



منظمة الأغذية
والزراعة للأمم
المتحدة

联合国
粮食及
农业组织

Food and
Agriculture
Organization
of the
United Nations

Organisation des
Nations Unies
pour
l'alimentation
et l'agriculture

Продовольственная и
сельскохозяйственная
организация
Объединенных
Наций

Organización
de las
Naciones Unidas
para la
Alimentación y la
Agricultura

Promoción de productos forestales no-madereros: panorama mundial

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Outline of the presentation

- ✓ Statistics at FAO
 - ✓ Forest products statistics
 - ✓ Non-wood forest products: overview, definition and statistics
 - ✓ Chestnuts production and trade statistics at global scale
 - ✓ Non-wood forest products beyond data
-



Statistics at FAO

ARTICLE I (FUNCTIONS OF THE ORGANIZATION)

1. *The Organization shall collect, analyse, interpret, and disseminate information relating to nutrition, food and agriculture.* The term *agriculture* encompasses agriculture, fishery and **forestry** products.



Statistics at FAO - Sustainable development goals

On 25 September 2015, the 193 Member States of the United Nations adopted the 17 Sustainable Development Goals (SDGs) of the [2030 Agenda for Sustainable Development](#), global objectives expected to guide the actions of the international community over the next 15 years (2016-2030).

It includes: 17 goals, 169 targets and 232 indicators

As of today, 50 organizations are responsible for the 232 indicators that compose the SDGs global indicator framework, which is coordinated by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs).

FAO is fully engaged in this process as leads international efforts to defeat hunger and malnutrition, ensuring the sustainable use of natural resources, and as the custodian agency for 21 SDG indicators

[Quantitative data](#) is key to measuring and reporting the progress made by countries against the Sustainable Development Goals framework.

Statistics at FAO - Sustainable development goals

Indicators under FAO custodianship



2.1.1 Hunger

2.1.2 Severity of food insecurity

2.3.1 Productivity of small-scale food producers

2.3.2 Income of small-scale food producer

2.4.1 Agricultural sustainability

2.5.1 Conservation of genetic resources for food and agriculture

2.5.2 Risk status of livestock breeds

2.a.1 Public Investment in agriculture

2.c.1 Food price volatility



5.a.1 Women's ownership of agricultural land

5.a.2 Women's equal rights to land ownership



14.4.1 Fish stocks sustainability

14.6.1 Illegal, unreported unregulated fishing

14.7.1 Value added of sustainable fisheries

14.b.1 Access rights for small-scale fisheries



6.4.1 Water use efficiency

6.4.2 Water stress



15.1.1 Forest area

15.2.1 Sustainable forest management

15.4.2 Mountain Green Cover



12.3.1 Global food losses



Food and Agriculture Organization of the United Nations

Statistics at FAO - Wood products statistics

Production and trade of primary wood and paper products

Roundwood

Wood charcoal, wood chips, particles and residues

Sawnwood

Wood-based panels

Trade of secondary wood products

Pulp and recovered paper

Paper and paperboard

Wood products



Food and Agriculture
Organization of the
United Nations

Dissemination of wood products statistics

FAOSTAT

A screenshot of the FAOSTAT website banner. The background is a dark grey with faint, white mathematical formulas and symbols. The text is white and centered. At the bottom right, there is a blue button with white text.

Food and agriculture data

FAOSTAT provides free access to food and agriculture data for over 245 countries and territories and covers all FAO regional groupings from 1961 to the most recent year available.

[Explore Data](#)

Books and materials:

Yearbook of forest products from 1947;
Production capacity of pulp and paper from 1968;
Recovered paper from 1947;

Not only wood!



Photo: AnnamariHeikkinen

Photo: Finnish Forest Ass.

NWFPs - overview, definition and statistics

- ❑ FAO estimates that NWFPs generated **US\$88 billion** in 2011 ([SOFO, 2014](#)).
- ❑ **76 million tonnes** of food from the forest were consumed on average in 2011 ([SOFO, 2014](#)).
- ❑ **1 billion people** are thought to depend on *wild* foods ([Burlingame, 2000](#)).
- ❑ **80 percent** of the population of developing countries rely on traditional medicines, mostly plant drugs, for primary health care.



Contributions of forests & trees for food security and nutrition

- ❑ **Dietary diversity.** Recent studies from Asia and Africa (21 countries) suggest a **positive correlation between tree cover** and more diverse and nutritious diets. (Sunderland et al., 2016; Ickowitz et al. 2014).
- ❑ **Resilience.** NWFPs can enhance the resilience of forest dependent peoples particularly in times of climatic and economic uncertainty.
- ❑ **Income and employment.** Avg. 60 to 80 percent of income of forest-dwellers from natural resources; NWFPs account for an average 40 percent (Ingram et al. 2016)
- ❑ **Energy.** Some 2.4 billion rely on woodfuel as main source of energy for cooking (764 million to boil and sterilize water)

Environmental Conservation: page 1 of 13. © Foundation for Environmental Conservation 2016.

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Forest foods and healthy

RESEARCH ARTICLE

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Date submitted: 11 February 2015; Date

Forests, Trees, and Micronutrient-Rich Food Consumption in Indonesia

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SUMMARY

Forested landscapes provide a rich food for millions of people growing evidence base suggests of great importance to the diet living in close proximity to forest communities. These foods are widespread and are attempted to be investigated in 37 countries. We compare household national we compare smallholder meat and half of the foods for patterns. For high forest food their die in each amounts

Assessing the cost of a nutritious eastern Bari

Céline Termote, Jes

Abstract

Background. Wild foods contributions to nutrition studied or considered in programs. **Objective.** To study the in achieving a cost reduced diet for women and young programming. **Methods.** An ethnobiology food biodiversity was carried discussions, and five wild modeling. A market survey assessed available food prices by season. Diets were modeled to minimize cost and maximize nutrient adequacy using the Cost of Diet linear programming tool. Modeling was done without and with wild foods. **Results.** The modeled diets without wild species were deficient in iron for all age groups during the dry season, deficient in vitamin B₆ and calcium for infants aged 6 to 8 months during the dry season, and deficient in iron and zinc for infants aged 6 to 8 months over the whole year. Adding wild foods, especially Berchemia discolor,

