

# State of the art and consolidation

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# Our objectives

→ To collect and compile key “authentic” data

## State-of-the-art

- knowledge base, existing initiatives and capabilities

## Identify a range of existing resources

- publications, projects, databases, regulations,..

## Develop a number of status reports

- commodity and country profiles

# Contributors

→ FERA, RIKILT, NOFIMA, DEFRA, VSCHT, FSAI, INIA, SCL, CSIC, CIRAD, IZSPLVA, MATIS, UNIBO, VU-VUMC, CRA-W, + new participants from Finland, Denmark, Hungary, Romania, Bulgaria, ...



# Realisation

- ✓ **Compilation of projects and research outputs**
  - List of recent and ongoing national and transnational R&D projects and initiatives
  - List of relevant reports, papers, publications and openly available databases
  - Identity card (keywords, relevant information) for each project and item → feed the searchable database
  
- ✓ **Outline the food authenticity legal framework**
  - List of international standards and regulations
  - Extraction or identification of keywords for each item

→ Total = 152 EC and 174 national documents

# Realisation

- ✓ Development of MS national status reports
  - Belgium
  - Bulgaria
  - Czech
  - Finland
  - France
  - Hungary
  - Iceland
  - Ireland
  - Italy
  - Netherland
  - Romania
  - Spain
  - United Kingdom

+ UN-FAO-IAEA

# Realisation

- ✓ Develop commodity status reports
  - Beef
  - Honey
  - Olive
  - Seafood

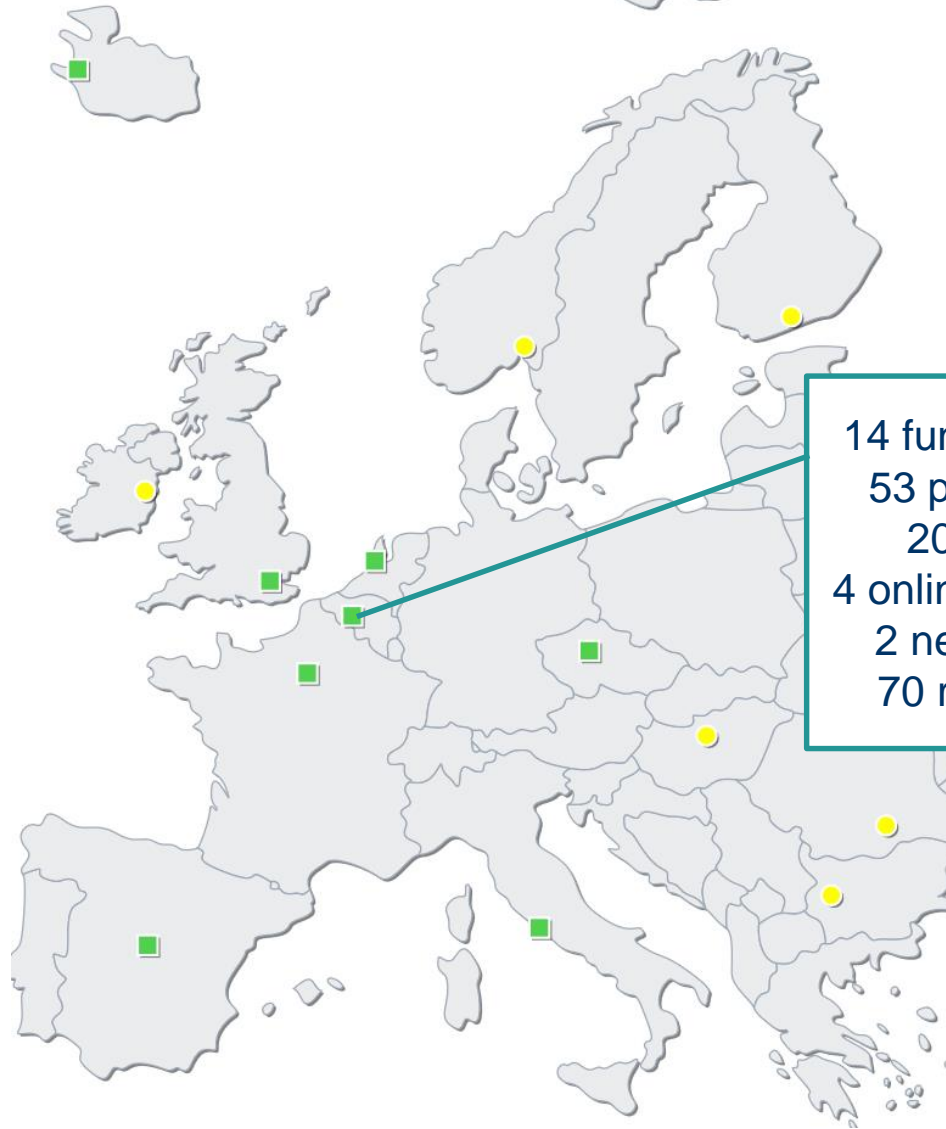
# Clickable map, country & commodity reports

## National Status Reports (NSRs)

- [Belgium](#)
- [Bulgaria](#)
- [Czech Republic](#)
- [France](#)
- [Finland](#)
- [Hungary](#)
- [Iceland](#)
- [Ireland](#)
- [Italy](#)
- [Romania](#)
- [Spain](#)
- [The Netherlands](#)
- [United Kingdom](#)
- [FAO/IAEA](#)

## Commodity Status Reports (CSRs)

- [Seafood](#)
- [Beef](#)
- [Olive oil](#)
- [Honey](#)



14 funding bodies  
53 publications  
20 projects  
4 online databases  
2 news stories  
70 regulations

[http://www.authent-net.eu/AN\\_FARNH\\_click\\_map.html](http://www.authent-net.eu/AN_FARNH_click_map.html)

# Realisation

- ✓ Development of MS national status reports
  - Belgium
  - Bulgaria
  - Czech
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  - France
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  - Ireland
  - Italy
  - Netherland
  - Romania
  - Spain
  - United Kingdom

+ UN-FAO-IAEA



# NSR Report – Belgium

## Authent-Net Member State (MS) National Status Report

Country: Belgium

Please note that the information provided here below will be put on the Food Authenticity Research Network Hub (FARNH) which will be publicly accessible. So please do not include any confidential information.

