

Market Intelligence EFTA for the Philippines Sector: Natural Ingredients



Source: www.kenresearch.com/blog



General Introduction

Background This market study was conducted under the Swiss Import Promotion Programme SIPPO, which is a longstanding, well-established flagship program for export promotion financed by the Swiss State Secretariat for Economic Affairs SECO. SIPPO is specialized in bridging the «last mile» of the supply chain, which covers the route from the supplier to the buyer. The programme works in eleven core countries and supports six economic sectors. The Philippines is not part of these core countries, so the market study was financed under a special budget for ad-hoc one-off activities and implemented against the background of the Free Trade Agreement FTA between the EFTA States (Iceland, Liechtenstein, Norway and Switzerland, and the Republic of the Philippines) signed in Bern, Switzerland, on 28 April 2016 and entered into force on 1 June 2018.

This study is part of the initiative to increase the Philippines' exports to the EFTA and to improve its competitive position with regard to the EFTA/EU markets. In order to meet these targets, three market studies have been conducted focussing on the following aspects:

- Three product groups including: Processed Food, Natural Ingredients and Value-Added Textiles;
- The «last mile» of the export promotion: market access to EFTA & EU, market entry activities, market information, opportunities and challenges for Philippine products;
- Recommendations for accessing EFTA & EU markets;

How to read	All three studies are structured as follows:
this study	 Introduction to the EFTA countries; Introduction to EU countries with most trade potential for the Philippine products; Trade Regulation, FTAs and non-tariff measures; Market Access Requirements; Trade related environmental and social issues;
	Analysis and knowledge on selected Philippine products or product groups;
Imple- mented by	Swiss Import Promotion Programme, Gutenbergstrasse 14, CH-3011 Bern, <u>www.sippo.ch</u>
Бу	in www.linkedin.com/company/swiss-import-promotion-programme
In collabora- tion with	Department of Trade and Industry Export Marketing Bureau, Manila

SIPPO, November 2020



Table of Content

Exe	cutive	Summar	у	5
1.	The E	European	Market	7
	1.1.	EFTA an	d the EU	7
		1.1.1.	EEA	7
		1.1.2.	The European Monetary Union & the Euro	8
		1.1.3.	Economy	8
		1.1.4.	Europe and global trade	9
	1.2.	Switzerl	and	.10
		1.2.1.	History and European cooperation	.10
		1.2.2.	Economy	.11
		1.2.3.	Demographic indicators	.12
		1.2.4.	Doing business	.13
		1.2.5.	Culture	.14
	1.3.	Liechter	nstein	.14
		1.3.1.	History and European cooperation	.15
		1.3.2.	Economy	.15
		1.3.3.	Demographic indicators	.15
		1.3.4.	Doing business	.16
		1.3.5.	Culture	.16
	1.4.	Norway		.16
		1.4.1.	Economy and European cooperation	.16
		1.4.2.	Doing Business	.18
		1.4.3.	History and culture	.19
	1.5.	Iceland		.19
		1.5.1.	History and European cooperation	.19
		1.5.2.	Economy	.20
		1.5.3.	Demographic indicators	.22
		1.5.4.	Doing business and business culture	
		1.5.5.	Culture	.23
2.	The N	Vatural In	gredients Sector in EFTA & selected EU countries	.23
	2.1.	Main Pr	oduct Lines	.24
	2.2.	Switzerl	and and Liechtenstein	.26
		2.2.1.	Consumption & Production	.27
		2.2.2.	Imports & Exports	.30
		2.2.3.	Trade structure	.32
	2.3.	Norway		
		2.3.1.	Consumption & Production	
		2.3.2.	Imports & Exports	
		2.3.3.	Trade structure	.38
	2.4.			
		2.4.1.	Consumption & Production	
		2.4.2.	Imports & Exports	
		2.4.3.	Trade structure	.41



	2.5.	Germa	ny	41		
		2.5.1.	Consumption & Production	41		
		2.5.2.	Imports & Exports	45		
		2.5.3.	Trade structure	47		
	2.6.	France		48		
		2.6.1.	Consumption & Production	48		
		2.6.2.	Imports & Exports	49		
		2.6.3.	Trade structure	51		
3.	EU ai	nd EFTA	Market	52		
	3.1.	Presen	t trade regulations	52		
		3.1.1.	Trade Relations between the Philippines and the EFTA & EU Market	53		
		3.1.2.	Free Trade Agreements between the Philippines and the EFTA & EU Market	53		
		3.1.3.	Identification of non-tariff measures and technical regulations of importing co	•		
	2.2					
	3.2.		Access Requirements			
		3.2.1.	Packaging, size marking and labelling			
		3.2.2.				
	3.3.		related environmental and social issues			
4.			on Philippine Products and Communications Tools			
	4.1. Existing Competition Studies in the NI sector (pricing, logistics and distribution channels)					
	4.2.		ut – desiccated and oil			
		4.2.1.	Coconut production in the Philippines			
		4.2.2.	Coconut products on the EU & EFTA markets			
	4.3.		ansi Extract – oil and juice			
		4.3.1.	Calamansi production in the Philippines			
		4.3.2.	Calamansi on the EU/EFTA markets			
	4.4.		eenan			
		4.4.1.	Carrageen production in the Philippines			
		4.4.2.	Carrageenan on the EU/EFTA markets			
	4.5.	-	ζa			
		4.5.1.	Moringa production in the Philippines			
		4.5.2.	Moringa on the EU/EFTA markets			
	4.6.		natural ingredients from the Philippines			
	4.7.		nce of Social Media / Media tools for the promotion of NI products to EU/EFTA			
5.	Cono		S			
э.			Solling Desition of Natural Ingradiants			
	5.1.		e Selling Position of Natural Ingredients			
	5.2.		Advantages			
c	5.3.		necks			
6.	Over	view of r	elevant buyers of Natural Ingredients in Europe	/3		



Executive Summary

The European market today, comprises of 27 countries as part of the European Union (EU), Great Britain as a country in transition and four EFTA countries with around 500 million consumers. The cornerstone of the European market is the principle of free movement of goods, capital, services and people within the European Single Market, also called Internal Market.

The European Free Trade Association (EFTA) is the intergovernmental organisation of Iceland, Liechtenstein, Norway and Switzerland. It was set up in 1960 for the promotion of free trade and economic integration between its members. The EFTA was founded as an alternative for European states, which were not eligible or not interested in joining the EU.

The Natural Ingredients industry is led by the main EU players like Germany and France and only to a minor extent, Switzerland and progressively Norway, as EFTA countries, influence and take part as importing and processing partners. Europe builds the baseline for legal and non-legal requirements of the natural ingredients sector with interlinkages of trade channels, demands and pricing and the trends among all European countries – the EU market and the EFTA market.

Natural ingredients are mainly used in three different industries - food, cosmetic and health / pharmaceutical industry. Depending on their properties, their area of application is defined. For natural ingredients, this report focuses on medicinal and aromatic plants (MAPs) and processed derivatives such as vegetable and essential oils, extracts, oilseeds and seaweed.

The EFTA and EU are major importers of food with a growing demand for organic quality. The European Union (EU) is the second largest single market for organic products after the USA; and Germany is the largest organic food market in the EU. Similarly, the development in the health and cosmetics industry increasingly requires certified natural and organic ingredients.

France, Germany and also the Netherlands represent Europe's main entry points – trade hubs - for natural ingredients sourced directly from the origin or entering via middlemen. From there, the products set out for the various European markets. At times with further processing and manufacturing steps along the way. Due to the increased demand for traceability and the improved technologies at the origin, local value addition is becoming increasingly important in developing countries.