Dietary quality and tree cover in Africa

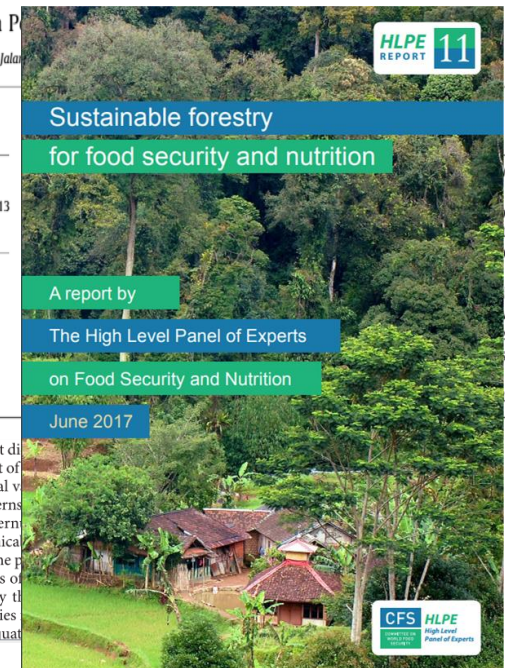
Amy Ickowitz*, Bronwen Powell

Center for International Forestry Research, Jala

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Dietary quality



NWFPs overview, definition and statistics

What is an NWFP?

- ❑ “Non-wood Forest Products consist of goods of biological origin other than wood, derived from forests, other wooded land and trees outside forests.” (FAO, 1999)
 - ❑ NWFPs cover (1) **wild** products; (2) **managed** products; (3) **cultivated** products.
 - ❑ **Includes:** mushrooms, fruits, nuts, herbs, aromatic plants, game, fibres (used in construction, clothing or handcrafts), resins, gums, saps, and products used for medicinal, cosmetic or cultural scopes.
-



NWFPs overview, definition and statistics

Challenges to data collection . . .

Vast **differences in terminology and definitions** make it difficult to assess trends.

Data is incomplete as in most cases NWFP use and trade are confined to the **informal sector**.

Where and when data is available, it is often **partial and incomparable** across countries and over time;
unclear boundary between NWFPs and products from agriculture.

as a result, NWFPs are **poorly represented in international statistics** so the role of NWFPs for food and nutrition security and their economic contribution **underestimated**

NWFPs overview, definition and statistics

FAO data collection and dissemination

Data availability in term of production and trade of:

Tree nuts (for food and non-food use)

Brazil nuts, Cashew nuts, Chestnuts, Almonds, Walnuts, Pistachios, Kolanuts, Hazelnuts (Filberts), Areca nuts, Shelled Cashew Nuts, Shelled Almonds, Shelled Walnuts, Shelled Hazelnuts, Shelled Nuts nes, Prepared Nuts, Groundnuts, in shell, Groundnuts Shelled, Prepared Groundnuts, Coconuts, Coconuts Desiccated, Karite Nuts (Sheanuts), Tung Nuts

Natural gums

Extracted from the latex of trees of various species. Although similar to rubber in many ways, natural gums are usually less elastic.

Natural rubber

The liquid secreted by the rubber tree. Includes stabilized or concentrated latex and prevulcanized rubber latex. In trade figures, liquid weight is converted to dry weight at 60%.

Game meat

Meat and offals of wild animals, whether fresh, chilled or frozen.

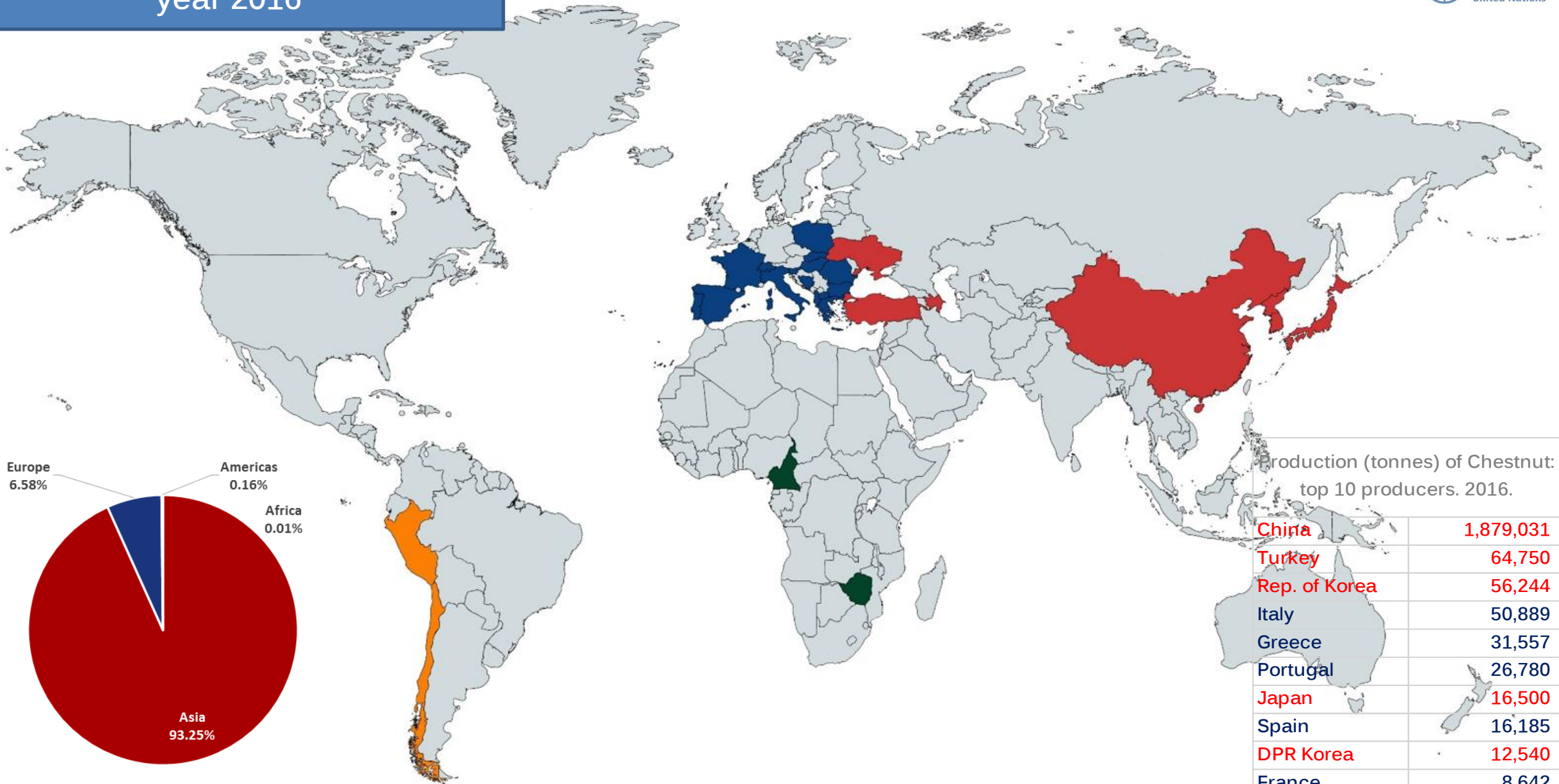
Chestnuts – Production statistics

Definition: chestnuts in shell. (*Castanea spp*)

