



CBI
Ministry of Foreign Affairs

CBI Product Factsheet:

Amaranth grains in Europe

Introduction

The European demand for ancient grains and niche cereals such as amaranth is increasing. Around 5,500 tonnes of niche grains, most of which were amaranth seeds, were imported from developing countries in 2015. The prospects for use of amaranth in the health food and gluten-free segments are promising. Germany is the largest importer of amaranth, and demand for this cereal is expected to grow in the food and processing industry.

Product description

Amaranth (*Amaranthus*) was an important staple crop in pre-Columbian Mexico and South-America, but is also widely used in other parts of the world. It is not a true grain, but a pseudo-grain, related to common pigweed. There are 60 species of Amaranth, of which three species (*Amaranthus cruenus*, *Amaranthus hypochondriacus* and *Amaranthus caudatus*) are commonly grown for their edible seeds. They are still cultivated in Mexico, Guatemala and Peru, but have also become a food crop in many areas, such as China, India, Nepal, Thailand and Nigeria. In lowland Asia and Africa amaranth is also consumed as a leafy vegetable.

Amaranth seeds are small and yellow or light brown in colour. They have a high protein content (around 13-14%) and are gluten free, unlike many cereal grains. Amaranth seeds can be popped or puffed, milled into flour or made into flakes.

Table 1: Combined Nomenclature (CN) Code for Amaranth

Statistical number	Product
1008.90.00 (from 2012)	CEREALS (EXCL. WHEAT AND MESLIN, RYE, BARLEY, OATS, MAIZE, RICE, GRAIN SORGHUM, BUCKWHEAT, MILLET, CANARY SEEDS, FONIO, QUINOA AND TRITICALE)
1008.90.90 (until 2012)	CEREALS (EXCL. WHEAT AND MESLIN, RYE, BARLEY, OATS, MAIZE, RICE, BUCKWHEAT, MILLET, CANARY SEED, TRITICALE AND GRAIN SORGHUM)

Source: Eurostat (Comext)

Product specifications

There is no international standard for amaranth. The private standard quoted below is commonly applied in the European Union (EU), but individual buyers may set other or higher requirements.

- Whole grains, not genetically modified
- Colour: yellow / light brown
- Moisture level max. 14%
- Purity level 99.9%
- Free from any foreign materials
- Quality in accordance with EU regulation on contaminants, maximum residue limits (MRLs) and microbiological properties
- Optional standards: organic, gluten free, kosher

New buyers will often require samples, which should be representative of the product delivered. For further details, see "What additional requirements do buyers often have?" below.

Labelling

Labelling must comply with the regulations applying to the European market. Read more about [food labelling on the EU Export Helpdesk](#) and in [EU Regulation 1169/2011](#) on information to consumers. The provision of nutritional information will also be made compulsory with effect from December 2016.

The following items should be on the label of pre-packed amaranth, whereas for amaranth sold in bulk certain items can be mentioned in the commercial documents:

- Official product name
- Physical condition or treatment
- List of ingredients and allergens
- Class, size (code), number of batches, net weight in metric units
- Statement that the product is destined for human consumption
- Best-before date or use-by date

- Instructions or special conditions for storage or use
- Place of origin or provenance
- Name and address of the importer established in the EU
- Name and address of exporter
- Lot marking on pre-packaged foodstuffs (to ensure traceability of individual batches)

In addition, the label should include any certification logo (if applicable) and/or retailer logo (in the case of products marketed under a private label).

English is often used on bulk labelling, unless your buyer indicates otherwise. Multilingual labels are commonly used on consumer packaging, but the language of the destination country must be included in any case.

Packaging and handling

Strong paper bags with a capacity of 25 kg are often used for the export of amaranth seeds, but these may be replaced by polypropylene bags. Different buyers may have different preferences. If you want to use other forms of packaging, you should take [EU legislation on food contact materials](#) into account.