List of organisations that fund food anti-fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)

Address

Web site link

Short description of the funder

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

[Click here to privately contact the persons responsible for Food Authenticity funding.](#)

[This would take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only once you're able to prove that you are from another funding organisation].

1. FAVV-AFSCA: Belgian Federal Agency for the Safety of the Food Chain (Federal government, public)

CA Botanique - Food Safety Center, Boulevard du Jardin Botanique 55, 1000 Brussels

<http://www.afsca.be>; <http://www.favv-afsca.be/rapportactivites/2014/luttefraude>

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

The Belgian federal agency for the safety of the food chain (FASFC) is a federal executive agency with authority over the entire Belgian nation. It sets the operational standards applicable to businesses and integrates all official monitoring and inspection services for the food chain. In accordance with the federal law dated February 4, 2000, the FASFC is responsible for setting, implementing and enforcing measures related to the analysis and the management of risks that may affect consumer health.

Contact: Jos Dusoleil, [JOS.DUSOLEIL@favv.be](mailto:JOS.DUSOLEIL@favv.be)

2. FRS-FNRS: Scientific Research Fund (French Community government, public)

Rue d'Egmond 5, 1000 Brussels

<http://www.frs-fnrs.be>

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

The mission of the Scientific Research Fund - FNRS is to develop fundamental scientific research within the context of initiatives put forward by the researchers. It encourages the production and development of knowledge by supporting, on the one hand, individual researchers and by financing, on the other hand, research programmes carried out within the laboratories and departments which are mainly located in the Universities of the Wallonia-Brussels Federation.

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## 1. Commodities/products of interest

- 1) Dairy products : butter (Beurre d'Ardenne), cheese (Fromage de Herve)
- 2) Meat : pig (jambon d'Ardenne, paté Gaumais), poultry,
- 3) Beers : trappists, gueuzes, ...
- 4) Feed : cereals, feedingstuffs, DDGs,
- 5) Organic food
- 6) Vegetables: potato (Plate de Florenville)

## 2. Type of research of interest

- 1) Harmonisation of the analytical methods
- 2) Consumer confidence (traceability, local products)
- 3) Fraud prevention



# NSR Report – Bulgaria

## 1. Commodities/products of interest

- 1) Honey
- 2) Dairy (milk and milk products)
- 3) Wine and other alcoholic drinks
- 4) Cereals and rice
- 5) Herbs and spices

## 2. Type of research of interest

- 1) Analysis for allergenic potential
- 2) Detection of frauds (fats, proteins)
- 3) Detection of antibiotics
- 4) Confirmation of geographic origin of wine and honey, herbs and spices.

### Authent-Net Member State (MS) National Status Report

Country: Bulgaria

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List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding in food authenticity in your MS

Categorise into government/NGO, public/public-private)

link

research funded: APPLIED RESEARCH/DEVELOPMENT

Description of the funder

to privately contact the persons responsible for Food Authenticity funding.

Id take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only are able to prove that you are from another funding organisation.

Ministry of Agriculture and Food (Government, public)

5, Hristo Botev Blvd., Sofia 1040

3592/8187100,/81-87-202

<http://www.mzh.government.bg>

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

Government administration

Contacts: Policy on Agri-food Chain Directorate

+359 2985 11 858

+359 2985 11 384

2. BNSF: Bulgarian National Science Fund (Government, public)

239B, Al. Stambolijski Blvd.; Sofia 1309

+3592/8187100,/81-87-202

<http://www.fnf.bg>

Type of research funded: BASIC AND APPLIED RESEARCH

Provide funding on competitive basis

Contact: Prof. Dr. Vesselin Brezin - Chief Executive

+359 28208842



# NSR Report – Czech

**Authent-Net Member State (MS) National Status Report**

**Country: Czech Republic**

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**List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund**

*Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS*

**1. Name (Categorise into government/NGO, public/public-private)**  
Address  
Web site link  
Short description of the funder  
**Type of research funded: APPLIED RESEARCH/DEVELOPMENT**  
*Click here to privately contact the persons responsible for Food Authenticity funding.*  
*(This would take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only once you're able to prove that you are from another funding organisation).*

**1. Ministry of Agriculture of the Czech Republic (Government, public)**  
Tesnov 17, 117 05, Prague 1  
e-mail: [info@mze.cz](mailto:info@mze.cz)  
<http://eagri.cz/public/web/en/mze/>  
<http://eagri.cz/public/web/en/mze/consultancy-research/>

The Department of Research, Training and Consultancy  
**National Agency for Agricultural Research (NAZV)**  
Contact person : Jana Slaba, e-mail: [jana.slaba@mze.cz](mailto:jana.slaba@mze.cz), phone no.: +420 221 812 107  
**Research, Education and Consultancy Dept.**  
Contact person : Pavlina Adam, e-mail: [pavlina.adam@mze.cz](mailto:pavlina.adam@mze.cz)

**Type of research funded: APPLIED RESEARCH/DEVELOPMENT**  
The Ministry of Agriculture is the central public administrative authority for agriculture, the water sector and the food processing industry, and for forestry, game management, hunting and fishing. The Ministry is also the central public administrative authority for commodity exchanges which organise trade in goods originating from agricultural and forestry production. In addition to this, it acts as the central public administrative authority for veterinary and phytosanitary services, food safety and quality management, the prevention of cruelty to animals, and protection of rights in regard to new varieties of plants and breeds of animals. The Ministry of Agriculture is in charge of the Czech Agricultural and Food Inspection Authority, the State Veterinary Administration of the Czech Republic, the State Phytosanitary Administration of the Czech Republic, the Central Institute for Supervising and Testing in Agriculture and the Czech Breeding Inspection Authority.

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## 1. Commodities/products of interest

- 1) Honey
- 2) Wine
- 3) Meat
- 4) Fish
- 5) Cereals
- 6) Poppy
- 7) Food supplements

## 2. Type of research of interest

- 1) Analytical methods
- 2) Control systems and fraud prevention
- 3) Consumer education

# NSR Report – Finland

## Authent-Net Member State (MS) National Status Report

Country: Finland

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List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)  
Address

Name of the funder

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

Please privately contact the persons responsible for Food Authenticity funding.