Data availability: time series from 1961 – 2016 related to production, area harvested, yield, value of agriculture production,

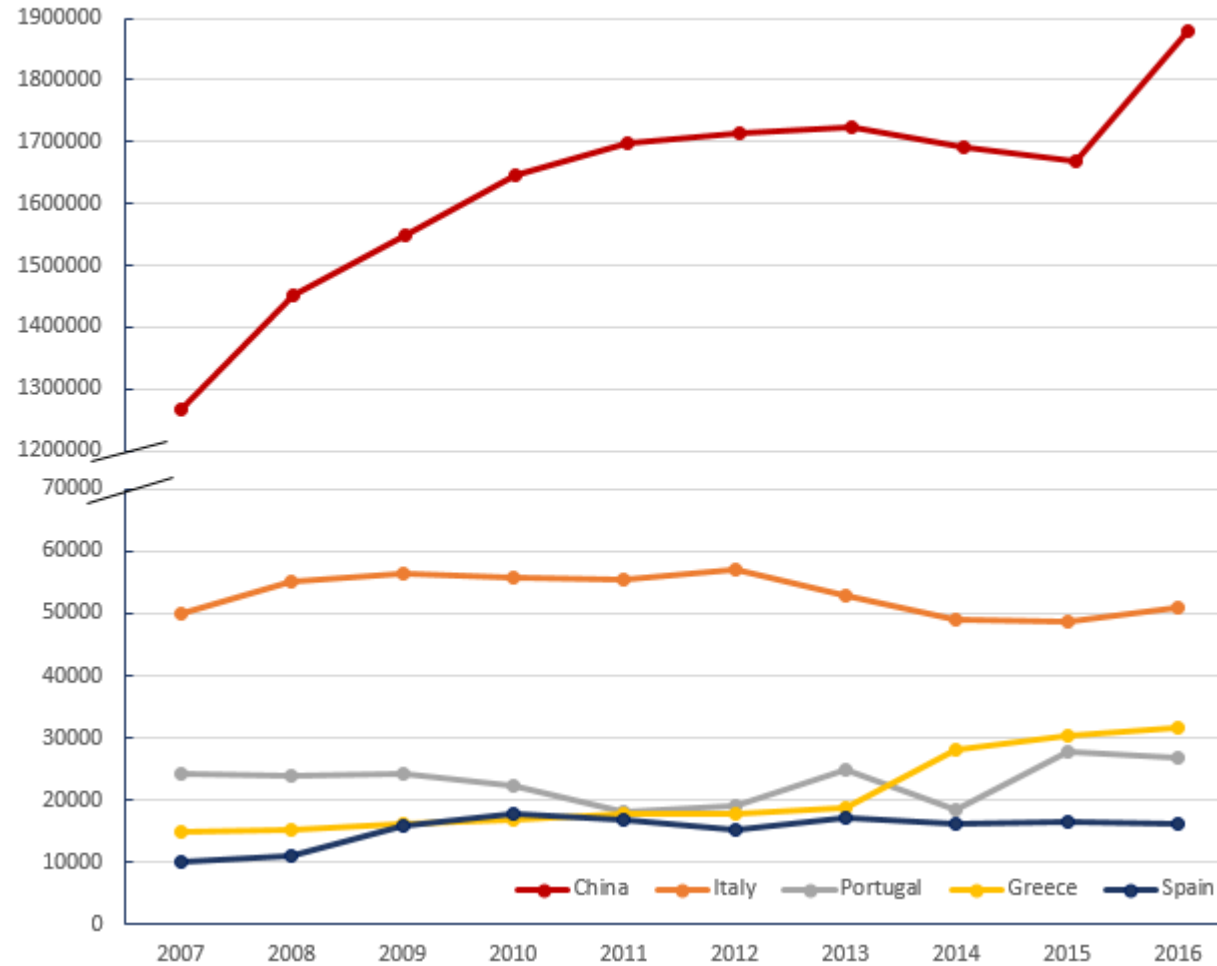
In 2016, the latest available year, FAO collected data with reference to 26 producing countries

Global chestnut production year 2016



Chestnuts - Production statistics

Production of chestnuts 2007 - 2016 in tonnes



Yearly growth rate (%)

China	4.48
Italy	0.20
Portugal	1.11
Greece	8.62
Spain	5.50

Chestnuts - Trade statistics

Trade data are collected and disseminated according the **Harmonized System** classification managed by the World Commodity Organization (WCO)

Section II – Vegetable products

Chapter 8 – Edible fruit and nuts; peel of citrus fruit or melons

Heading 0801- Coconuts, Brazil nuts and cashew nuts, fresh or dried, whether or not shelled or peeled

Heading 0802- Other nuts, fresh or dried, whether or not shelled or peeled

-Almonds

-Hazelnuts or filberts (*Corylus spp.*)

-Walnuts

-Chestnuts (*Castanea spp.*):

Subheading 080241 -- In shell

Subheading 080242 – Shelled

-Pistachios

-Macadamia nuts

-Kola nuts (*Cola spp*)