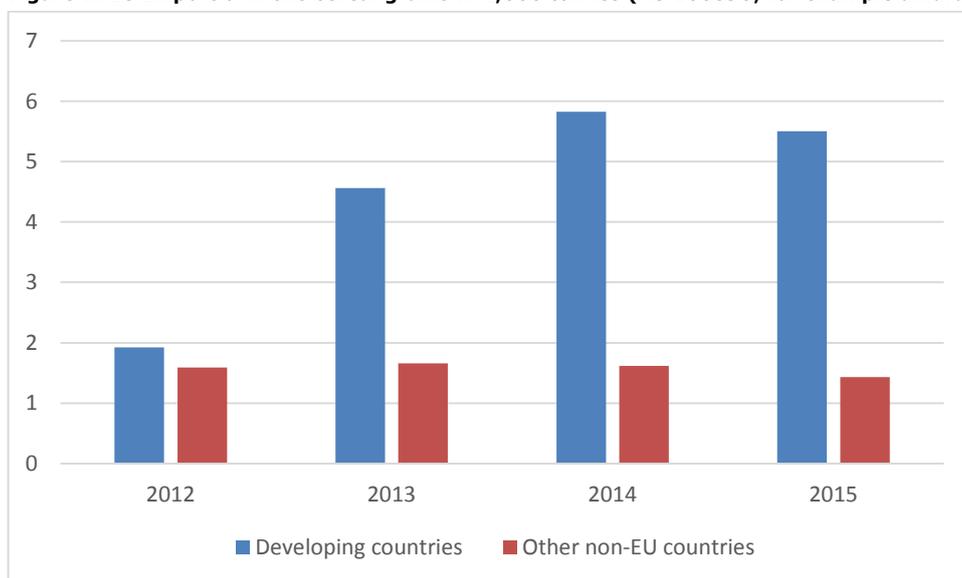
Amaranth should be kept dry, cool and well ventilated during storage, loading and shipping. Containers should be clean and the cargo must be protected from moisture, pests and cross-contamination (especially with organic produce).

What is the demand for amaranth in Europe?

General information about the demand for grains and pulses in the European market is provided on the [CBI Market Intelligence Platform](#). There is no specific statistical trade data on amaranth. The present section gives more detailed information about the trade in and consumption of niche cereals in Europe, including amaranth as one of the principal niche cereals from non-EU suppliers.

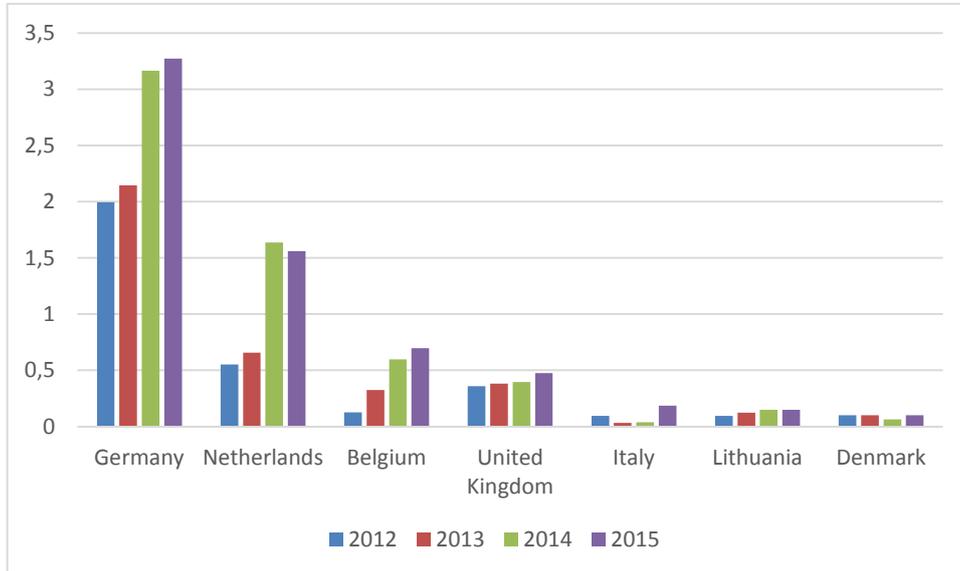
Import

Figure 1: EU Import of niche cereal grains in 1,000 tonnes (HS 100890; for example amaranth, teff, cañihua)