Specific import rules, regulations and legislation – so-called Market Access Requirements MARs - create the baseline for any export activity to the EU and EFTA states. All relevant Internal Market legislation is integrated into the EEA Agreement so that it applies throughout the whole of the EEA with minor variation in Switzerland (as not a member of the EEA). Buyers in the European markets require compliance with the EU and national laws and regulations - legal requirements. Further, buyers possibly request additional requirements, beyond the EU, EFTA and national laws – non-legislative requirements. Product Safety is the overarching objective of the compliance with legal and non-legal requirements: aspects of the product quality, the consumers' and staff's health and safety, social responsibility and the environment, determine and govern the MARs.

Since 1995, the Philippines is a member of the WTO and enjoys since 2014 enhanced trade preferences with the EU under the EU's Generalised Scheme of Preferences plus GSP+. In 2016 the Free Trade Agreement between EFTA states and the Philippines was signed and is in full force since 1 January 2020. The Philippines host an outstanding richness of biodiversity, of natural resources regarding natural ingredients. Most relevant specialty products from the Philippines are coconut with its derivatives such as Virgin coconut oil VCO, desiccated coconut and sugar, but also native MAPs with various processing stages as essential oils as well as spices and herbs.



The Natural Ingredients market in Europe is prone to immense competition and is very complex in its regulations on Union level and when going more into the specific national levels. However, European buyers understand the value of direct access to producing countries and are open to new suppliers. This fact is underlined by the latest developments in our globalised world, the changing environmental conditions and with Covid-19 showing at the same time the limits of international trade. Apart from the bestseller coconut, the Philippines has intrinsic opportunities for certain small windows in the European natural ingredient sector, although the variety is limited. Therefore, it's the specialities of the Philippines that could have the best chances on the EU and EFTA markets and therewith facilitate the structural conditions and development of the Philippine natural ingredient producing industry.

With natural ingredients being an indispensable part of the international food, cosmetics and health product market and also having already shaken off the trend image for some time, the Philippines are in a unique position to become a supplier of indigenous and innovative, though traditional, natural ingredients and can therefore benefit from an international growing "natural" industry. The Filipino market for natural ingredients can offer a number of advantages, however, those need to be strengthened and consolidated institutionally, to also evolve into an advantage for the Filipinos engaged in cultivation, collection and processing of respective ingredients.

There is in fact a group of medium-sized and large Philippine producers-exporters with the motivation and capacity to prospect new markets and foster new export opportunities. Companies that depend on well-established, fully traceable supply chains to develop the capacity and methods to prepare produce that meet all European mandatory market requirements and even comply with voluntary standards, should consider prospecting this market.

To encourage even smaller producers to approach foreign markets, with a cooperation along the domestic supply chain to consolidate volumes with regards to the demands of importers, implies a cooperation of homogenous quality producers, within a supportive environment. Horizontal cooperation and aggregation models, as well as vertical integration in the chain, might be part of the solution. Such approaches would greatly help overcoming the obstacles to reach export competitiveness (in volumes and quality) and also increase the indirect participation of small and medium scale farmers in export market channels entailing income generation for the rural, remote areas of the Philippines.

The COVID-19 pandemic has adversely affected Europe – and many other parts of the world - through the collapse in global commodity prices, disruptions to global and regional supply chains, and heightened risk aversion in financial markets. The widening of domestic outbreaks of the virus has steepened the decline in domestic demand, exacerbated supply disruptions, and brought much activity to a halt. The consequences and potential waves are unpredictable.



1. The European Market

The European market today, comprises of 27 countries as part of the European Union, Great Britain as a country in transition and four EFTA countries with around 500 million consumers. The cornerstone of the European market is the principle of free movement of goods, capital, services and people within the European Single Market, also called Internal Market.

The European market as such a diverse conglomerate offers vast opportunities for producers and exporters from developing countries and emerging markets. Companies aiming to succeed in Europe must develop a thorough understanding of Europe as a region.



How are European countries interlinked? Are European states completely different, or does the continent show signs of homogeneity? And what about European consumers? Are consumption patterns similar across national borders, or do country differences and peculiarities result in a fragmented consumer market? Ultimately, this leads to the question of how much common ground there is amongst the country markets that make up the European region.

Figure 1. The European Market: the 27 EU states and 5 non-EU states, incl. four EFTA states. Source: Wikipedia.

1.1. EFTA and the EU

In 1952, the European Union was founded by France, Germany, Italy, the Netherlands, Belgium and Luxembourg. After shaken times of war, a union was formed to create economic and political stability to ensure long term peace in Europe. The Treaty of Maastricht, signed in February 1992, and later the Treaty of Lisbon in 2007 established the European Union EU as it is known today. Since February 1, 2020 the EU members states are Belgium, Bulgaria, Denmark, Germany, Estonia, Finland, France, Greece, Ireland, Italy, Croatia, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Sweden, Slovakia, Slovenia, Spain, Czech Republic, Hungary and Cyprus. The United Kingdom has left the EU and is now a country in transition, still holding its status within the European Economic Area EEA, just like the EFTA states, except for Switzerland.

The European Free Trade Association (EFTA) is the intergovernmental organisation of Iceland, Liechtenstein, Norway and Switzerland. It was set up in 1960 for the promotion of free trade and economic integration between its members. The EFTA was founded as an alternative for European states, which were not eligible or not interested in joining the EU.

1.1.1. EEA

The European Economic Area EEA includes EU countries and also Iceland, Liechtenstein and Norway. It allows them to be part of the EU's Internal Market. Out of the four EFTA countries, only Switzerland



opted not to join the EEA but decided to focus on bilateral agreements with the EU. Switzerland is therefore, not an EU, nor an EEA member, but is part of the Internal Market. The internal or single market entails free movement of goods, services, capital and people. This implies that EU legislation is aligned on a national level with the EEA countries, and Switzerland is successful in facilitating trade.

A crucial aspect in the context of the single market is the Customs Union with the same rules of customs along all external borders. Products entering the EEA can move freely, are accepted beyond national borders as well as the same duties and tariffs apply for products entering any EEA state.

1.1.2. The European Monetary Union & the Euro

The European Monetary Union EMU is the cooperation of the European countries representing a major step in the integration of EU economies. Whilst all 27 EU member states take part in the economic union, not all adopted the Euro as common currency since its introduction to the world financial markets on 1 January 1999, and physical Euros in 2002. The monetary union, also called the Euro Area, of 19 out of 27 EU member states adopted the Euro as common currency, whilst the remaining eight¹ states still use their respective national currencies.

1.1.3. Economy

In the second half of the 20th century, the abovementioned cooperation amongst European states created not only stability in the political, but also economic context. Combining interests, collaborating on different levels made the states dependent on each other and formed hence a zone of global significance.

	EU-27	EFTA
Population	446.8 million	14.2 million
GDP per capita (in PPS) ²	100	143.3
Real GDP growth rate	1.5%	1.3% *
Unemployment rate	6.7%	3.8% *
Main trading partners		EU-27 and FTA partners

Table 1. Comparing EU-27 and EFTA figures, average of 2019 calculated. Source: Eurostat. (* no specific Liechtenstein data available)

Among all the countries involved, there are significant differences from the size of the country, to consumer numbers and the purchasing power. Taking the GDP per capita value of 100 as a base for the EU-27 countries, the EFTA amounts to 143.3 which clearly presents the EFTA countries as a more affluent group. Furthermore, in terms of employment, for instance, the north-south divide is shown in employment rates across the EU. Employment rates in the EFTA countries were higher than in the majority of EU member states.³

¹ Bulgaria, Croatia, Denmark, the Czech Republic, Hungary, Poland, Romania and Sweden are not part of the Euro Area or Eurozone. There are exceptions, which allow non-EU member countries the use of the Euro such as the European microstates, for instance.

² Gross domestic product (GDP) is a measure for the economic activity. It is defined as the value of all goods and services produced less the value of any goods or services used in their creation. The volume index of GDP per capita in Purchasing Power Standards (PPS) is expressed in relation to the European Union average set to equal 100. If the index of a country is higher than 100, this country's level of GDP per head is higher than the EU average and vice versa.