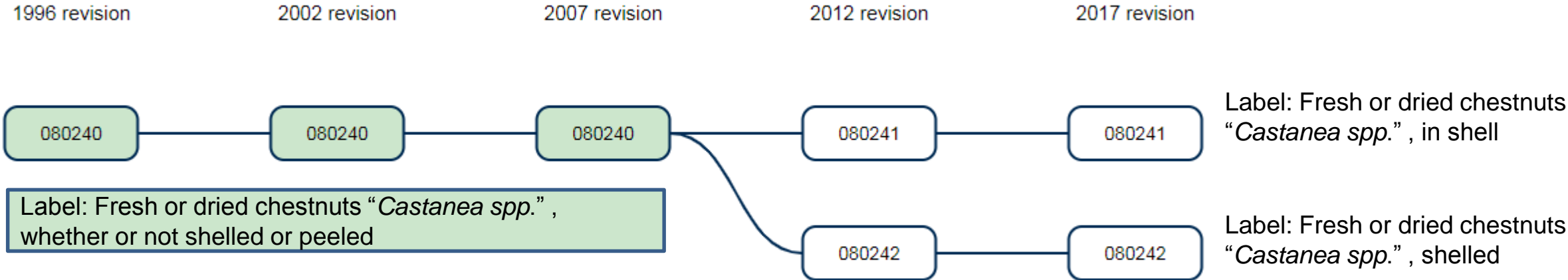
-Areca nuts

Other

Chestnuts - Trade statistics

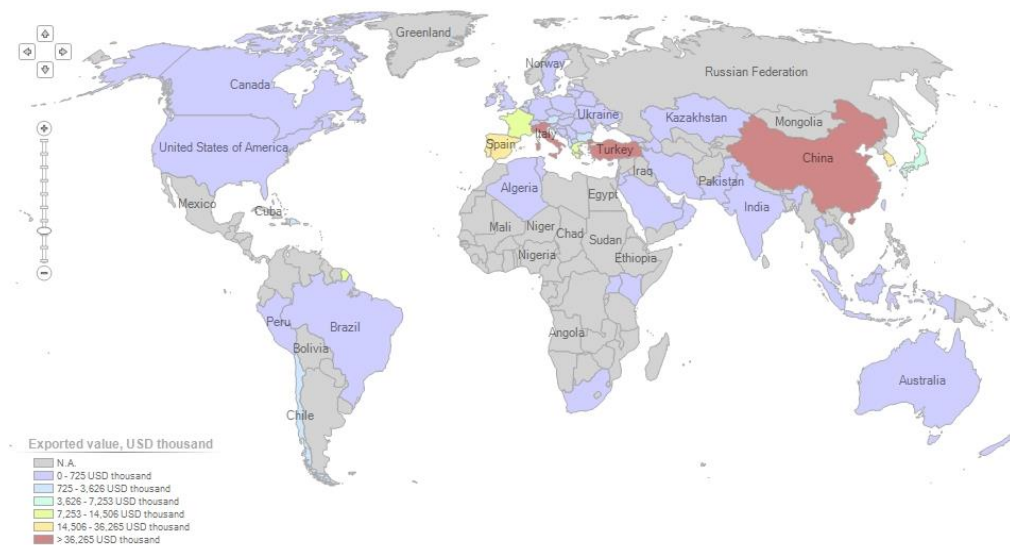
Trade data are collected and disseminated according the **Harmonized System** classification managed by the World Commodity Organization (WCO).

HS revisions correspondences:



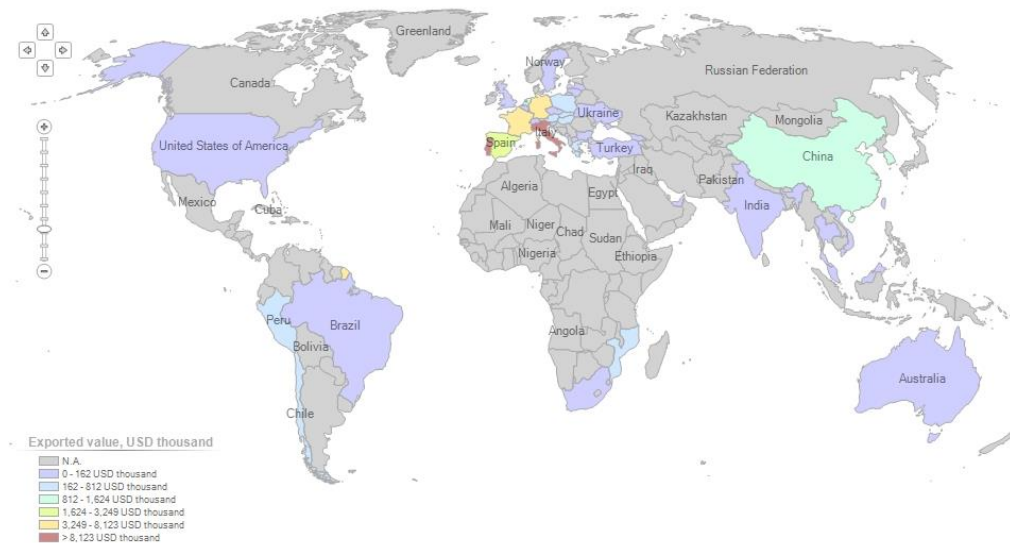
Export indicators – Top 5 countries Fresh or dried chestnuts "Castanea spp.", in shell

Exporters	Value exported in 2017 (USD thousand)	Trade balance in 2017 (USD thousand)	Annual growth in value between 2016-2017 (%)	Share in world exports (%)	Cumulated share in world exports (%)
China	72,530	50,491	-5	25	25
Italy	61,350	-2,838	16	22	47
Turkey	36,787	35,859	47	13	60
Portugal	27,687	23,865	-40	10	70
Spain	26,273	22,612	-48	9	79



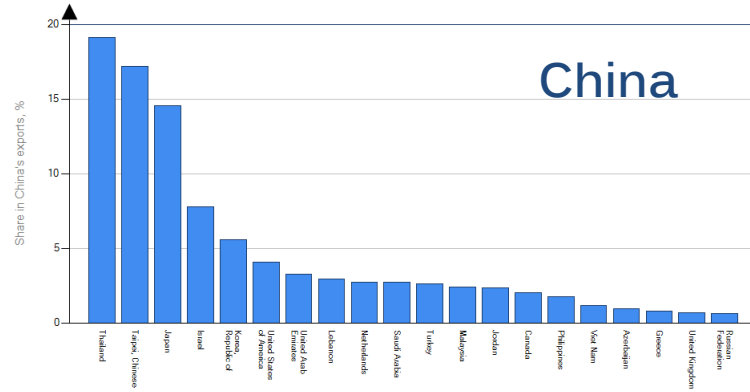
Export indicators – Top 5 countries Fresh or dried chestnuts "Castanea spp.", shelled

Exporters	Value exported in 2017 (USD thousand)	Trade balance in 2017 (USD thousand)	Annual growth in value between 2016-2017 (%)	Share in world exports (%)	Cumulated share in world exports (%)
Portugal	16,246	15,980	62	33	33
Italy	13,204	12,129	20	27	60
France	6,196	-15,630	7	13	73
Germany	3,656	-4,392	26	8	80
Spain	1,802	-6,442	10	4	84