Please contact you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only once you're able to prove that you are from another funding organisation.

1. National funding body in Finland: Ministry of agriculture and Forestry of Finland

Hallituskatu 3 A, Helsinki  
FI-00023 Government, Finland  
Tel: 0295 16 001  
Email: kirjaamo@mmm.fi  
<http://mmm.fi/en/frontpage>

Short description of the funder: Governmental ministry funding developmental projects

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

2. Co-funder: University of Helsinki/Ruralia-institute

Lönnrotinkatu 7  
FI-50100 Mikkeli, Finland  
[http://www.helsinki.fi/ruralia/index\\_eng.htm](http://www.helsinki.fi/ruralia/index_eng.htm)

Short description of the funder: University unit (University of Helsinki)

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

[Click here to privately contact the persons responsible for Food Authenticity funding.](#)

(This would take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only once you're able to prove that you are from another funding organisation).

## 1. Commodities/products of interest

- 1) Berries (e.g. strawberry, blueberry)
- 2) Jams
- 3) Juices
- 4) Organic products
- 5) Spices

## 2. Type of research of interest

All research types are important and are difficult to list in priority order. All the research types have to be developed at the same time; food safety issues, analytical methods (development), economic aspects, consumer behaviour.

# NSR Report – France

## Authent-Net Member State (MS) National Status Report

Country: France

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List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

me (Categorise into government/NGO, public/public-private)

ISS

site link

description of the funder

of research funded: APPLIED RESEARCH/DEVELOPMENT

here to privately contact the persons responsible for Food Authenticity funding.

would take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only you're able to prove that you are from another funding organisation).

R: Agence Nationale de la Recherche

Agence Nationale de la Recherche, 50, avenue Daumesnil, 75012 PARIS

Web: [www.agence-nationale-recherche.fr/](http://www.agence-nationale-recherche.fr/)

Type of research funded: STRATEGIC and RESEARCH

ANR funds project-based research in all science fields (both basic and applied research) through an internationally compliant competitive peer review process; grant recipients include public research organisations, universities, and companies big and small.

No private contact

2. CNRS : Centre Nationale de la Recherche Scientifique

3, rue Michel-Ange, 75794 Paris cedex 16

Web : <http://www.cnrs.fr/accueil.php>

Type of research funded: STRATEGIC and RESEARCH

Founded in 1939 by governmental decree, the CNRS aims to: Evaluate and carry out all research capable of advancing knowledge and bringing social, cultural, and economic benefits for society, Contribute to the promotion and application of research results, Develop scientific information, Support research training, Participate in the analysis of the national and international scientific climate and its potential for evolution in order to develop a national policy.

3. CIRAD: Centre de coopération internationale en recherche agronomique pour le développement

42, rue Scheffer, 75116 Paris

Web: <http://www.cirad.fr/>



## 1. Commodities/products of interest

- 1) Animal origin (Meat, fish)
- 2) Fat compounds (olive oil origin, nut oil, oil mixtures)
- 3) Sugared compounds (Sweeteners ,Honey)
- 4) Vegetal species (potatoes, OGM detection, detection of insect flour in transported products)
- 5) Geographical Origin (apples, honey, châtaignes, garlic, chestnut, tobacco, beverages)

## 2. Type of research of interest

- 1) Analytical methods

# NSR Report – Hungary

## Authent-Net Member State (MS) National Status Report

Country: Hungary

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Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)

Address

Web site link

Research funded: APPLIED RESEARCH/DEVELOPMENT

Role of the funder

How to privately contact the persons responsible for Food Authenticity funding.

How to refer you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only able to prove that you are from another funding organisation.

National Food Chain Safety Office (government, public)

Address: Budapest, Keleti K. u. 24. 1024

Website: [portal.nebih.gov.hu](http://portal.nebih.gov.hu)

Research funded: APPLIED RESEARCH/DEVELOPMENT

Decree 22/2012 established the NFCSO with its central office in Budapest. NÉBIH is the President (Deputy CVO) who reports to the State Secretary for Food-Chain Safety (CVO). The national competent authority is responsible for supporting of decision-making of the national competent authority and providing control plans, procedures and guidelines to county government and monitoring of events when immediate action is required the CVO has the right to give direct

order to county government offices.

The Directorate for System Management and Supervision (SMSD) co-ordinates the MANCP and is responsible for risk assessment, strategic and risk based planning of official controls. This Directorate co-ordinates all kind of scientific activities such as cooperation with Universities, Research-Development-Innovation activities in the Office. The directorate is the national contact point for FAO/ WHO Codex Alimentarius and EFSA.

The Directorate for Food Safety Risk Assessment (NFCSO-DFSRA) supports the activities of the Competent Authorities in terms of risk management and communication. The directorate is the national contact point for the Commission services, RASFF network and WHO INFOSAN.

The Directorate for Priority Cases is responsible for controls of fraud and adulteration related to food chain, and cases representing risk to consumers' health in the country.

The Food and Feed Safety Directorate coordinates the safety and quality control in food and feed, responsible for coordination of investigation after RASFF or AAC alert. The FFSD has got countrywide laboratory network to analyse authenticity.

## 1. Commodities/products of interest

1) Honey

2) Wine,

3) Pálinka (Hungarian spirit)

4) Meat (cattle, poultry, perch)

5) Food for special diet

## 2. Type of research of interest

1) Consumer behaviour

2) Historical points

3) Economic aspects



# NSR Report – Iceland

## Authent-Net Member State (MS) National Status Report

Country: Iceland

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Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)

Address

Web site link

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

Short description of the funder

[Click here to privately contact the persons responsible for Food Authenticity funding.](#)

(This would take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only once you're able to prove that you are from another funding organisation).

1. RANNIS The Icelandic Centre for Research (Government, public)

Borgartún 30, IS-105 Reykjavik, Iceland.

<https://en.rannis.is/>

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

The Icelandic Centre for Research (RANNIS) supports research, innovation, education and culture in Iceland. RANNIS cooperates closely with the [Icelandic Science and Technology Policy Council](#) and provides professional assistance in the preparation and implementation of the national science and technology policy.