³ Eurostat



The EU has set an agenda - Europe 2020 - for jobs and growth for the current decade. It emphasises smart, sustainable and inclusive growth as a way to strengthen the EU economy and prepare its structure for the challenges of the next decade. The strategy's main objectives strive to deliver high levels of employment, productivity, and social cohesion in the Member States, while reducing the impact on the natural environment. However, to reflect the various national circumstances, a general target needs to be translated into national targets and from a national perspective.

With the latest developments of the long, on-going process of Brexit, the turbulence in the economy, the drifting of Europe, the environmental changes and the latest Covid-19 challenges, as well as consciousness and individualism have all influenced the consumers' behaviour. Additionally, the household size decreased to an average of 2.3 persons in Europe.

There are common baselines for economic regulations, thresholds etc. in the EU and EFTA context. However, it is important to be aware of the tax systems in specific countries, as there is no harmonised system in place. Although partially aligned, there are still major discrepancies between the European countries in terms of the Value Added Tax (VAT) rates.

1.1.4. Europe and global trade

The EU and its member states are with the United States and China the three largest players in world trade. And the four EFTA States are world leaders in several sectors vital to the global economy. After the financial crises and all the waves which have influenced the world economy since then, the European economy has been stable and with positive developments. For comparison, the annual growth rate of GDP in 2018 for the whole world was 3.1 %, with the EU-27 recording slightly slower growth (2.1 %).

COVID19

The COVID-19 pandemic has adversely affected Europe – and many other parts of the world - through the collapse in global commodity prices, disruptions to global and regional supply chains, and heightened risk aversion in financial markets. The widening of domestic outbreaks of the virus has steepened the decline in domestic demand, exacerbated supply disruptions, and brought much activity to a halt.

Widespread virus outbreaks throughout the Euro Area have prompted governments to impose various mitigation measures such as nationwide lockdowns, extended school closures, and border restrictions. These have significantly disrupted domestic economic activity. In contrast to the United States, the rise in unemployment has been modest so far, in large part due to the widespread use of short-time work policies. Euro Area output is expected to contract by 9.1% in 2020—10.1% points below previous projections—with all major member countries experiencing recessions before a gradual recovery gets underway late in the year. Growth is forecast to rebound to 4.5% in 2021, reflecting fading pandemic-related drag, and the eventual effects of accommodative fiscal and monetary policy.⁴

The spread of the pandemic has essentially halted international travel and disrupted global value chains, resulting in a sharp contraction in global trade. Moreover, the consequences and potential waves are unpredictable.

Covid-19 has clearly exposed the interlinkages of global trade players, and also on a smaller scale the dependencies amongst EU and EFTA states, as well. Hence, sustainability gains new meaning and importance in the sense of creating true resilience of economies and of supply chains.

⁴ Worldbank: Global Economic Prospects, June 2020



1.2. Switzerland

Switzerland is situated in the heart of Western Europe. Its neighbours are in the north Germany, in the east Austria and Liechtenstein, in the south, Italy and in the west and north-west, France. The territory of the country covers 41,285 km2 (15,940 sq mi). The swiss topography is characterized by the Alps with

many peaks above 4,000 m.a.s.l. (12,000 ft) situated in the southern half, the Jura mountain chain in the north elevating between 1,000 and 1,500 m.a.s.l. and in between the Central Plateau. Roughly 25% of Switzerland counts as an unproductive area due to the adverse climatic and topographic conditions. By December 31, 2019 about. 8.6 million people lived in Switzerland, most of them concentrated in the region of the Central Plateau. It is also there where the main cities of the country are situated: Zurich, Basle, Geneva and Bern. The first three are cities of major importance due to their economic performance, the services they deliver to the international community and the industrial complexes, many of which are amongst the world's leading categories. The latter city, Bern, is the capital of Switzerland with the seat of the federal authorities. The country is politically established as a federal republic consisting of 26 cantons.



There are three main languages spoken in Switzerland. German, French, Italian. Another forth language, Romansh is spoken to a minor extent in the south eastern region. All four idioms are official. Therefore, also the four names given officially to the country: Schweiz (German), Suisse (French), Svizzera (Italian) and La Svizra (Romansh). The ISO country codes are CH and CHE deviated from the Latin Confoederatio Helvetica.

Considering the fact of the existing four linguistic regions, there is not one unique linguistic or ethnic identity which would predominate in Switzerland. The shared values forging together the Swiss people are direct democracy, federalism and its neutral position the country always emphasizes in its international relations. Also, the historical background of the country established officially on 1st of August 1291 – the Swiss national day - and the Alpine symbolism omnipresent in the Swiss mentality, play an important role holding together the Swiss people.

1.2.1. History and European cooperation

The Swiss people were always committed to their independency and neutrality. From the very beginning in 1291 throughout the centuries the Swiss confederation always managed its national position towards Europe with well pondered diplomatic tact and intuition. Major European powers have respected Switzerland's sovereignty and neutrality and since 1815 the country has not been in a war with any other nation.

In one of Switzerland's major cities, Geneva, representations of many international organizations are based: World Trade Organization (WTO), World Health Organization (WHO), United Nations Conference On Trade And Development (UNCTAD), International Organization of Standardization (ISO), to mention just a few. Switzerland is a member of a number of international economic organisations, including the United Nations, the World Trade Organisation, the International Monetary Fund, the World Bank, and the Organisation for Economic Cooperation and Development. The presence of these organizations with



their wide-ranging tasks and many-sided duties account for a favourable climate of multiculturality and openness to the world.

On the European level it was a founder of the European Free Trade Association (EFTA) and is part of the Schengen Agreement.

1.2.2. Economy

Between the European countries belonging to the two economic blocks EU and EFTA, there are large differences. The four EFTA countries have a slightly higher GDP than the ones belonging to the EU. The GDP per capita in Switzerland, in purchasing power standards was EUR 48,200 (2019)⁵ the second highest of the four EFTA countries.

Table 3: Segmentation of Switzerland's economy is as follows⁶

	enterprises		employees	(part of) GDP	
Total	606,090	100%	5,180,000	100%	
Primary sector: agriculture	53,353	8,8%	160,000	1%	
Secondary sector: industry	90,805	15%	1,089,000	25%	
Tertiary sector: services	461,932	76,2%	3,931,000	74%	

One of the world's strongest currencies with the lowest inflation rate is the Swiss franc, CHF.

Figure 2. Swiss franc expressed in euro and US dollar with highs and lows June 2016-June 2020^7

Euro	US dollar
Low-high	Low-high
June 2016 - June 2020	June 2016 – June 2020

Figure 3. Indexed inflation rate between June 2016 and June 2020 (Index basis: 12.2015 = 100)⁸

Indexed Inflation Rate	
Final value June 2016	Final value June 2020
100,6	101,3

Since January 2018 VAT in Switzerland has been 7.7% for most of the services and products traded. A reduced VAT of 2.5% is applicable to food, most agricultural goods, medicaments and printed matter.⁹

⁵ source EFTA annual report 2019

⁶ Source: <u>www.bfs.admin.ch</u> / STATENT 2017

⁷ Source: <u>www.xe.com</u> (2020/06/13)

⁸ Source: <u>https://lik-app.bfs.admin.ch/en/lik/rechner</u> (2020/06/13)

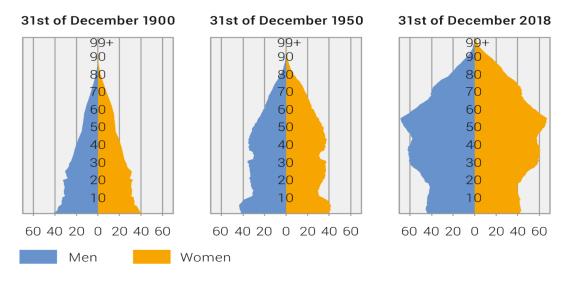
⁹ source: <u>https://www.ch.ch/en/vat-rates-switzerland/</u>; 2020/06/13)



1.2.3. Demographic indicators

By end of 2019 Switzerland's population was 8,542 million inhabitants. With the country's surface area of 41,291 km², the population density of 206 inhabitants per km². Two thirds of the population live in the geographical region between the Jura mountains in the North and the Alps in the South. This region represents only 30% of the territory, therefore the population density there, is much higher. On average the population growth of Switzerland is a little bit less than 1% annually, since 1999. In 2019 it was 0.7%. Switzerland has a growing segment of elderly people. Nearly 20% are aged +65 years, the same % as for the group 20 years and less, whilst 61 % are aged between 20 and 64. This situation is having an increasing effect, with the elderly people being an increasingly important consumer group. 1:

Figure 4. Demographic pyramids of Switzerland 1900, 1950, 2018: Age structure of population, number of people in 1,000. Source: FSO 2019



Many products and services are being adapted and designed for this proportionally faster growing population segment.