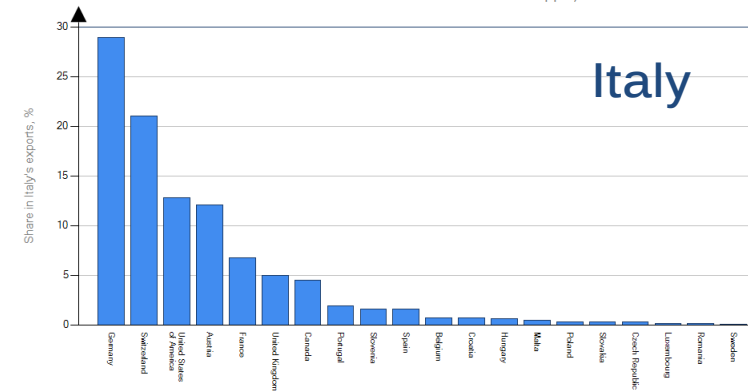


Chestnuts in shell – Export markets

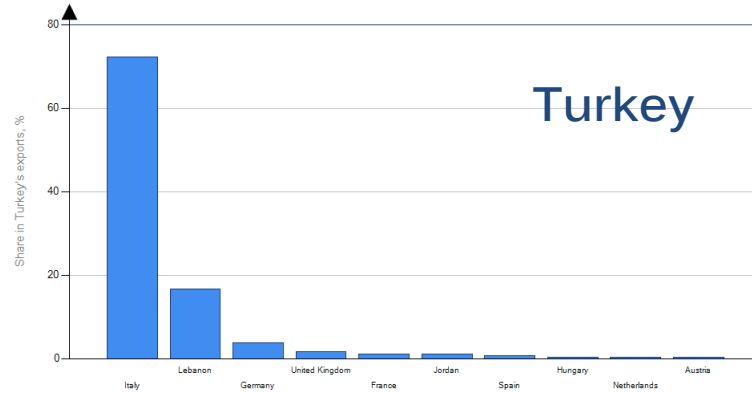
List of importing markets for a product exported by China in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



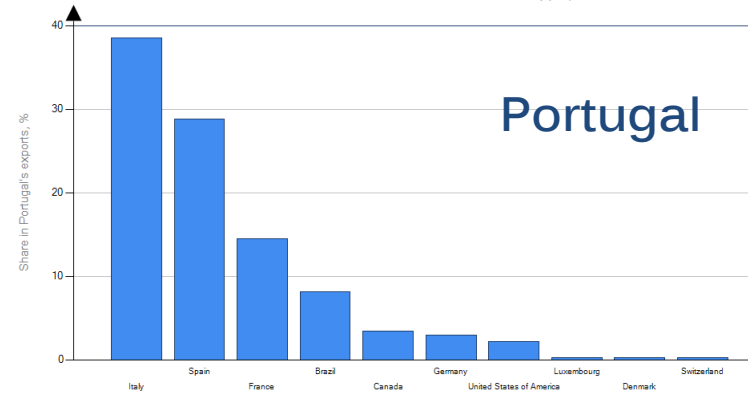
List of importing markets for a product exported by Italy in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



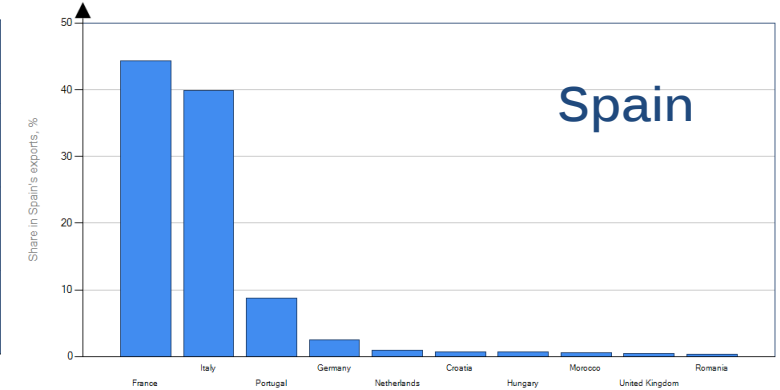
List of importing markets for a product exported by Turkey in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



List of importing markets for a product exported by Portugal in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



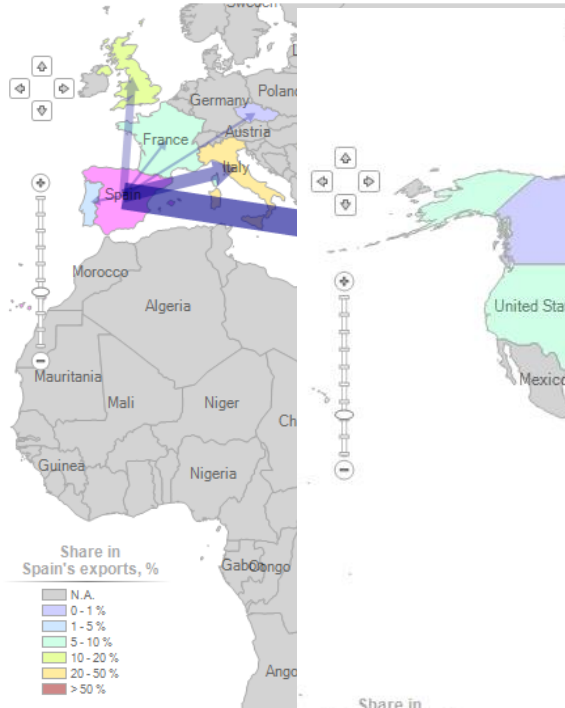
List of importing markets for a product exported by Spain in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