Contact: [rannis@rannis.is](mailto:rannis@rannis.is)

2. Agricultural Productivity Fund (Government, public)

Hvanneyrargötu 3, 311 Borgarnes, Iceland

<http://www.fi.is/forsida/> (in Icelandic)

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

The Agricultural Productivity Fund aims to fund development on Icelandic farms and research providing new knowledge and productivity in Icelandic farming. The Fund is run by Icelandic law and governmental funding each year.

Contact: [fi@fi.is](mailto:fi@fi.is)

3. AVS R&D Fund of Ministry of Fisheries and Agriculture in Iceland (Government, public)

Byggðastofnun, Ártorgi 1, 550 Sauðárkrúkur, Iceland.

<http://www.avs.is/> (in Icelandic).

## 1. Commodities/products of interest

- 1) Seafood
- 2) Livestock (Lamb, beef, poultry, pork)
- 3) Milk (including milk products)

## 2. Type of research of interest

- 1) Analytical methods
- 2) Contingency plans/strategy
- 3) Economic
- 4) Consumer behaviour



# NSR Report – Ireland

## Authent-Net Member State (MS) National Status Report

Country: IRELAND

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List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

**1. Name: FOOD SAFETY AUTHORITY OF IRELAND**

Government – public body

Development research

100 North Wall Quay, Lower Abbey Street, Dublin 1, Ireland

Website link: [www.fsai.ie](http://www.fsai.ie)

Function of the funder:

Agency coordinating the implementation and enforcement of food law in Ireland.

**FEFOOD**

Government – public body

Development research

100 North Wall Quay, Eastgate, Little Island, Co Cork T45 RX01

Website link: [www.safefood.eu/](http://www.safefood.eu/)

FEFOOD is an all-island implementation body set up under the British-Irish Agreement Act with a general remit to promote awareness and knowledge of food safety and nutrition issues on the island of Ireland. Activities include: Promotion of food safety Research, Communication of nutritional advice, Promotion of scientific co-operation and laboratory linkages, Provide independent scientific advice, Deliver consumer focused review - See more at: <http://www.safefood.eu/Utility/About-Us.aspx#sthash.3H0NBego.dpuf>

[Safefood Food Fraud](#)

**3. Name: TEAGASC**

Government – public body

Basic/Applied/development research

Address: Ashtown, Dublin 15 D15 KN3K

Web site link: <https://www.teagasc.ie/>

Teagasc is the Irish Agriculture and Food Development Authority. It is a national body providing integrated research, advisory and training services to the agriculture and food industry and rural communities

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## 1. Commodities/products of interest

- 1) Dairy
- 2) Beef
- 3) Prepared foods
- 4) Beverages

## 2. Type of research of interest

- 1) Food Chain mapping and food fraud vulnerability analysis
- 2) Analytical analysis
- 3) Drivers of food fraud
- 4) Criminology





# NSR Report – Italy

## 1. Commodities/products of interest

- 1) Wine
- 2) Confectionery
- 3) Milk and milk products
- 4) Cereal products (pasta)
- 5) Processed vegetables
- 6) Olive oil
- 7) Milk and milk products
- 8) Bivalve molluscs
- 9) Honey

## 2. Type of research of interest

- 1) Analytical methods
- 2) Support to the control system
- 3) Food regulation

### Authent-Net Member State (MS) National Status Report

Country: Italy

Please note that the information provided here below will be put on the Food Authenticity Research Network Hub (FARNH) which will be publically accessible. So please do not include any confidential information.

List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. **MINISTRY OF AGRICULTURAL, FOOD AND FORESTRY POLICIES (Ministero delle Politiche Agricole, Alimentari e Forestali - MIPAAF)** (government, public)  
Via XX Settembre, n.20 – 00187 - Roma  
Web: <https://www.politicheagricole.it>

Type of research funded: APPLIED

The Ministry of Agricultural, Food and Forestry Policies (MIPAAF) is the governmental department that develops and coordinates national agricultural, food and forestry policies and manages fishery activities at national and international level.

The Ministry directs specific control activities to protect certified typical Italian food products and to contrast food frauds; it also promotes research and progress in its areas of expertise.

Contact available through: Direzione generale per la Prevenzione ed il Contrasto alle frodi agroalimentari. [pref.direttore@politicheagricole.it](mailto:pref.direttore@politicheagricole.it)

2. **MINISTRY OF HEALTH (Ministero della Salute)** (government, public)

Viale Giorgio Ribotta, 5 – 00144 - Roma

Web: <http://www.salute.gov.it/>

Type of research: APPLIED/STRATEGIC

The Ministry of Health is the governmental Department that directs the National Health Service and coordinates official control activities on animal health, food hygiene and food safety; it also promotes research in human and animal health and in food safety areas of interest.

Contact available through: Direzione generale per l'Igiene e la Sicurezza degli Alimenti e la Nutrizione. [segreteriaadsan@sanita.it](mailto:segreteriaadsan@sanita.it)

3. **MINISTRY OF EDUCATION, UNIVERSITY AND RESEARCH (Ministero dell'Istruzione, dell'Università e della Ricerca – MIUR)** (government, public)

Via Michele Carcani, 61 – 00153 Roma

Web: <http://www.istruzione.it>

Type of research: APPLIED/STRATEGIC

The Ministry of Education, University and Research coordinates the National Education System and research activities; it funds research projects concerning topics of national interest and elaborates the general Italian Research Strategy.



# NSR Report – The Netherlands

## Authent-Net Member State (MS) National Status Report

Country: The Netherlands

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List of organisations that fund food anti-fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)

Address

Web site link

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

Short description of the funder

[Click here to privately contact the persons responsible for Food Authenticity funding.](#)

(This would take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only once you are able to prove that you are from another funding organisation).