Source: [Market Access Database](#) (Comext)

Figure 2: Main European importing countries of niche cereal grains from non-EU countries in 1,000 tonnes (HS 100890; for example amaranth, teff, cañihua)



Source: [Market Access Database](#) (Comext)

Interpretation and opportunities

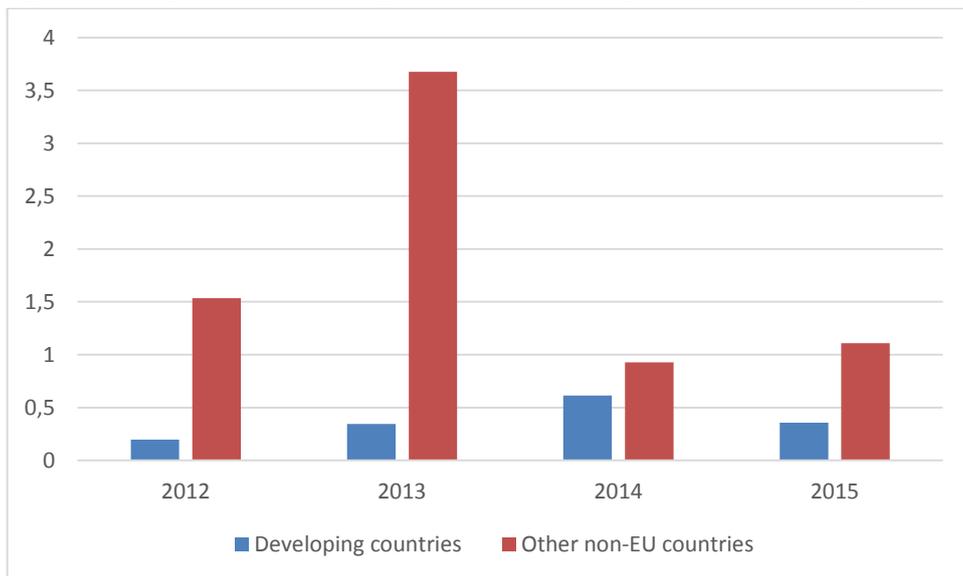
- The import of niche cereals (HS 100890) from developing countries (5,500 tonnes) is very low compared to the total EU imports of this category (140,360 tonnes). However, most of the amaranth intended as a (health) food product comes from non-EU suppliers. India (3,871 tonnes), the USA (1,277 tonnes), South Africa (455 tonnes) and Peru (370 tonnes) were responsible for most of the supply of niche cereals in 2015.
- Since amaranth was first introduced to Europe by the organic industry, most of the food-grade amaranth imported is certified organic. Whereas Latin America used to be the main source for organic amaranth, in 2015 India became the main supplier, offering the product at a much lower price. From 2015 onwards, imports of amaranth from Peru and Bolivia have almost been reduced to zero.
- South Africa has become one of the largest supplying countries in a very short time, increasing its export to the EU from 22 to 455 tonnes in the past four years.
- Spain and the Netherlands are the main importers of niche cereals when including the import from other European countries. The biggest importers from outside the EU are Germany (3,272 tonnes) and the Netherlands (1,559 tonnes). Germany mainly imports from India, followed by Peru and the USA, while the Netherlands imports mainly from India and South Africa. Germany and the Netherlands are responsible for almost 70% of EU imports of niche cereals from non-EU countries.
- Belgium is also becoming increasingly important as an importer of niche cereals. The UK is a stable end market.