Chestnuts shelled – Export markets

List of importing markets for a product exported by Spain in 2017

Product : 080242 Fresh or dried chestnuts "Castanea spp.", shelled



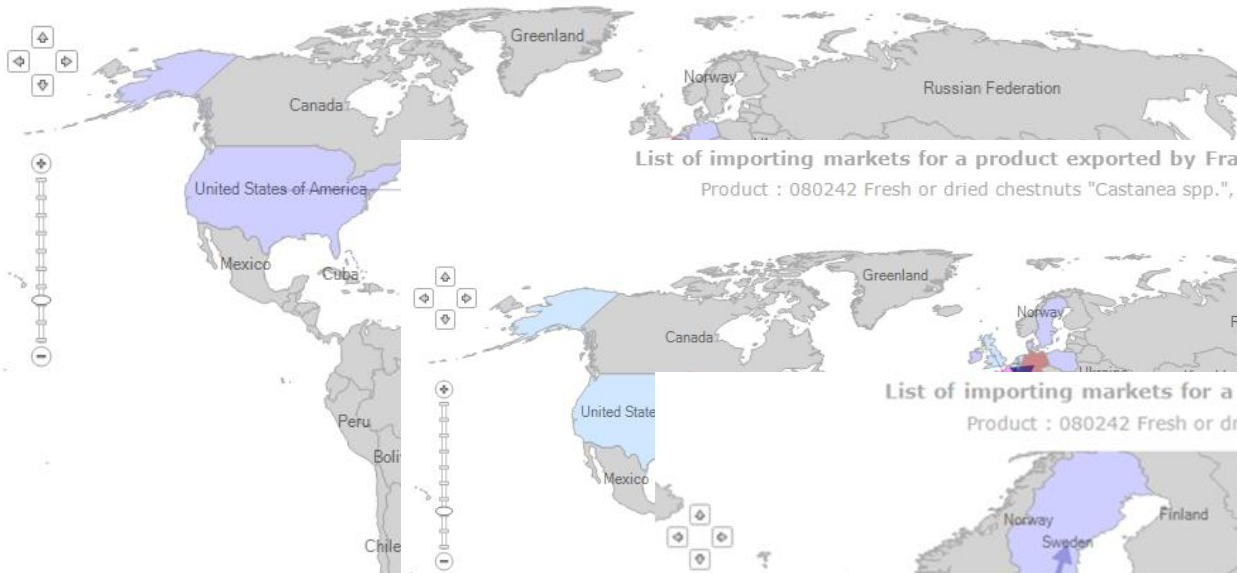
List of importing markets for a product exported by Italy in 2017

Product : 080242 Fresh or dried chestnuts "Castanea spp.", shelled



List of importing markets for a product exported by Portugal in 2017

Product : 080242 Fresh or dried chestnuts "Castanea spp.", shelled



List of importing markets for a product exported by France in 2017

Product : 080242 Fresh or dried chestnuts "Castanea spp.", shelled



List of importing markets for a product exported by Germany in 2017

Product : 080242 Fresh or dried chestnuts "Castanea spp.", shelled

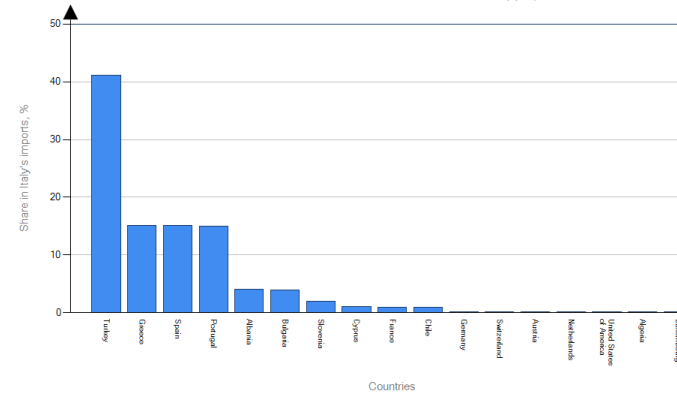


Chestnuts – Trade import statistics

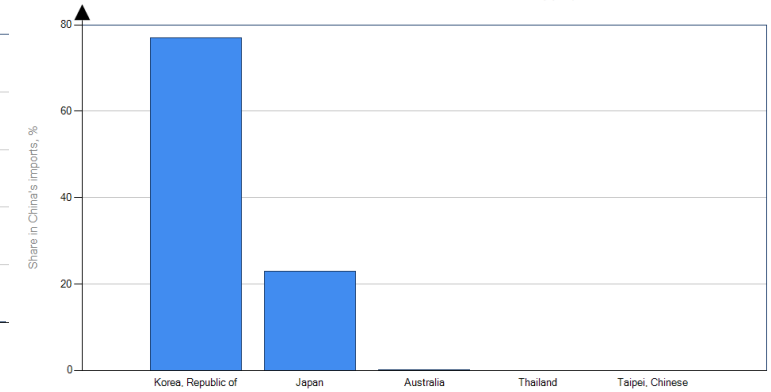
Fresh or dried chestnuts "Castanea spp.", in shell

Importers	Value imported in 2017 (USD thousand)	Quantity imported in 2017	Share in world imports (%)
Italy	64,188	21,506	26.2
China	22,039	9,255	9.0
Germany	18,216	3,429	7.4
Switzerland	15,311	2,467	6.2
USA	13,837	3,180	5.6

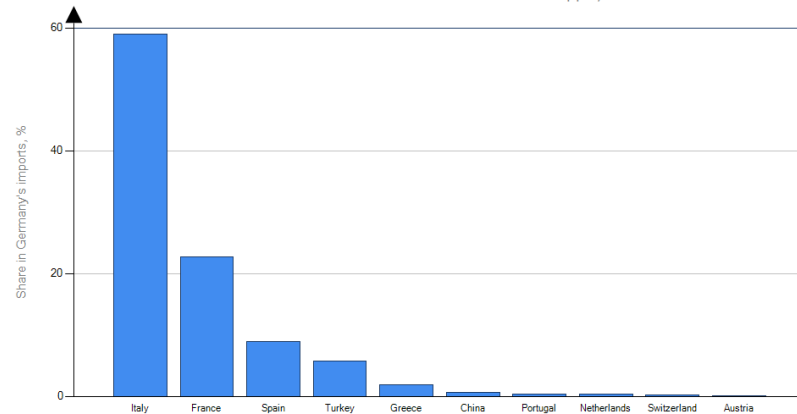
List of supplying markets for a product imported by Italy in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



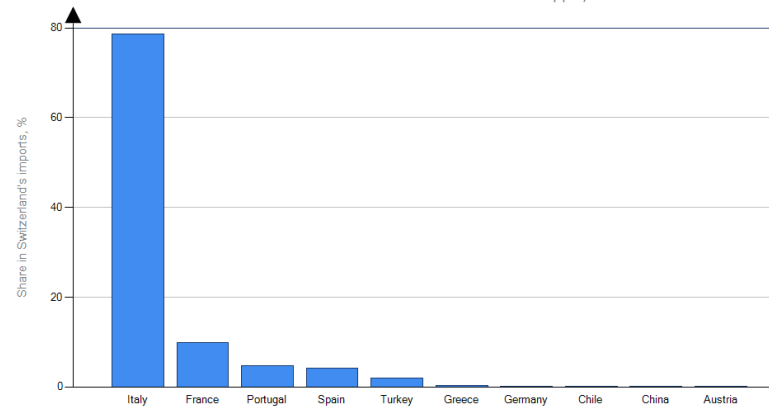
List of supplying markets for a product imported by China in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