The level of education is high and many enterprises invest in Research and Development tackling the constantly changing situations of society and environment with innovation and efficiency. Consequently, new business opportunities are increasing, being a source of employment. The positive employment situation has an important complementary function to the increasing portion of the elderly population living in the country.

By end of 2019 approx. 60% of the Swiss population, 5,18 million people, were working. For ten years the unemployment rate has been between a 2.1%, low in 2019 and a 3.6%, high in 2016¹⁰. However, it is without doubt that the consequences of the COVID19 pandemic situation also will affect the good performance of the Swiss labour market in the near future, even though it has proven formerly to have impressive resilience after recent shocks.

¹⁰ source: <u>https://tradingeconomics.com/switzerland/unemployment-rate</u>; 2020/06/14



1.2.4. Doing business

Efficiency and accountability are key words in doing business with Switzerland and all business-related activities are very results orientated. In the yearly ranking of the World Bank, Switzerland is considered an easy place to do business. Benchmarked in May 2019 the country ranks 36th of 190.¹¹ One of the ten indicators of this ranking is "trade across border". For this specific indicator Switzerland holds the 26th place.

The Swiss economy is highly integrated in the international economy. Only the Swiss agriculture sector benefits from some protection, whilst industrial products are embedded in an open trade regime.

Swiss product legislation is broadly in line with the rest of Europe. Although Switzerland does not take part in the so called "single market" through the EEA, which the other three EFTA states do, doing business with Switzerland does not differ significantly from the rest of Europe. The Swiss Government negotiated bilateral economic agreements with the EU, which culminated in Bilaterals, a cross-platform agreement covering seven sectors: research, public procurement, technical barriers to trade, agriculture, civil aviation, land transport, and the free movement of persons. In recent years and in order to maximise the country's international competitiveness, Switzerland has brought most of its practices into conformity with European Union policies and norms.

Exports of goods (machinery, chemicals, metals, watches, agricultural products) and services account for 66% of the Swiss GDP. The economy is therefore strongly geared towards exports.¹² The EU is Switzerland's main trading partner. Of all Swiss exports 52 % go to the EU, being Germany, France and Italy, the main export destinations in the EU. In 2019, Switzerland was the EU's 4th largest partner: Imports of goods and services from Switzerland into the EU were ranked 4th behind the USA, China and the UK.¹³

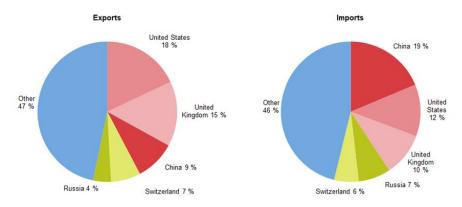


Figure 5. Main trade partners of Switzerland. Switzerland among the EU 27's main partners for trade in goods, 2019. Source: Eurostat.

Another proof of Switzerland's business friendly environment is the fact that the country is home to several large multinational corporations. Nestlé, Hoffmann-La Roche, Novartis, ABB, Swiss Re, UBS AG

¹¹ <u>http://www.doingbusiness.org/economyrankings/</u>; 2020/06/14

¹² https://tradingeconomics.com/switzerland; 2020/06/14

¹³ <u>https://ec.europa.eu/trade/policy;</u> 2020/06/14



and the Swatch Group, are just a few of the many enterprises which operate in and from Switzerland, spreading their company philosophy to Europe and also worldwide.

1.2.5. Culture

Switzerland belongs to Western Europe in terms of its culture. The country is located in the centre of Western Europe, where the Latin influenced culture from the South and southwestern Europe melt together with the various cultural elements of the rest of Europe. Therefore, in doing business you can show emotion, but you have to be measured in how you do so. Formality in business in this part of Europe is strong.

Swiss people in particular and Western Europeans citizens in general, tend to be receptive to new business if they can see a reasonably quick return. Transparency, accountability and punctuality pared with fairness, equality and quality are important values if not to mention, core elements of trading with the Swiss.

The Swiss people value order, privacy and punctuality. Their home is very important to them. They are also hard working and have been called perfectionist. There is a strong desire for belonging, as well as a sense of community and social conscience.

Swiss people value everything to be highly structured and have respect for rules that make people know what is expected of them. They value respect for, and submission to, timetables and schedules.

1.3. Liechtenstein

In the East of Switzerland and the West of Austria, lies the Principality of Liechtenstein, which is landlocked by these two countries. It is the river Rhine which forms mainly the western border towards Switzerland. With an area of only, approximately 160 km² (about 62 sqm) this microstate lies completely in the geographical region surrounded by the Alps mountain range. The lowest point of Liechtenstein is at 430 m.a.s.l. and its highest peak at 2,599 m.a.s.l.; its biggest city is Schaan.

Liechtenstein is a constitutional monarchy divided into 11 municipalities and its capital is Vaduz. It is the smallest German speaking country in the world and the only one which does not share borders with Germany.



1.3.1. History and European cooperation

The post-war period after 1945 was a period of reconstruction. Liechtenstein joined the Statute of the International Court of Justice in 1950, signed the Helsinki Final Act of the CSCE (now OSCE) with 34 other



States in 1975, joined the Council of Europe in 1978, and was admitted to the United Nations (UN) in 1990. In 1991 Liechtenstein entered the European Free Trade Association (EFTA) as a full member and since 1995 has been a member of the European Economic Area (EEA - an organisation serving as a bridge between the EFTA and the EU) and the World Trade Organisation (WTO). From the perspective of economic and integration policy, Liechtenstein's relations within the framework of the EEA and the EU play an important role in Liechtenstein foreign policy. In addition, the good relations with the neighbouring countries of Switzerland and Austria are a particular priority. The government of Liechtenstein is working constantly on the topics to harmonize its economic policies with those of an integrated Europe.

1.3.2. Economy

The years following the second world war were marked by prosperous development and within only a few decades, Liechtenstein developed from a mainly agricultural state into a modern society with a diversified economy. The highly specialized industrial firms are competitive throughout the world, and trade occupies an important position in the region. In 2017 the GDP per capita in purchasing power standards was EUR 91,500, the highest of the four EFTA countries.¹⁴

Today the economy of Liechtenstein is mainly based on services. More than 60% of the GDP is generated in this sector. The main services are banking, fiduciary companies, asset management and investment fund companies and common-benefit foundations and trusts. Whilst agriculture accounts for less than 1%, this sector contributes to the beautiful landscape of the Principality, which attracts many tourists. The industry sector is highly export oriented and also very specialized. Its main branches are electronics, metal manufacturing, dental products, pharmaceutical products, precision instruments, to mention the most important ones. These industries contribute roughly 37% to the GDP.

The handling of VAT is the same as in Switzerland, however Liechtenstein has its own VAT administration. The general VAT rate is 7.7%. A reduced rate of 2.5% is applicable to deliveries of food, drugs, newspapers, magazines, and books.

In December 2016 a new agreement on double taxation was signed by the two EFTA members Liechtenstein and Switzerland and took effect, replacing a former one from 1995.

Since 1924 the Swiss Franc has been the official currency in Liechtenstein. All coins, bank notes and other means of payment used in Switzerland were then recognized as official legal tender in the country. Also, in the same year the two countries formed a customs union, which is still in place today.