Tip:

- Build your trade relations in Germany and the Netherlands. The food market for amaranth is relatively small and still largely concentrated in these two markets. Though Belgium is establishing a stronger position as the third target market.

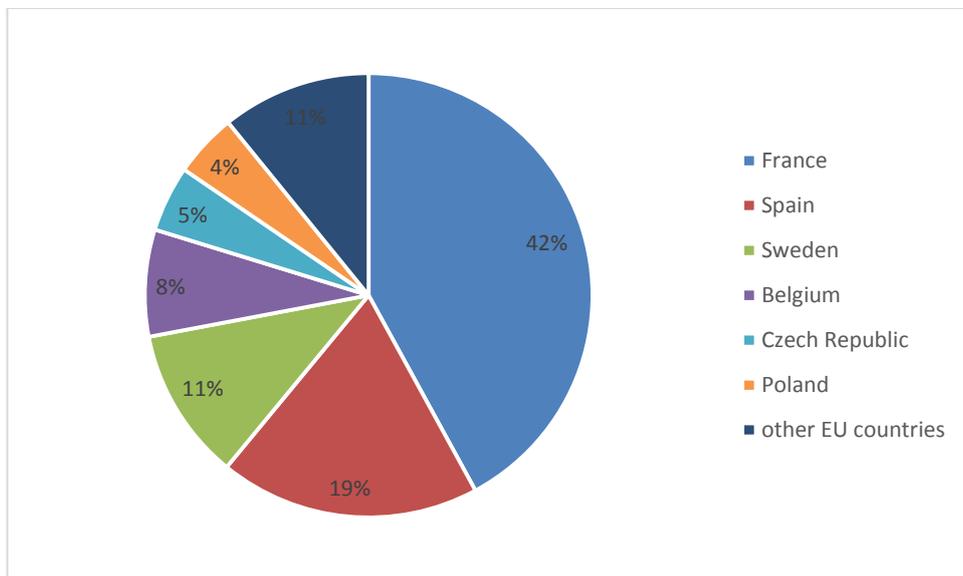
Export

Figure 3: EU Export of niche cereal grains in 1,000 tonnes (HS 100890; for example amaranth, teff, cañihua)



Source: [Market Access Database](#) (Comext)

Figure 4: Main European exporting countries of niche cereal grains to EU and non-EU countries (HS 100890 for example amaranth, teff, cañihua)



Source: [ITC Trademap](#)

Interpretation and opportunities

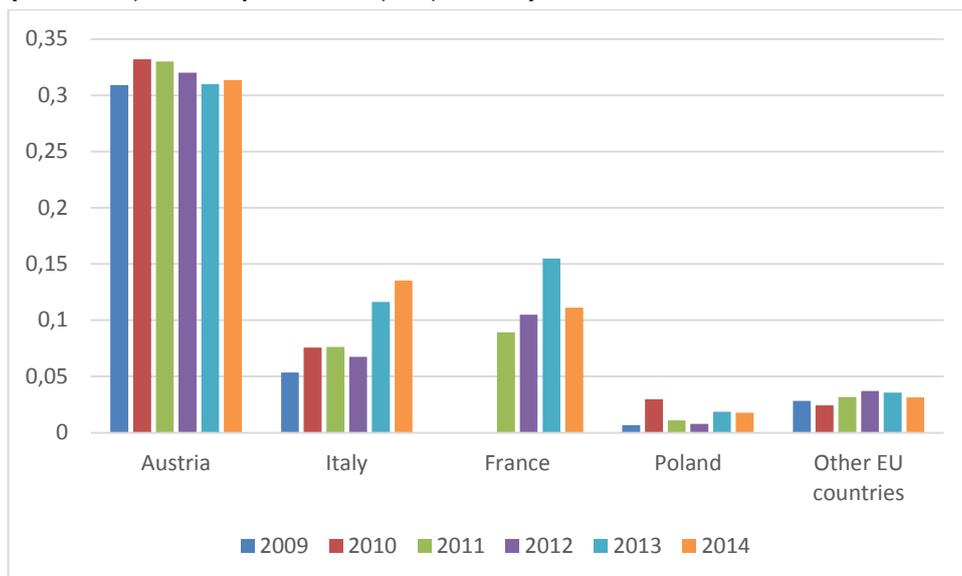
- The export of niche cereals from the EU has fluctuated during the past three years. Many EU countries contribute to this trade, Spain and France being the largest. A large amount of the niche cereals exported from Europe is locally produced, but this does not include amaranth varieties for human consumption.
- The main destinations within the EU are Germany, the Netherlands, Belgium, Spain and France, while the main non-EU destinations are the USA, Morocco, Norway and Switzerland.