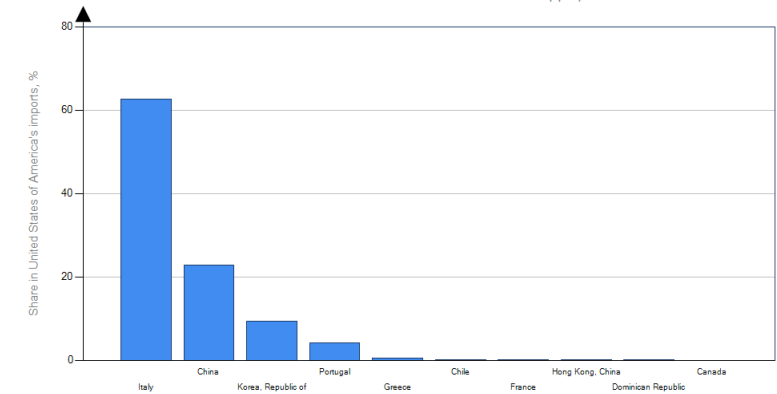
List of supplying markets for a product imported by Germany in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



List of supplying markets for a product imported by Switzerland in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell

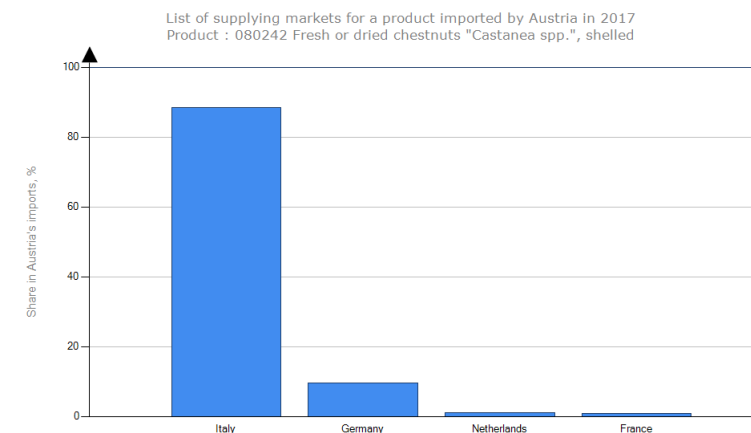
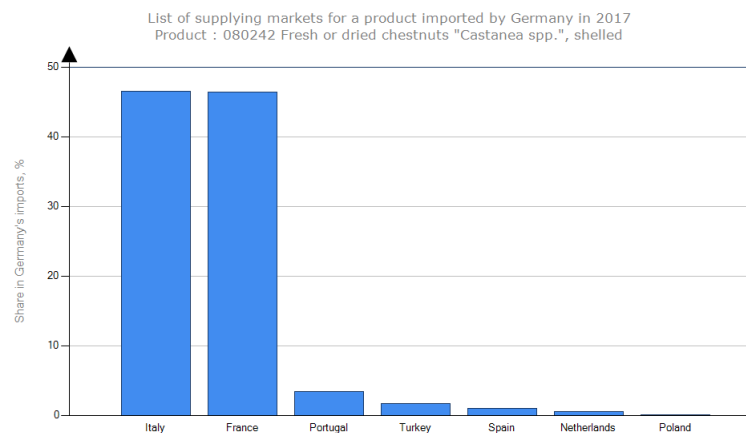
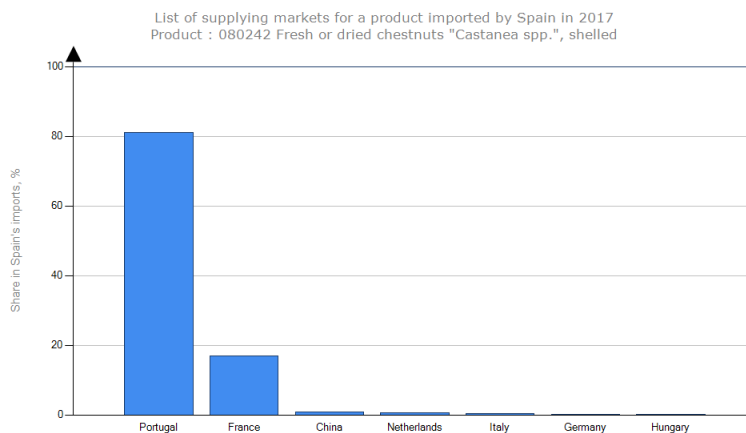
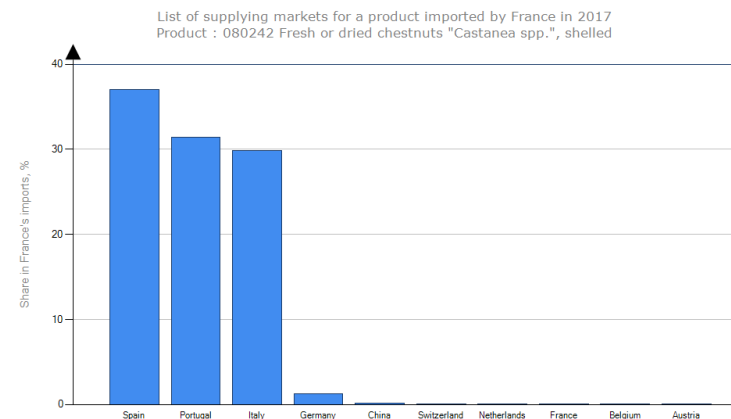
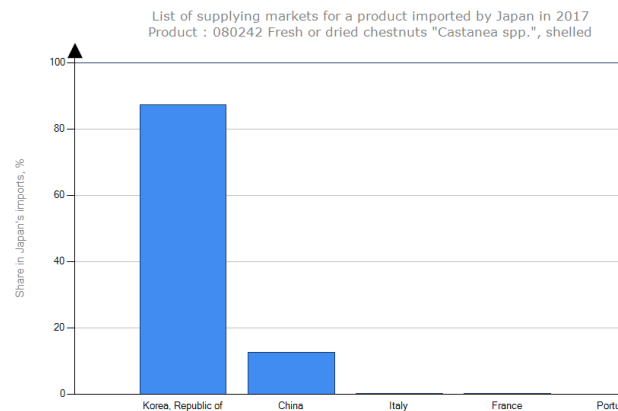


List of supplying markets for a product imported by United States of America in 2017
Product : 080241 Fresh or dried chestnuts "Castanea spp.", in shell