Government/Public

1. Ministry of Economic Affairs

<https://www.rijksoverheid.nl/ministeries/ministerie-van-economische-zaken>

Applied research and development

2. Ministry of Finances

<https://www.rijksoverheid.nl/ministeries/ministerie-van-financien>

Applied research (customs)

3. NWO, STW

<http://www.nwo.nl/en>

National scientific funding (Development)

4. SKAL Biocontrole

<https://www.skal.nl/>

National certification body for organic produce

Applied research (analyses)

5. BKD

<http://www.bkd.eu/>

National control body for the flower bulb sector

Development

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## 1. Commodities/products of interest

- 1) Generally those issues/foods with associated safety risks
- 2) Fish, meat, dairy, oils & fats, nuts

## 2. Type of research of interest

- 1) Vulnerabilities
- 2) Offender characteristics and motives (criminology)
- 3) Ranking fraud vulnerable products
- 4) Prevalence food fraud
- 5) Development of methods



# NSR Report – Romania

## 1. Commodities/products of interest

- 1) Dairy products : cheese
- 2) Food supplements
- 3) Wine and other alcoholic drinks
- 4) Processed meat products
- 5) Honey
- 6) Organic food

## 2. Type of research of interest

- 1) Harmonisation and validation of analytical methods
- 2) Rapid screening methods
- 3) Consumer confidence (traceability, local products)
- 4) PCR based methods
- 5) Geographic origin determination

### Authent-Net Member State (MS) National Status Report

Country: ROMANIA

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List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)

Address

Web site link

Description of the funder

Research funded: APPLIED RESEARCH/DEVELOPMENT

> privately contact the persons responsible for Food Authenticity funding.

Take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only able to prove that you are from another funding organisation.

(Executive Unit for Financing Higher Education, Research, Development and Innovation)

Str. Bvd. 21-25, 010362 Bucharest

[uefiscdi.gov.ro/](http://uefiscdi.gov.ro/)

Type of research funded: STRATEGIC/APPLIED RESEARCH

UEFISCDI is a public body of the Central Administration under the ultimate authority of Romanian Ministry of Education and Scientific Research (MECS).

Mission: promote quality and leadership for higher education, research, development and innovation.

Prerogatives:

- to ensure the executive activity for the consultative councils with attributes in the domain of higher education, research, development and innovation of the MECS;
- to coordinate programmes of the National Research, Development and Innovation Plan, 2015 - 2020;
- to cooperate with other public or private, national or international institutions.

Contact: Luciana Bratu (Email: [luciana.bratu@uefiscdi.ro](mailto:luciana.bratu@uefiscdi.ro); Phone: + 40.213071910)



# NSR Report – Spain

## Authent-Net Member State (MS) National Status Report

Country: SPAIN

Please note that the information provided here below will be put on the Food Authenticity Research Network Hub (FARNH) which will be publically accessible. So please do not include any confidential information.

List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

(Categorise into government/NGO, public/public-private)

link

Description of the funder

Research funded: APPLIED RESEARCH/DEVELOPMENT

to privately contact the persons responsible for Food Authenticity funding.

ould take you to a secure location [eg. LinkedIn private chat] to contact relevant funder, only if you're able to prove that you are from another funding organisation).

1. National Institute for Agricultural and Food Research and Technology (INIA). (public)

Address: Ctra. de A Coruña Km. 7,5, 28040 Madrid

Website: <http://www.inia.es>

INIA is a Public Research Organisation (OPI) of the State Secretariat of Research, Development and Innovation of the Ministry of Economy and Competitiveness. Its unique mandate entails a dual responsibility 1) as coordinator of the national network of agrifood research centers is responsible for the harmonization, resource allocation, monitoring and evaluation of scientific, technical research activities and funds research through the National Program INIA Autonomous Regions System; 2) as an agrifood research institution is responsible for the execution of its own research and technology projects (including technology transfer) under the General Deputy Directorate of Research and Technology (SGIT).

Type of research funded: APPLIED RESEARCH/DEVELOPMENT

2. Ministry of Economy, Industry and Competitiveness (public)

Address: P. Castellana, 162, 28046 Madrid

Website: <http://www.mineco.gob.es/portal/site/mineco/>

The Ministry of Economy, Industry and Competitiveness is responsible for the implementation of government policy on economic and reforms to improve competitiveness, scientific research, technological development and innovation in all sectors, trade policy and business support and all other powers and duties conferred by law.

Type of research funded: STRATEGIC/APPLIED RESEARCH/DEVELOPMENT

## 1. Commodities/products of interest

- 1) Olive oil, edible oils,
- 2) meat,
- 3) Ewe's Cheese,
- 4) eggs,
- 5) cow's milk,
- 6) meat of small ruminants,
- 7) paté,
- 8) fruit juices,
- 9) honey,
- 10) saffron,
- 11) paprika,
- 12) nuts,
- 13) coffee

## 2. Type of research of interest

- 1) Analytical methods
- 2) Consumer behaviour
- 3) Geographical origin
- 4) Authentication
- 5) Characterization
- 6) Food composition



# NSR Report – United Kingdom

## Authent-Net Member State (MS) National Status Report

Country: UK

Please note that the information provided here below will be put on the Food Authenticity Research Network Hub (FARNH) which will be publically accessible. So please do not include any confidential information.

List of organisations that fund food anti- fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)  
Address

Research funded: APPLIED RESEARCH/DEVELOPMENT  
Name of the funder

Directly contact the persons responsible for Food Authenticity funding.  
Please provide you to a secure location (eg. LinkedIn private chat) to contact relevant funder, only if you are able to prove that you are from another funding organisation.

Department for Environment, Food & Rural Affairs (Government, public)  
17 Smith Square, London SW1P 3JR

<https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs>

Address

Type of research funded: STRATEGIC/APPLIED RESEARCH

The Department for Environment, Food and Rural Affairs (Defra) is the government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities in the United Kingdom of Great Britain and Northern Ireland.

Contact: Lucy Foster / Sophie Rollinson

2. FSA: Food Standards Agency (Government, public)

125 Kingsway, London WC2B 6NH

<http://www.food.gov.uk/>

Type of research funded: STRATEGIC/APPLIED RESEARCH

The Food Standards Agency is a non-ministerial government department of the Government of the United Kingdom. It is responsible for protecting public health and other consumer interests in relation to food in England, Wales and Northern Ireland.