Production

FAOSTAT production statistics include data on the following group of niche cereals:

- Canagua or coaihua (*Chenopodium pallidicaule*); quihuicha or Inca wheat (*Amaranthus caudatus*); adlay or Job's tears (*Coix lacryma-jobi*); wild rice (*Zizania aquatica*). Other cereal crops are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report cereals that are classified individually by FAO under this common heading.
- The production quantities given in Figure 5 are not representative of amaranth for human consumption. These figures are likely to include other niche cereals as well as amaranth types that are used as forage.

Figure 5: Main European producing countries of niche cereal grains to EU and non-EU countries (HS 100890; for example amaranth, teff, cañihua)



Source: [FAOSTAT](#)

Interpretation and opportunities

- The production of niche cereals is increasing at a global level. The main production regions for amaranth are Latin America (Mexico, Central America, Bolivia, Peru), India, China and Africa. Amaranth is often also marketed as a vegetable, especially in Africa and Asia, or as an ornamental plant.
- Most production of niche cereals in Europe occurs in Austria, France and Italy. However, the high production volumes reported in FAOSTAT statistics suggest that these figures do not refer mainly to edible amaranth seeds. The commercial supply of amaranth seeds for human consumption comes mainly from non-EU countries.
- Central European countries, such as Austria, the Czech Republic, Slovakia, Germany and Poland, started to show an interest in the cultivation of amaranth seeds and to carry out research on this topic a few decades ago. The main reason for this interest was the nutritional value of these seeds.

Tip:

- Check the suitability of your climate for the production of high-quality amaranth. A drier climate can reduce the risks of mycotoxins, making it easier to comply with European food safety requirements.

Consumption

The available trade and production statistics do not provide a reliable basis for estimation of the consumption of amaranth seeds.

Interpretation and opportunities

- The main consumption market for amaranth seeds is Germany. However, this commodity is becoming increasingly well known in other EU markets as well, such as the UK, the Netherlands, Sweden, Belgium and France. The majority of the trade is still handled by Germany and the Netherlands.
- Imported amaranth is mainly consumed as a health food. It is often organically grown, and may be sold in small packages (raw, popped or milled) containing up to 500g of the product, or as an ingredient in breakfast cereals, bakery products or healthy snacks.

- There is also a large market in Europe for [amaranth seed oil](#) for cosmetic and personal care applications, which is believed to be increasing.

Tip:

- Keep up to date on consumer trends and new products, in order to be able to identify new target groups. Shops or online retailers can be a useful source of such information.

What trends offer opportunities for amaranth on the European market?

General information about trends affecting grains and pulses on the European market is provided in the [CBI Trends](#) page on the [CBI Market Intelligence Platform](#). The present section deals with specific trends for amaranth in Europe.

Amaranth as a health food:

A growing number of consumers in Europe are increasingly aware of the need for a healthy diet. Although still considered a niche product, amaranth perfectly fits the image of a "superfood". The demand for healthy grains will continue to grow, which will benefit amaranth seeds with their high nutritional value and gluten-free composition.