1.3.3. Demographic indicators

Whilst in the mid-fifties there were 15,000 people living in the Principality, this number was slightly higher than 27,000 in the mid-eighties. Today it has an estimated population of 38,000 people and its density of population is 242 people living on 1 km². Roughly one third of the inhabitants does not have

¹⁴ www.efta.int/statistics ; 2020/07/22



the nationality and are foreign residents. In 2017-2018 the population growth rate was 0,8%.¹⁵ As in many other countries in Europe, Liechtenstein has an ageing population, being 20% older than 60 years old. However, it is calculated that the relatively high population growth rate of the last 60 years will be lower than 0,15% beyond 2040 and by then the number of citizens living in Liechtenstein will remain around 40,000 inhabitants.

Liechtenstein offers high living standards and thanks to its tax regulations, attracts many citizens to choose the country as their residence.

1.3.4. Doing business

Liechtenstein participates in a customs union with Switzerland and as mentioned above, employs the Swiss franc as national currency.

In Liechtenstein more than 4,600 enterprises are registered, which offer more jobs than the country has inhabitants. Thus, more than 20,000 people commute daily to the Principality to work there, coming mainly from Switzerland, Austria and Germany.

More than 70,000 holding (or so-called 'letter box') companies have established registered offices in Liechtenstein, thanks to relatively low business taxes as well as easy Rules of Incorporation. This provides about 30% of the country's state revenue. Liechtenstein also generates revenue from Stiftungen ("foundations"), which are financial entities created to increase the privacy of non-resident foreigners' financial holdings. The foundation is registered in the name of a citizen of Liechtenstein, often a lawyer.

1.3.5. Culture

Situated in the heart of the Alps, Liechtenstein has many of its own traditions. Its customs are often drawn from Alemannic culture influenced by alpine heritage, agricultural habits and also closely linked to the Catholic church and its holy days and rites. The particular, geographical situation and its small size has influenced the country, also by external cultural influences, most notably those originating in the southern German-speaking areas of Europe, including Austria, Bavaria and Switzerland. Bearing this in mind, it has to be pointed out that the Principality is nowadays a striving society where the modern way of living has a sound place in everyday life. The cultural elements influencing "doing business" in Liechtenstein are the same as in Switzerland.

1.4. Norway

Norwegians have a deeply rooted respect for traditional values and a clear orientation towards what the future can offer; combine this with a very modern infrastructure, broad wealth and highly grounded culture then it may explain their reputation for innovation in all areas.

Modern Norway is prosperous, urbanised and has a diverse population. Income and wealth are broadly distributed, compared to most industrialised countries.

1.4.1. Economy and European cooperation

Although it notes a number of challenges facing the country (slowdown in trade and investment, vulnerability to property-market risks, faltering business and consumer confidence in the euro area etc.)

¹⁵ www.efta.int/statistics ; 2020/07/22



the latest OECD report on Norway's economic situation confirms the high level of income and well-being enjoyed by most Norwegians.

Norway ranks fifth (after Liechtenstein, Switzerland, Iceland and Luxembourg) among European countries with the highest purchasing power (EUR 29,072 in 2018). GDP growth has resumed since 2017.

Norway is, with Switzerland, the only EFTA founding member still part of the organization, and as such trades freely with the EU.

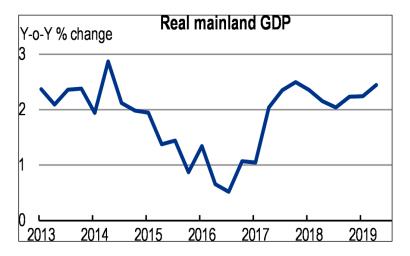


Figure 6. Norway's GDP development 2013-2019, real mainland GDP

The country has an efficient social protection system, a large public sector (e.g. the oil, gas and wind power sectors are managed by the state-owned company Equinor, oil and gas production accounts for approximately 20% of national economy) and a particularly active private sector.

Oslo is one of Europe's youngest capitals. It is a hub of creativity where leading companies are concentrated, where numerous start-ups are developing and where young actors of the cultural scene, including those in the fashion and textile industries, are constantly innovating by relying on the latest technologies, digital or otherwise, but also by remaining faithful to the deeply Scandinavian value of attachment to nature.

It is therefore not surprising that Norway, together with its neighbours Sweden and Denmark, is one of the most advanced and demanding countries in terms of sustainability, the new credo of the times.

The Norwegian nature is rich in oil, gas, forests, minerals and fish, all active economic sectors (the country is the second largest exporter of marine products after China).

Europe, which absorbs about 80% of the total value of Norwegian exports, is by far the country's main export market, followed by Asia (11%), North America (6%) and Africa (2%).



Norway is ranked 9 among 190 economies in the ease of doing business, according to the latest World Bank annual ratings¹⁶. The country is in an excellent position (3rd) on the issue of compliance with contractual commitments, in other words it is a very safe place to do business.

1.4.2. Doing Business

Norway is a particularly egalitarian society. In the professional field this is reflected in companies organised according to a flat hierarchy and organisation. Norwegians often work across hierarchies rather than down through the line. The leadership style is informal and is based on employee freedom with responsibility.

Trading partners	Values exported to these coun- tries	Percentage share of Norwegian exports
United Kingdom	USD 20.7 billion	20.1 %
Germany	USD 14.7 billion	14.3 %
Netherlands	USD 11.4 billion	11.1 %
Sweden	USD 7.9 billion	7.7 %
France	USD 6.1 billion	5.9 %
Denmark	USD 4.7 billion	4.5 %
United States	USD 4.5 billion	4.4 %

Table 2. Norway's main trading partners in 2019, source¹⁷

English is widely spoken, usually to a very high standard. Norwegians are direct and ready to negotiate, straight to the point, with minimum small talk. They will be primarily interested in the facts, in your product, the details of your commercial offer, its practical, logistical, commercial aspects, rather than your personality or social skills.

From a commercial point of view, the number of cities of critical size is limited in Norway, the four most important being:

- Oslo: leading international hub. Norway's fast- growing, governmental, economic and cultural capital. A uniquely compact global city on the rise and one of Europe's youngest capitals.
- Bergen: gateway to the Fjords and a global maritime centre: Boasting a vibrant maritime and energy sector, the Bergen region is also the portal to world-famous natural tourist attractions. With its direct access to the famous Norwegian fjords, Bergen attracts a growing number of tourists from around the world.
- Trondheim: Norway's science and technology hub. Trondheim region is a leading European science and technology centre. The region's capital, also called Trondheim, is a vibrant city, with major

¹⁶ https://www.doingbusiness.org/content/dam/doingBusiness/country/n/norway/NOR.pdf (World Bank Group)

¹⁷ http://www.worldstopexports.com/norways-top-15-import-partners/



business activity and cultural attractions. Trondheim has more than 45,000 students in its universities and research institutions.

- Stavanger: Europe's leading energy region, is also going through exciting developments in business and tourism. The Stavanger region is Norway's third largest urban area, with about 400,000 residents, 130,000 of them in the city. The area has generally been Norway's most successful economic region.

Whatever your field of activity, it is highly likely that your business will be discussed with partners based in one of these four cities

1.4.3. History and culture

Norway claims the heritage of early Norse seafarers, raiders, colonizers, explorers, and merchants for whom the "Viking Age" (793 to 1050 c.e) was named. In the ninth century Harald Fairhair became the first king of all of Norway, consolidating smaller kingdoms through alliance and conquest. Harald's descendant, Olaf Tryggvesson (Olaf I), converted to Christianity while in England and came to Norway in 995 to force conversion of the country from the Norse religion. Killed in 1030 at the Battle of Stiklestad, Olaf II (Saint Olaf) was the first king to organize an administration for church and state.