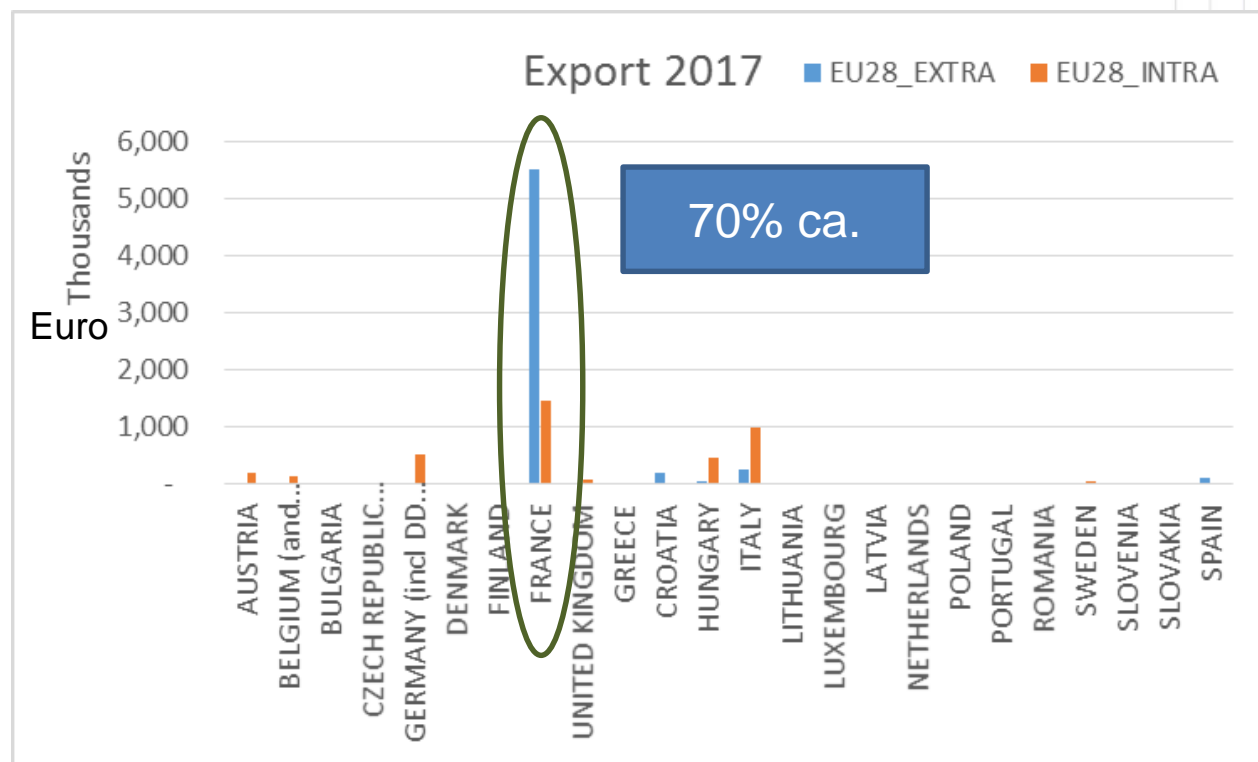
Chestnuts – Trade import statistics

Fresh or dried chestnuts "Castanea spp.", shelled			
Importers	Value imported in 2017 (USD thousand)	Quantity imported in 2017	Share in world imports (%)
Japan	30,865	3,874	35.3
France	21,826	3,697	25.0
Spain	8,244	2,453	9.4
Germany	8,048	1,186	9.2
Austria	2,503	509	2.9



Chestnuts – Trade statistics for EU countries

20079920 - CHESTNUT PURÉE AND PASTE, OBTAINED BY COOKING, WITH SUGAR CONTENT OF > 30% BY WEIGHT



How to get better NWFPs data

What is FAO doing to get better data?

- Working on methods and classifications jointly with other international partner (United Nations Statistics Division and World Commodity Organization)
- Field work: piloting an household survey on forest products consumption in Zambia



The ultimate objective is to improve statistical capacities to collect this information systematically. This information is critical for improving forest management and land use plans, and policies that recognize the contribution of NWFPs, and wild biodiversity more generally, to food and nutrition security

Technical assistance in Turkey

In 2015 FAO started a project with the Ministry of Forestry and Water Affairs of Turkey for the *Control of Chestnut Gall Wasp in Chestnut Forests of Turkey*. FAO assisted in:

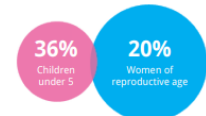
- establishing a laboratory for rearing and releasing the biological control agent *Torymus Sinensis* which was imported from Italy
 - developing both training to all stakeholder (technical staff, foresters and chestnut growers) and practical guidelines describing the process and procedures for management of the Asian chestnut gall wasp using classical biological control
-

Valuation of forest products for refugee resilience and planning forest resources management for emergency and development needs in Bidibidi settlement, Uganda

Site report **2017** Bidibidi **UGANDA**

► Population

272,206 refugees



Origin of refugees
SOUTH SUDAN

Site opened
Aug 2016



► Partners



► Key Indicators

CRUDE MORTALITY RATE 0.1 Deaths/1,000 refugees/month	US MORTALITY RATE 0.1 Deaths/1,000 refugees/month	MATERNAL MORTALITY 4 Deaths	SKILLED BIRTH ATTENDANCE 92% of all births
GAM 12% Global Acute Malnutrition	SAM 0% Severe Acute Malnutrition	WATER SUPPLY 18 Liters/person/day	LATRINE COVERAGE 12 Refugees/communal toilets or latrines



Source: <https://www.maf-uganda.org/bidi-bidi-the-worlds-largest-settlement/>

NWFPs beyond data 3/3

Global Environment Facility (GEF) project: *reversing deforestation and degradation in high conservation value Chilgoza Pine Forests in Pakistan*

FAO is an implementing agency of the Global Environment Facility (GEF), an international co-financing mechanism that provides grants to countries to invest in global environmental projects addressing the critical nexus between agriculture and the environment. This includes climate change, biodiversity, land degradation, international waters and chemicals.

Start April 2018 - Executing Agencies: Ministry of Climate Change. Co-financing amount:
USD 24 000 000



In conclusion:

- **Chestnut data are readily available**
- **Consumption data could be improved**
- **Valuation of forest products essential for planning forest resources management** and support food, nutrition, livelihoods and emerging bio-economies.

What is really important?

Stakeholders engagement – collaboration among growers and trade association, institutional and academic world, specialized organization to better understand their statistical needs