Organic is important:

Growing consumer interest in health, environmental and social responsibility is stimulating rapid expansion of the organic sector. Amaranth is strongly associated with health, and consequently many amaranth-based food products are organic too. Health food shops and specialised organic grocery stores have a regular supply of products incorporating healthy grains such as amaranth, but amaranth is also increasingly available in conventional retail stores.

Interest in new, authentic food:

Many European consumers are keen to try out new products. The story behind amaranth, describing it as an ancient grain and a traditional food for native Americans, can throw interesting new light on this product.

Amaranth as an ingredient:

The variety of food products available on the European market is growing rapidly. Amaranth is an interesting ingredient for new products in this expanding market. Their small size makes amaranth seeds much more suitable as an ingredient than as a food in its own right. Amaranth is typically used as semi-processed seeds (for instance, puffed, milled or flaked), in breakfast cereals, grain mixes, healthy snacks and bakery products.

Tips:

- Keep up to date on new European food trends by visiting news websites, such as [Food Navigator](#), [Organic & Wellness News](#) and [Food Manufacture](#).
- If possible, create a good story on your product, including information on such aspects as its origin, social impact and traditional cultivation.

What requirements should amaranth comply with to be allowed on the European market?

General information on buyer requirements for grains and pulses on the European market is given in [CBI Buyer Requirements](#) on the [CBI Market Intelligence Platform](#). The present section deals with specific requirements applying to amaranth in Europe.

What legal and non-legal requirements must my product comply with?

Food safety:

The [General Food Law](#), which regulates food safety in the EU, also applies to amaranth. Suppliers must make sure that amaranth exported to the EU is traceable and that safety systems (such as HACCP) are in place.

Contaminants:

The maximum permissible levels of contaminants, such as heavy metals and mycotoxins, are laid down in [EU Regulation 1881/2006](#). All the provisions of this regulation that apply to cereal products are also relevant for amaranth.

Maximum Residue Limits:

The maximum residue limits (MRLs) for pesticides that might be used on amaranth can be found in the [EU Pesticide Database](#). Use of "amaranth" or "buckwheat and other pseudo cereals" and the type of pesticide in question as search terms will yield the corresponding MRLs. Maximum residue levels are also laid down in [EU Regulation 396/2005](#). You should be aware that the MRL requirements for organic amaranth – and for amaranth seeds used in baby food – are much more stringent.

Tips:

- Read the [EU Factsheet on contaminants](#) and the [EU Factsheet on new rules on pesticide residues in food](#).
- Take extra precaution with organically produced amaranth. Avoid the use of any chemical pesticide and cross-contamination.
- Find out about the general export requirements for amaranth by consulting the [Export Helpdesk](#): just fill in the product code for "other cereals" (10089000), the country of origin and the destination of the amaranth to find the information required.

What additional requirements do buyers often have?

Organic certification:

European buyers often require amaranth to be organically cultivated, especially when supplying the health food market. You need to use organic production methods as laid down in [EU legislation](#) in order to market organic amaranth in the EU. Note: The European Commission recently proposed [new rules for organic farming](#) as part of its future policy framework.

Tips:

- Read about organic farming and European guidelines in this field on the [EU website on organic farming](#).
- You can find importers who specialise in organic products through directories, such as the *International directory of organic food wholesale & supply companies* ([Organic-bio](#)), or at special trade fairs for organic products, such as [Biofach](#) in Germany.

Food safety certification:

As food safety is a top priority in all EU food sectors, you can expect most buyers to request extra guarantees from you in the form of certification. Food management systems and certification schemes recognised by the Global Food Safety Initiative ([GFSI](#)) are widely accepted throughout Europe.

If you are a supplier of amaranth, you may find one of the following certification schemes useful, depending on the role you play in the supply chain (production, distribution and/or processing): [GLOBALG.A.P.](#), [Food Safety System Certification 22000](#) (ISO 22000), [BRC Global Standard for Food Safety](#) (British Retail Consortium) and [IFS Food Standard](#) (International Featured Standard).