The emergence of the nation-state can be traced to the development of a national culture, then to that of a national identity, and finally to the political events that led to the country's final emergence as an independent nation in 1905. The Napoleonic Wars resulted in the dissolution of the union between Denmark and Norway in 1814, the year in which the Norwegian constitution was established. Norway had been a province of Denmark for nearly four hundred years before it was ceded to Sweden. The union with Sweden was dissolved in 1905.

The foundation for the development of a national culture can be traced to the national romanticism of an intellectual elite. In the late eighteenth century, Norway was predominantly rural, with a tiny elite of religious and government officials that began to collect information about national history and culture.

Later, the educated bourgeoisie wrote about the history of the country, tracing the connection between the present and the Icelandic sagas, the Viking period, the medieval period etc. Those intellectuals also began recording and describing rural culture, including folktales, architecture, customs, clothing, my-thology, music, and peasant dialects. From a national romantic perspective, this information helped make the case for a distinct Norwegian land, culture, and history, quite different from those of other Nordic countries. Rural culture became identified as Norwegian culture, a culture that could be traced back to Viking times.¹⁸

1.5. Iceland

1.5.1. History and European cooperation¹⁹

What we know²⁰ of Iceland's earliest settlers can be largely traced back to the Landnamabok, or the « Book of Settlements », a five-part medieval manuscript that tells the story of the Norsemen discovering and settling the country in the 9th and 10th century.

¹⁸ <u>https://www.everyculture.com/No-Sa/Norway.html</u>

¹⁹https://ec.europa.eu/neighbourhood-enlargement/countries/detailed-country-information/iceland_en and https://guidetoiceland.is/history-culture/history-of-iceland

²⁰ https://guidetoiceland.is/history-culture/history-of-iceland



Thankfully, the Icelandic language is largely unchanged from that of Old Norse, meaning stories contained in the « Landnamabok » are just as accessible today to native speakers as they were nearly 1000 years ago. Iceland was given its name by a Scandinavian sailor after he spotted some drift ice in the fjords during an especially brutal winter.

In order to sustain life in Iceland, it was a necessity for the early inhabitants to trade with the outside world. In 1262 the Iceland became a vassal of the Kingdom of Norway. One century later, Iceland would be granted to the Danish. Disaster struck Iceland with the violent eruption of the Lake Volcano in the 18th century, killing 9000 Icelandic citizens and causing widespread famine.

Iceland finally became a republic on June 17, 1944 (Iceland's parliament, Althing, is the oldest surviving parliament in the world, founded in 930 AD. Gaining independence meant that Iceland had to reinvent its position on the world stage as culturally separate from the Danish, as well as their relationship with the rest of mainland Europe. The second half of the 20th century saw substantial economic growth driven primarily by the fishing industry.

Iceland is highly integrated with the EU through membership in the <u>European Economic Area (EEA)</u>, the <u>Schengen Area</u> and the <u>European Free Trade Association (EFTA)</u>. It is also a signatory of the <u>Dublin regulation on asylum policy</u> and a partner in the EU's Northern Dimension policy to promote cooperation in Northern Europe.

Through the EEA, Iceland participates in the single market and contributes financially towards social and economic cohesion in Europe. A significant proportion of the EU's laws are applied in Iceland today. Iceland also participates, albeit with no voting rights, in a number of EU agencies and programmes, covering areas including enterprise, environment, education and research. Iceland has a bilateral Free Trade Agreement with the EEC since 1972. Two thirds of Iceland's foreign trade is with EU Member States.

1.5.2. Economy²¹

In many ways living conditions are good in Iceland. There was a great deal of economic progress in the last century and this is reflected in the fact that, between 1945-2009, the GDP per capita increased by 450%. In 2019 Iceland's GDP was the 7th²² highest in the world (USD 60,180 per capita).

Iceland's economy combines a capitalist structure and free-market principles with an extensive welfare system. Except for a brief period during the 2008 crisis, Iceland has in recent years achieved high growth, low unemployment, and a remarkably even distribution of income, indeed inequality is among the lowest in the OCDE, as is the gender gap.

Iceland's economy has been diversifying into manufacturing and service industries in the last decade, particularly within the fields of tourism, software production, and biotechnology. Abundant geothermal and hydropower sources have attracted substantial foreign investment in the aluminium sector,

²¹ https://www.stjornarradid.is/media/forsaetisraduneyti-media/media/2020/iceland2020.pdf , https://www.cia.gov/library/publications/the-world-factbook/geos/print_ic.html ,

<u>https://www.oecd.org/economy/iceland-economic-snapshot/</u>, https://www.chamber.is/files/útgáfa/skýr-slur/the_icelandic_economy_2019_report.pdf</u>

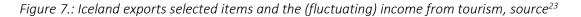
²² After Luxemburg (Nbr. 1), Singapore, Ireland, Switzerland, Norway and the USA.

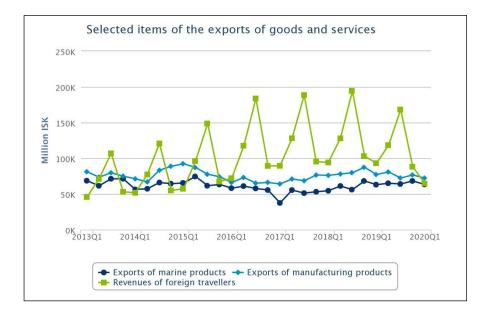


boosted economic growth, and sparked some interest from high-tech firms looking to establish data centres using cheap green energy.

Tourism, aluminium smelting, and fishing are the pillars of the economy.

For decades the Icelandic economy depended heavily on fisheries, but tourism (39%) has now surpassed fishing (18%) and aluminium (17%) as Iceland's main export industry, however tourism is putting pressure on the environment and making the economy more dependent on tourist inflows (particularly reduced flows due to the sanitary crisis).





Despite promising economic growth in the long term, economic instability²⁴ and volatility have been more pronounced in Iceland than in other countries (e.g. in 2008 worsening global financial conditions resulted in the collapse of Iceland's three largest banks, a 6.8% fall in GDP and unemployment peaked at 9.4% in February 2009). The lack of good governance for decades led to much more elevated inflation than elsewhere, with consequent costs, damages and uncertainty regarding value.

Since the collapse of Iceland's financial sector, the government's economic priorities have included stabilizing the krona, implementing capital controls, reducing Iceland's high budget deficit, containing inflation, addressing high household debt, restructuring the financial sector, and diversifying the economy.

The EU makes up 53% of Iceland's total trade in goods, followed by the United Kingdom (8.1%), the United States (8%), Norway (7.9%), and China (5.2%).

²³ <u>https://www.statice.is</u>

²⁴ Small economies are by nature often more volatile than larger economies. This is mainly caused by a lack of diversification and relatively large external influences Beedon, Pétursson and Rose (2011): http://fac-ulty.haas.berkeley.edu/arose/BPR.pdf



The coronavirus pandemic and the restrictions around it, have had a deep impact on the Icelandic economy which shrank at a record 9.1 % on quarter in the second quarter of 2020. The country did not impose a lockdown, but some types of businesses were ordered to close and travel restrictions hurt both imports and exports of services.

1.5.3. Demographic indicators

The total land area is 103,000 km² and the population is 360,384 (of which nearly 44,000 are foreign citizens), compared with 348,450 in January 2018. The population growth was 3.4% in 2 years. This increase was mainly due to positive net migration in 2018, together with natural population growth (more births less deaths). The population has grown in the past five years by an annual average growth rate of 1.9%.

Iceland is one of the 10 countries in the world with the highest life expectancy (average 84 for both sexes). It is a relatively urbanised country with 94% of its inhabitants living in urban areas and almost two-thirds of the entire population live in Greater Reykjavik, the country's capital.

The nation is relatively young and amongst the more educated in OECD; 42.4% of people aged 25-64 years old have graduated from university.

1.5.4. Doing business and business culture

Iceland is ranked 26 among 190 economies in the ease of doing business, according to the latest World Bank annual ratings. It has a strong import market that has grown every year from 2014 to 2018. Apart from a dip in 2019, the import market is projected to grow until at least 2024 (IMF, 2019). Still, due to the small size of the country, it remains a small market.