Contact: Penny Bramwell

3. Innovate UK (Government, public)

North Star House, North Star Avenue, Swindon, SN2 1UE

<http://www.innovateuk.gov.uk>



## 1. Commodities/products of interest

- 1) Livestock (poultry meat, beef and veal, pork, lamb and mutton)
- 2) Cereals (wheat, barley)
- 3) Vegetable oil (oil seed rape)
- 4) Milk (including milk products)
- 5) Allergens in food

## 2. Type of research of interest

- 1) Analytical methods
- 2) Economic
- 3) Consumer behaviour

# NSR Report – FAO/IAEA

## Authent-Net Member State (MS) National Status Report

Country: United Nations FAO/IAEA Joint Division

Please note that the information provided here below will be put on the Food Authenticity Research Network Hub (FARNH) which will be publically accessible. So please do not include any confidential information.

List of organisations that fund food anti-fraud/food authenticity research and the type of research they fund

Please provide a list of organisations (Government + NGO whatever the nationality) that are funding projects on food authenticity in your MS

1. Name (Categorise into government/NGO, public/public-private)  
Address

the funder

unded: **APPLIED RESEARCH/DEVELOPMENT**

ly contact the persons responsible for Food Authenticity funding.

u to a secure location [eg. LinkedIn private chat] to contact relevant funder, only  
rove that you are from another funding organisation).

Division of Nuclear Applications in Food and Agriculture, Department of Nuclear  
Sciences and Applications, International Atomic Energy Agency, Vienna International Centre  
PO Box 100, 1400 Vienna, Austria

<http://www.naweb.iaea.org/nafa/fep/index.html>

Type of research funded: **APPLIED AND ADAPTIVE RESEARCH**

The Food and Environmental Protection Section of the Joint Programme and its associated Food and Environmental Protection Laboratory of the FAO/IAEA Agricultural and Biotechnology Laboratory in Seibersdorf provide assistance and support to countries in their efforts to ensure the safety and quality of food and agricultural commodities and food security while at the same time facilitating international trade. Our activities primarily focus on strengthening Member State capacities for the application of international standards on irradiation as well as on the use of nuclear and related analytical technologies and capacity building in the control of food and environmental hazards as well as food traceability and authenticity. These efforts are based on a coordinated and comprehensive “farm to fork” approach to food production systems that ensure the application of good agricultural practices throughout the food chain.

Contacts: Mr Andrew Cannavan / Mr Simon Kelly

Plan/Strategy in terms of Authenticity Research Funding

Please provide a web link to a plan/strategy on food authenticity for each specific funding organisation (see 1<sup>st</sup> box), provided there is one, or anything the funding organisations are able to

## 1. Commodities/products of interest

- 1) Livestock (Poultry meat, Beef and veal, pork, lamb and mutton)
- 2) Cereals (Wheat, Barley)
- 3) Vegetable oil (oil seed rape)
- 4) Milk (including milk products)

## 2. Type of research of interest

- 1) Analytical methods
- 2) Economic



# Realisation

- ✓ Develop commodity status reports (CSR)
  - Beef
  - Honey
  - Olive
  - Seafood



# CSR - Beef



## Authent-Net Commodity Status Report

### Commodity: Beef

#### State of the Art of the commodity:

##### 1. Market Share of Commodity:

In the last years, the world bovine meat production has been modestly increasing: in 2016 it is expected to reach 68.4 million tonnes, while in 2015 it was 67.9 million tonnes. The United States are the major bovine meat producing country in the world, with 11328000 tonnes (10815000 in 2015) that is the highest production in the last three years. The second producer is Brazil, with 9620000 tonnes (9425000 in 2015) which is encouraged in herd expansion thanks to the international trade, despite of a reduction in domestic demand. The European Union is the third beef producer (7876000 tonnes in 2016 and 7719000 in 2015), followed by China, India and Argentina.

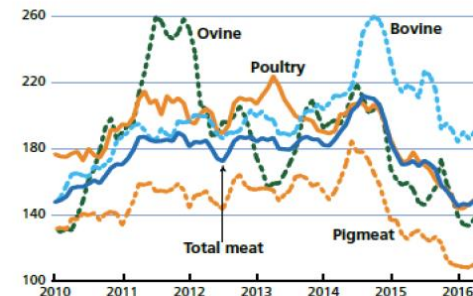
In Europe, beef production increased by 3.4% year on year in the first half of 2015, thanks to milk cow slaughtering due to low milk prices and changes in milk producing system. The European countries where this growth was greater were: Hungary, Bulgaria, the Czech Republic, Estonia, Lithuania and Romania, because of the increase in the number of slaughtered heads and in carcass weight. However EU 15 countries (Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden and the United Kingdom) maintained higher absolute changes in slaughtered beef volume than EU 13 countries (the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovakia, Bulgaria, Romania and Croatia), especially thanks to Italy, Spain, Austria, Belgium and Portugal, despite of a smaller increase in slaughtering percentage. On the other hand, Ireland, the Netherlands and the United Kingdom reduced the number of slaughtered animals to increase dairy herds. The growth in EU-13 countries slaughtering is referred to bulls and bullocks and confirms the trend to a rise of importance in beef production in certain EU-13 countries, despite of a shift from beef to dairy in other EU-15 countries. Therefore, the rise of production forecasted in 2016 compared to 2015 (2%) is mainly due to the culling of dairy cows, heavier average slaughter weights and retention of male dairy calves for meat production.

##### 2. Process Specificity of commodity (production/welfare):

It is possible to distinguish between fresh and processed meat. Fresh meat is defined as meat without treatments different from chilling and freezing, while processed meat is a very broad category of many different types of products, all defined by having undergone at least one further processing or preparation step such as, i.e. grinding, adding an ingredient or cooking, which changes the appearance, texture or taste. The main classes of processed meat are described below:

- minced meat – boneless meat reduced in fragments which contains less than 1% salt;

International prices (FAO meat price index\*: 2002-2004 = 100). FAO food outlook, June 2016.



\*The FAO price indices are calculated using the Laspeyres formula; the weights used are based on the average export value of each commodity for the 2002-2004 period.