Tips:

- Use the [ITC Standards Map](#) or the [GFSI website](#) to learn about the different food safety management systems, hygiene standards and certification schemes.
- Check with your buyers to determine which certification scheme is most relevant for your target market.

Social compliance & sustainability:

EU buyers are paying increasing attention to their corporate responsibility concerning the social and environmental impact of their business. Programmes and initiatives that facilitate social compliance include the *Business Social Compliance Initiative* ([BSCI](#)), the *Ethical Trading Initiative* ([ETI](#)) and the *Global Social Compliance Programme* ([GSCP](#)).

New health foods, such as amaranth, have great exposure in the food media, which makes them more susceptible to both good and bad publicity. It is best to prevent bad publicity up front by being completely transparent and complying with social and environmental requirements.

Tip:

- Check your company's current performance, for example, by performing a self-assessment. Details of how to do this can be found on the [BSCI website](#).

What are the requirements for niche markets?

Fair trade and environmental certification

Fair trade and sustainable certification, such as [Fair for Life](#), [Rainforest Alliance](#) and [Fairtrade](#), is still a niche requirement for amaranth, but it can help your product to stand out from the mass of competitors and attract consumers who are more aware of these issues.

Tip:

- Find a specialised European buyer who is familiar with sustainable and/or fair-trade products. Before engaging in a Fairtrade certification programme, make sure to check (in consultation with your potential buyer) that this label has sufficient demand in your target market and whether it will be cost beneficial for your product.

What competition do I face on the European amaranth market?

General information on competition in the European market for grains and pulses is provided in the [CBI Competition](#) page on the [CBI Market Intelligence Platform](#). This platform also includes [Tips for doing business with European buyers](#). The present section provides further information about the competition in the European market for amaranth.

Market entry – what are the opportunities and barriers?

European buyers are very aware of the potential risks of purchasing amaranth from developing countries. They will get samples analysed in the laboratory to ensure that they are receiving the right quality. Laboratory tests in an EU country may differ considerably from those performed in the country of origin in terms of parameters tested and the residue levels that are considered to be permissible.

Tips:

- Look for potential buyers at major trade events, such as [SIAL](#), [Anuga](#) and [Biofach](#). This is also a good way of checking out the European competition.
- Make sure your product is absolutely clean. Ask your buyer to have a sample tested in a laboratory in his country.
- Prove yourself to be a reliable supplier in order to establish a long-term trade relation. Efficient communication and meeting agreements are essential to build trust.

Product competition – what are substitute products?

Amaranth is a specialty grain and often a conscious choice when purchased or used in processing. There are many grains that are cheap alternatives to amaranth, such as wheat, barley and rye. But amaranth is generally considered to give added value to common grain products, such as breakfast cereals.

Amaranth is a gluten-free grain and can thus potentially be replaced by other gluten-free grains and seeds, such as quinoa, cañihua, teff, millet, buckwheat, sorghum or oats (though oats are often contaminated by wheat gluten).

Tips:

- Make sure you can guarantee a minimum availability and be honest about your capacities as a supplier, especially when targeting the food industry or when working with relatively new products.
- When supplying the gluten-free sector, make sure your amaranth seeds are kept completely separate from gluten-containing grains, post-harvest and during processing, to avoid cross-contamination.

Company competition – who are my rivals?

And how much power do I have as a supplier when negotiating with buyers?

Many buyers regard amaranth as a product that complements their assortment of special grains, but is not yet a major category in its own right. They will often buy amaranth from their current supplier of other grains (such as quinoa) in the same region, simply because this arrangement is convenient and often gives them the best deal. Buyers might consider offers from other suppliers when the volume of amaranth traded increases.