Iceland's economic and trade relations with the EU are mainly governed by the European Economic Agreement EEA <u>https://www.efta.int/Legal-Text/EEA-Agreement-1327</u> The European Economic Area extends the laws of the single market (except for agriculture and fisheries laws) to the European Economic Area countries. This means that Iceland is legally bound to add EU directives and regulations about the free movement of goods, persons, services and capital into Icelandic law.

As Iceland is one of the four members of EFTA, the free trade agreement signed in 2016 between the Philippines and EFTA, now in force, applies to exports from the Philippines to Iceland under the terms and conditions set out in the treaty.

« Icelanders are hard workers, and willing to work overtime to get things done. They're not too focused on their work mandate, but more on 'doing it for the team'²⁵ » As well as being well educated, the workforce is very young – half the population is under 35 – which means a results-driven mentality. Everybody speaks English." Icelanders can be quite reserved but very direct.

Indeed, as in the case of other Scandinavian countries, professional contacts are extremely direct and focused on the product and the essential. Half-measures, the temptation to negotiate on points that are in reality, non-negotiable, the use of approximations, etc. are badly perceived.

²⁵ https://www.director.co.uk/doing-business-in-iceland-international-report-19039-2/



Before any commercial contact is made, it is essential to have an offer that is as close as possible to the customer's expectations, which implies having put in place, upstream, all the necessary measures to study the market in depth and prepare a perfectly targeted and mastered offer.

1.5.5. Culture

The isolation of the island has helped to preserve an authentic culture and language. As previously mentioned the Icelandic language has changed very little in 1000 years, so much so that its contemporary speakers can still read the sagas and eddas (the famous tales that tell the lives of legendary and invisible characters gnomes, elves, giants, goblins) of the Middle Ages. Indeed, the population is still very much imbued with ancient cultures, myths and legends, all very much linked to the forces of nature so fully expressed in this highly volcanic country.

This age-old literature is an integral part of reading from childhood, and Icelanders are very proud of their cultural heritage. Museums are filled with traces of this surprising past.

The capital Reykjavík boasts a burgeoning contemporary art scene. Icelandic art comes to life in innovative galleries sprinkled throughout the streets, showcasing everything from cutting-edge experimentation to more mainstream forms of creative work.

« Freedom, expression and experimentation are descriptions that come to mind when thinking about the contemporary art scene in Reykjavík (...) The scene here is vibrant²⁶. Everyone is incredibly passionate about art and the language and dialogue that comes with it » says Ingibjörg Sigurjónsdóttir, one of the capital's most acclaimed artists²⁷.

Traditionally, Icelandic artists have always pursued their education abroad before returning home, bringing an international flavour to the scene that contrasts with the community vibe in Reykjavík.

This is what characterises contemporary art in the city: the diverse experience of its artists coming together in a progressive and very egalitarian society, where they are able to encourage each other and in turn expose younger creative talents to different international influences. It makes for some explosive and high-quality work that's as varied as it is interesting.

This openness to the world is favourable to international exchanges, whether private or commercial. For example, the Icelandic fashion scene has, despite the country's small size, many very creative designers at the forefront of international trends.

2. The Natural Ingredients Sector in EFTA & selected EU countries

This chapter presents the natural ingredients sector in the EFTA countries, and additionally, Germany and France, as the main European players in this context. Europe builds the baseline for legal and non-legal requirements of the natural ingredients sector with interlinkages of trade channels, demands and pricing and the trends among all European countries – the EU market and the EFTA market. The natural ingredients industry is led by the main EU players like Germany and France and only to a minor extent,

²⁶ Sometimes a good glass will help to create the right vibe!... Alcohol is widely integrated into Icelandic culture; its consumption is a national tradition.

²⁷ https://theculturetrip.com/europe/iceland/articles/iceland-s-10-contemporary-artists-and-where-to-find-them/



Switzerland and progressively Norway, as EFTA countries, influence and take part as importing and processing partners.

2.1. Main Product Lines

As valid for all markets within Europe, an overview of the main natural ingredient product lines is provided. To define the broad field of natural ingredients the use or application is determining. Natural ingredients are mainly used in three different industries - food, cosmetic and health / pharmaceutical industry. Depending on their properties, their area of application is defined. For natural ingredients, this report focuses on medicinal and aromatic plants (MAPs), vegetable and essential oils, extracts, oilseeds and seaweed.

The natural ingredient products and their application in the sub-sectors are displayed in Table 3. The NI sub-sectors and a range of natural ingredient products., including doubling of some natural ingredients as they find applications in more than one sub-sector.

Application/use – NI sub-sectors	Natural ingredient
Food	Medicinal and aromatic plants (MAPs), tea, spices, natural colorants and thickeners, e.g. seaweed, natural colorants, vegetable oils
Health/pharmaceuticals	Herbal raw materials, such as medicinal and aromatic plants (MAPs), extracts with active ingredients, gums and resins, balsam, vegetable oils, seaweeds
Cosmetics	Botanicals, essential oils, vegetable oils, marine extracts, waxes, colouring/dye, sea- weeds, natural colorants, gums and resins

Table 3. The NI sub-sectors and a range of natural ingredient products.

Natural ingredients cannot easily be summarised when a compilation in terms of HS codes is required. In Table 4. Relevant HS Codes for Natural Ingredients. Source: Foreign Trade Online, 2020 all suitable HS codes (seven product groups) are presented.

HS code	Description	Remarks on the study's context
0801	Coconuts	Focus on 080111: desiccated coconut, to ex- clude fresh produce
0902	Tea, whether or not flavoured	
0903	Mate	
0904	Pepper	
0905	Vanilla	
0906	Cinnamon	
0907	Cloves	
0908	Nutmeg, mace, cardamom	
0909	Anise seeds, fennel, coriander, cumin, caraway, ju-	
0910	niper	Focus on 0910 : representing the tendency of
	Ginger, saffron, turmeric, thyme, bay leaves, curry and other spices	

Table 4. Relevant HS Codes for Natural Ingredients. Source: Foreign Trade Online, 2020



121190	Plants and parts of plants	
1212	Locust beans, seaweeds, and other algae	Focus on 121190 : representing raw material and herb trade Instead of 1212 seaweed rather 13023 for the processed seaweed -> thickeners
1301	Lac, natural gums, resins, balsams, and other oleo-	
1302	resins	Focus on 130223 + 130231 : thickeners as
	Vegetable saps and extracts, thickeners	carrageenan and agar-agar
1509	Olive oil	
1512	Sunflower-seed, safflower, or cotton-seed oil	
151311	Crude coconut oil ²⁸	Focus on 151311 + 151319 and 1515
151319	Coconut oil and its fractions ²⁹	
1515	Fixed vegetable oils and fats (incl. Sesame, linseed,	
1521	etc)	
	Vegetable waxes, beeswax, other insect waxes and	
	spermaceti	
3203	Colouring matter of vegetable or animal origin	
3301	Essential oils	

These ingredients are often used within the corresponding sectors as so-called functional ingredients. Functional ingredients give the final product specific properties such as texture, fluidity, hydration, and taste. They also enable processors to produce new products more efficiently using controlled and productive recipes. In addition, the synonym "botanicals" is often used in connection with cosmetic plant raw materials.

MAPs are botanical raw materials, also known as herbal products, which are mainly used for therapeutic, aromatic and / or culinary purposes as components of cosmetics (e.g. perfume), medicinal products (e.g. aromatherapy), natural foods (e.g. spices, flavours) and other natural health products (supplements). They are also the raw materials for value-added processed natural ingredients such as essential oils, dry and liquid extracts and oleoresins. Due to the increasing production of herbal health formulations, there is a clear industrial demand for MAPs as herbal cosmetic products and herbal supplements. In addition, traditional naturopaths, traditional healers and household consumption have contributed to the demand for herbal medicines.