## FRAUD

### 1. Substitution

- Species substitution
- Protein substitution
- Fat substitution
- Tissue substitution
- Breed substitution
- Sex substitution

### 2. Addition of substances

- Additives
- Water

### 3. Process/production/welfare deception

- Meat preparation
- Fresh vs Thawed
- Geographic origin
- Organic vs conventional
- Feed intake



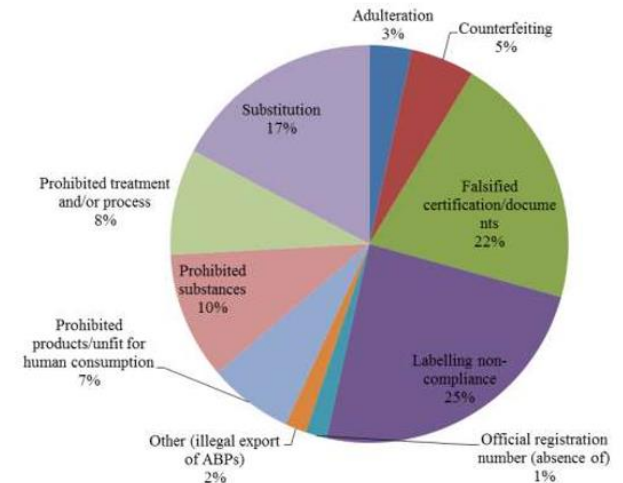
# CSR - Beef



## Priorities

- Labelling Irregularities
- Falsified documents
- Missing QUID (Qualitative Ingredient Declaration)
- Substitution
  - Water
  - Mechanically separated meat
  - Meat species

Cases exchanged on the FFN by type of alleged violation in 2014



# CSR - Honey



## Authent-Net Commodity Status Report

### Commodity: Honey

#### State of the Art of the commodity:

##### 1. Market Share of Commodity:

European apiculture is a niche sector of agricultural production. Although globally in EU most of the beekeepers are non-professional, the percentage of beehives controlled by professional beekeepers shows differences between countries. For the period 2014-2016, in Mediterranean countries (Spain, Greece and Italy) this percentage was around 80% (40% for EU).

Overall, EU honey production has been increasing slowly with annual variations depending on climatic conditions, bees' health and environmental constraints. With a production of around 250 000 tonnes per year in 2015, the EU is the second largest producer of honey after China. Other main honey producers are Turkey with a steady output increase, Ukraine and the United States of America.

On a global scale, the EU is the largest importer of honey as the EU production covers only 60% of its consumption in 2015. The three main honey producers in the Union are Romania, Spain and Hungary (each one produces around 30 000 tonnes). Other important producing Member States are Germany, Italy, Greece, France and Poland.

##### 2. Process Specificity of commodity (production/welfare):

Honey has a long history of human consumption, and is commonly consumed in its unprocessed state (i.e. liquid, crystallised or in the comb). The FAO/WHO [Codex Alimentarius issued STAN 12-1981](#) (revised in 2001), which outlines the provisions related to the naming, chemical properties, level of contaminants and labelling of honey, among other characteristics.

The European Council Directive 2001/110/EC defines honey and establishes minimum quality standards for honey when placed on the market as honey or used as an ingredient in products intended for human consumption. The regulations generally aim to preserve the purity of honey as an unprocessed raw agricultural product, with limited modifications to its chemical composition. The Directive defines honey as the natural sweet substance produced by *Apis mellifera* bees from the nectar of plants or from secretions of living parts of plants or excretions of plant-sucking insects on the living parts of plants (honeydew), which the bees collect, transform by combining with specific substances of their own, deposit, dehydrate, store and leave in honeycombs to ripen and mature.

The colour and flavour of honeys differs depending on the nectar source, age, and storage conditions. Honey made primarily from one type of flower is called monofloral honey, whereas honey made from several types of flowers is called polyfloral honey. Monofloral honey typically has a high commercial value in the marketplace due to its distinctive flavour. However, most commercially available honey is a blend of honeys differing in floral source and geographic origin.



## FRAUD

1. Addition of sugar of non-honey origin
2. Mixtures of industrial honey with harvested honey
3. Mixtures of honey from known origin with other honeys
4. Bee feeding product from an external origin
5. Labelling polyfloral honey as monofloral honey

# CSR - Honey



## Priorities

- Update the EU Directive
- Control aspects in relation to filtering
- Control of imported products
- Harmonized protocols for definitions of types of monofloral honeys
- Detection of lower limits of sugars from non-honey origin
- Control of industrial honeys
- Harmonize European labelling of honeys in relation to country of origin
- Labelling Irregularities

# CSR - Olive



## Authent-Net Commodity Status Report

### Commodity: olive oil

#### State of the Art of the commodity:

##### 1. Market Share of Commodity:

About 98.7% of olive orchards are located around the Mediterranean Sea. The rest of olive crops (1.3%) are distributed in some countries of American continent such as USA, Argentina or Chile, and Australia.

The average of the virgin olive oils worldwide production in the last six years (2009-2015) was 1,794,200 t. The production in European Union accounts for more than 72% of this world production. Spain is the first worldwide producer with at least 61% of the virgin olive oil production. The increment of production, mainly in Spain and Tunisia, and non-Mediterranean producer countries, it has been complemented with the increment of consumption (20% of increment per each decade from the 60s until now). This increment was higher in the 90s due to the demand of USA, Canada, and Australia.

##### 2. Process Specificity of commodity (production/welfare):

Virgin olive oil (VOO) is the oil obtained from the fruit of the olive tree (*Olea europaea* L.) solely by mechanical or other physical means under conditions, particularly thermal conditions, which do not lead to alterations in the oil, and which has not undergone any treatment other than washing, decantation, centrifugation and filtration. Virgin olive oils fit for consumption are the following:

- Extra virgin olive oil (EVOO) is a VOO which has a free acidity, expressed as oleic acid, of not more than 0.8 g per 100 g and whose organoleptic characteristics correspond to those fixed for this category in the trade standard.
- Virgin olive oil is a VOO which has a free acidity, expressed as oleic acid, of not more than 2 g per 100 g and whose organoleptic characteristics correspond to those fixed for this category in the trade standard.
- Ordinary virgin olive oil is a VOO which has a free acidity, expressed as oleic acid, of not more than 3.3 g per 100 g and whose organoleptic characteristics correspond to those fixed for this category in the trade standard.
- Virgin olive oil not fit for consumption as it is, known as lampante virgin olive oil, is a VOO which has a free acidity, expressed as oleic acid, of more than 3.3 g per 100 g or whose organoleptic characteristics correspond to those fixed for this category in the trade standard. It is intended for refining or for technical purposes.