Tips:

- Enhance your profile, for example, by gaining Fairtrade or environmental certification, introducing basic processing of your product or combining it with complementary products, such as quinoa, cañihua or teff. All such measures may convince your buyer that you are a more valuable trading partner.
- Evaluate the possibility of integrating your supply chain with that of a strong partner in the EU in order to supply major retail channels or big food processors. Make sure your company is ready for such commitment.

What do the trade channels and market segments of interest for amaranth in Europe look like?

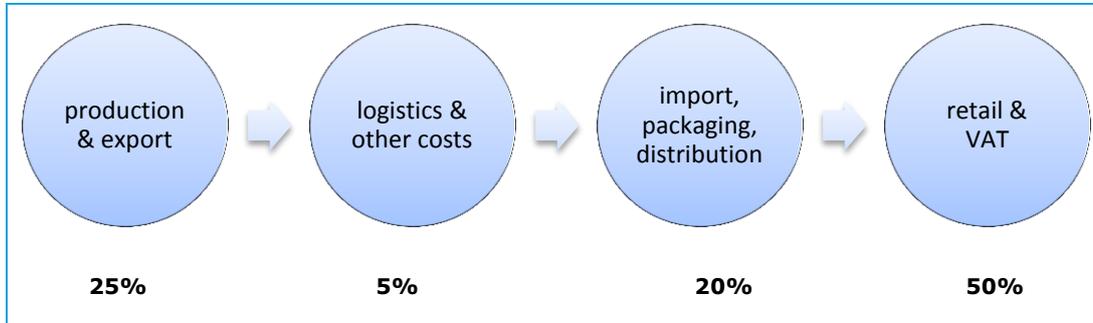
Amaranth as an ingredient in health foods

Amaranth seeds are very small and thus less versatile than other grains like quinoa. Amaranth has to be processed or cooked before consumption, but it is not likely to become an alternative to rice or quinoa dishes. The process industry (making products such as puffed or milled grain, or flakes) and the use as an ingredient are important for the trade in amaranth. Most of these applications can be found in the health food segment.

For further information on trade channels and market segments, see [CBI's Trade Channels and Market Segments for grains and pulses](#). Much of this general information also applies to amaranth.

What are the end market prices for amaranth?

Figure 6: Breakdown of the consumer price for amaranth (indicative)



Unprocessed or raw organic amaranth is commonly sold at a consumer price of around 4 to 6 Euros per kg. Non-organic amaranth for the consumer market is less common, but may cost about 20% less.

Tip:

- You can find information on consumer prices in online shops or the websites of supermarket chains such as [Tesco](#), [Albert Heijn](#) or [Carrefour](#).

Useful sources

Trade organisations

[Coceral](#) - European association of dealers in cereals, rice, feedstuffs, oilseeds, olive oil, oils and fats and agricultural supplies.

[Health Grain Forum](#) - An association set up to promote research and information about the production and consumption of healthy cereal foods.

Databases

[European Grain](#) - Platform linking grain buyers and sellers.

[Organic-Bio](#) - Database listing buyers and suppliers of organic food ingredients and products.

[Europages](#) - European business database.

[Kompass](#) - International business database.

Trade fairs

[Eventseye](#) - Worldwide database of trade fairs and expositions.

[SIAL](#) - Trade fair for food products.

[Anuga](#) - Trade fair for food products.

[Biofach](#) - Trade fair for organic food products.

[Certified Food](#) - Trade fair for certified raw materials and semi-finished food products.

News sites

[Organic & Wellness News](#) - Website with news about organic and sustainable trade.

[Food Navigator](#) - Website with news about trends in the food industry.

[Food Manufacture](#) - Online news service about food and beverage trends in Europe.

Export requirements

[ITC Standards Map](#) - Overview of different standards and certification schemes.

[EU Export Helpdesk](#) - Information about export to Europe.

Statistics

[Market Access Database](#) - European trade statistics.

[ITC Trademap](#) - Global trade statistics.

[FAOSTAT](#) - Production data from the UN Food and Agriculture Organization



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July 2016