It is important to consider the classification according to European Union, in which ordinary category does not exist. In this case, the limits of free acidity are the following:



## FRAUD

### 1. Substitution:

- Substitution of a high quality virgin olive oil (virgin or lampante)
- Substitution by other vegetable oils

### 2. Addition of substance X

- Vegetables oils in olive oils
- Pomace oil in olive oils
- Any edible oil (crude or refined) in virgin or refined olive oil
- Any refined edible oil in virgin or refined olive oil
- VOOs deodorized at low temperature in EVOOs.

### 3. Process/production/welfare deception

- Determination of the geographical provenance (country, region, PDO) of VOO



## Priorities

- Harmonization of the olive oil categories
- Reducing the number of trade standards
- Determination of the blend of EVOO or VOO with soft deodorized olive oil
- Harmonization of methods described to research on altered pigments
- Detection of other adulterant oils (vegetable/edible oil or low quality olive oil)
- Development of new techniques (non-targeted approaches)
- Development of genomic methods
- Development of “omic” procedures
- Development of an “olive oil map” to improve the geographical traceability
- Improvement of chemometric tools for perfecting the analytical methods
- To obtain a database to adjust the legal limits of some chemical compounds



# CSR - Seafood



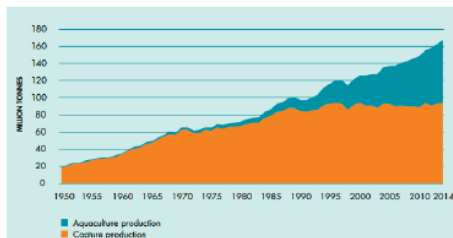
## Authent-Net Commodity Status Report

### Commodity: seafood

#### State of the Art of the commodity:

##### 1. Market Share of Commodity:

The total worldwide seafood production considering both fisheries and aquaculture in 2014 was 167.2 million tonnes, and has increased steadily from 145.9 million tonnes in 2009.<sup>1</sup> The growth is mainly driven by increased production in the aquaculture sector, which has increased by 32% over the aforementioned six-year period, with traditional capture fisheries have only increased by 3.5% for the same period. Estimated total production for 2015 is 171 million tonnes, with 93.5 tonnes originating from wild capture fisheries and 77.5 million tonnes from aquaculture; and forecasts for 2016 are predicting total production of 174.1 million tonnes where 92.7 million tonnes come from wild capture and 81.4 million tonnes from aquaculture.<sup>2</sup> Despite a robust growth in aquaculture, traditional fisheries remain the largest sector by volume, on the other hand the aquaculture sector is overtaking capture fisheries as the main producer of seafood for human consumption.



A total of 71% of the world's seafood production originates from Asia, with the greater part being located in Southeast Asia. China is the by far the largest producing country in the world contributing 37%, while other major producers in the region are Indonesia, Japan, Viet Nam and India. Outside of Asia, key producers include the US, Russia, Peru and Norway.

##### 2. Process Specificity of commodity (production/welfare):

The majority of fish products, 87% in 2014, are used for direct human consumption, with the rest mainly going to the production of fishmeal, fish oil and as raw material for feed in the aquaculture sector.

<sup>1</sup> FAO 2016. *The State of World Fisheries and Aquaculture 2016: Contributing to food security and nutrition for all*. Rome. 200 pp.

<sup>2</sup> FAO Food Outlook October 2016

## WORLD FISH MARKET AT A GLANCE

	2014	2015 <i>estim.</i>	2016 <i>f'cast</i>	Change: 2016 over 2015
	<i>million tonnes</i>			%
<b>WORLD BALANCE</b>				
<b>Production</b>	<b>167.2</b>	<b>171.0</b>	<b>174.1</b>	<b>1.8</b>
Capture fisheries	93.4	93.5	92.7	-0.9
Aquaculture	73.8	77.5	81.4	5.0
<b>Trade value (exports USD billion)</b>	<b>148.3</b>	<b>134.1</b>	<b>140.0</b>	<b>4.4</b>
<b>Trade volume (live weight)</b>	<b>60.0</b>	<b>59.9</b>	<b>60.0</b>	<b>0.2</b>
<b>Total utilization</b>	<b>167.2</b>	<b>171.0</b>	<b>174.1</b>	<b>1.8</b>
Food	146.3	149.4	152.8	2.3
Feed	15.8	16.5	16.2	-1.8
Other uses	5.1	5.1	5.1	0.0
<b>SUPPLY AND DEMAND INDICATORS</b>				
<b>Per caput food consumption:</b>				
Food fish (kg/yr)	20.1	20.3	20.5	1.1
From capture fisheries (kg/year)	10.0	9.8	9.6	-1.8
From aquaculture (kg/year)	10.1	10.5	10.9	3.9
<b>FAO FISH PRICE INDEX (2002-2004=100)</b>	<b>2014</b>	<b>2015</b>	<b>2016 <i>Jan-Jun</i></b>	<b>Change: Jan-Jun 2016 over Jan-Jun 2015 %</b>
	157	142	143	-1.6

Source: FAO Fish Price Index: Norwegian Seafood Council (NSC)  
Totals may not add up due to rounding

*World fish market at a glance according to FAO food Outlook  
report from October 2016*



## FRAUD

### 1. Substitution

- Species substitution

### 2. Addition of substance X

- Salt
- Benzoic acid
- Citric acid, ascorbic acid and Erythorbic acid
- Carbon monoxide
- Injection of vegetable protein
- Phosphates

### 3. Process/production/welfare deception

- Frozen sold as fresh
- Geographical origin
- Inconstancies between amounts bought and sold
- Product labelled with ambiguous/vernacular name
- Water injection/overglazing to increase weight
- Not disclosed whether farmed or wild caught

# CSR - Seafood



## Priorities

- Lack of easy-to-use traceability software
- National and international databases
- Harmonize the use of analytical authentication methods
- Harmonized databases on chemical contents and nutritional components
- Improved methods for speciation of fish in fish products
- Lack of official methods to distinguish farmed and caught fish
- Lack of methods to distinguish fresh from thawed products
- Lack of methods to detect H<sub>2</sub>O<sub>2</sub> treatment in seafood products.
- Harmonize naming conventions in seafood labelling.
- Validated methods to detect geographic origin.