There are over 3,000 types of botanical raw materials in global trade and more than 850 are coming from the Philippines.³⁰

Plant extracts are traditionally obtained from the whole plant, root, rhizome, stem, leaf, flower among others. Through a (solvent) extraction process substances or active ingredients with desirable properties are removed the respective plant parts. Extracts can be used in various areas of activity: food and functional properties for food, medicinal products, cosmetic etc. For instance, vegetables saps and extracts, dry extracts are a basic active ingredient³¹ in pharmaceuticals and herbal medicine. Due to its chemical

²⁸ Crude coconut oil, produced from the dried copra, need further processing for human consumption.

²⁹ Coconut oil and its fractions includes also the Virgin Coconut oil, pressed from the fresh coconut.

³⁰ Wikipedia, 2020 & Ramon A. Razal, 2009

³¹ API: Active Pharmaceutical Ingredient



description, an extract can be common to different sectors, although different sectors mean different technologies (different forms, solubility, stability), different regulations, different claims.³²

Essential oils are aromatic, volatile liquids that are extracted from plant material, such as leaves, flowers, bark, roots and peel. Based on the climatic and geographic origin, essential oil (active) components can vary widely, also due to genetic causes. Essential oils are often used in cosmetics, perfumes, detergents, to flavour food and beverages. Due to their therapeutic, antimicrobial and antioxidant properties, essential oils also have medical applications in e.g. aromatherapy. Not only the most commonly used steam distillation extracts essential oils, but also other methods include solvent extraction, sfumatura³³, absolute oil extraction, and cold pressing.³⁴

Natural gums, resins & oleoresins are widely used and traded as NWFPs (Non-Wood Forest Products) and are a metabolic by-product of plant tissues – exudates from plant material. Gums and resins are used in the food and pharmaceutical industry as thickeners, emulsifiers, stabilisers etc. Oleoresins (oleo from the essential oils contained and resin as extracted component) are viscous residues obtained by solvent extraction (e.g. spice oleoresins), and find applications in the fragrance industry, colorants etc.

Vegetable oils or vegetable fats are substances that are obtained predominantly from seeds, but also other may yield oil. Vegetable fats and oils are mixtures of triglycerides, are mostly edible and while oils are liquid at room temperature, fats are solid. The production method of the oils depends on the raw material: all fruit oil can be extracted by (mechanical) cold pressing, oilseeds can be solvent extracted. Afterwards, centrifuging, filtering, refining is feasible to increase the quality and shelf life.

The oils serve a number of purposes, e.g. in the context of shortening, texture and taste, as ingredient, as well as in personal care and cosmetic products. But also, in the pharmaceutical sector, vegetables oils are used as fillers. The more exotic and originating mainly from the wild are oils, such as moringa, mango, shea, apricot kernel etc.

Oilseeds as source for vegetables oils and fats, are generally one of the most important crops in terms of human nutrition and industrial application. The most important oil seeds include soybeans, coconuts, oil palms, sesame, rapeseed, sunflowers, safflower, olive seeds, etc. The by-products (hull, flour and oil) of oil seeds have been integrated into human and animal nutrition due to their important nutrient compositions.

Seaweeds are marine plants, algae including the main types as Rhodophyta (red), Phaeophyta (brown) and Chlorophyta (green) marine macroalgae. As green and blue-green algae find applications in human and pet food industry as vegetable, the brown and red types as raw material for the hydrocolloid production. Hydrocolloids, used as thickeners, gelling agents and stabilisers, obtained from the red macroalgae are agar and carrageenan. Further, seaweeds and its extracts can be found in cosmetics, as fertilisers, etc.³⁵

³² ScienceDirect, 2020

³³ As part of the coldpress extraction of essential oils from peel, sfumatura as slow-folding method, traditionally used for the extraction of bergamot oil.

³⁴ ScienceDirect, 2020

³⁵ The Seaweed Site, 2020; FAO and ScienceDirect



2.2. Switzerland and Liechtenstein

Switzerland is a mountainous, landlocked country in Central Europe. It borders Germany to the north, Austria and Liechtenstein to the east, Italy to the south and France to the west. Switzerland is composed of 26 cantons, 8.5 million inhabitants and the capital located in Bern.

The neighbouring country Liechtenstein is a 25 km long principality between Austria and Switzerland. With 38,650 inhabitants, Liechtenstein is the smallest state in the German-speaking area. The country has a small but significant agricultural sector and is in a customs union with Switzerland, using the Swiss Franc as national currency. As Liechtenstein, whose main trading partners are Switzerland, Germany and other EU members, does not have large production industry, nor a large domestic market, it is therefore added to Switzerland as part of this report and only addressed for main differences.

2.2.1. Consumption & Production

With 53.1% of the gross domestic product in 2019, private consumption is one of the most important pillars of the Swiss economy. In 2019, consumer spending by households and private non-profit organizations in Switzerland totalled around USD 408 billion, an increase of 1.1% compared in real price in 2018. The largest expenditure items in 2017 were housing, including energy (USD 94.7 billion), health care (USD 62.9 billion) and food and non-alcoholic beverages (USD 34.9 billion). Together, these three groups accounted for about half of private consumption.³⁶

Food

The Swiss people are very health conscious, which is evident in the increasing demand for organic foods, natural foods and environmentally friendly products and packaging. The per capita consumption of organic food is one of the highest in Europe.

The total market size for organic packaged food and beverages in Switzerland in 2017 was USD 541.4 million, making it the 14th largest market in the world by value. Organic packaged food and beverages in Switzerland experienced slow year-on-year growth of close to 4% in 2018, which is slightly slower than the rest of the Western Europe region, with 5% to 6% year-on-year growth in 2018.³⁷

Figure 8. Household consumption expenditure for food in 2017 in Switzerland. Source: FSO, 2019.

³⁶ Statista, 2020

³⁷ FSO, 2020

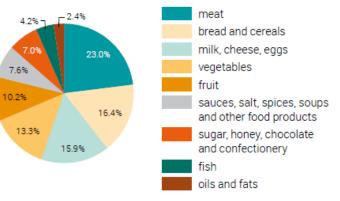


The food industry is divided between internationally competitive sub-sectors that are the main drivers of the strong industrial growth, such as coffee, chocolate, or beverages, and other sub-sectors, which operate pre-dominantly in the domestic context such as meat and dairy production.

Both, the Swiss food and pharmaceutical sectors have a long tradition and are seen as a pillar of the national economy. Switzerland counts as the most important manufacturer of pharmaceuticals and supplements in Europe. However, due to the size of the country, Switzerland tends to be a small manufacturer of natural ingredients for high-quality products, for the food, pharmaceutical and cosmetic industry. In addition to the large corporations, there are also many small and medium-sized manufacturers that are integrated in the market. In general, the value chain in Switzerland ranges from (domestic) raw material production through processing to semi-finished products to the manufacture of ready-to-use products.

The demand for Swiss MAPs is increasing: the number of producers in mountain areas is growing. These companies provide high quality plants, which is a welcome diversification and innovation for the production and wild collection in mountainous areas, providing raw materials to the industry for innovative products. There are around 150 known MAP species in Switzerland. Many of these MAPs are certified organic and are mostly used for tea, spices, sweets, essential oils, cosmetics and pharmaceutical products.

Another focus is on the extraction of plant extracts for the local and international production of herbal medicine and natural cosmetics. Regarding oilseeds, only four varieties are suitable for cultivation in Switzerland: rapeseed, linseed, sunflowers and soy. These products are then sold directly or processed as vegetable oils. Other vegetable oils are mostly imported. Seaweed production is negligible in Switzerland.³⁸



Cosmetics

average number of persons per household: 2.2

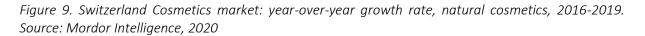
The Swiss cosmetics market is projected to grow at a CAGR³⁹ of 4.51% during the years 2020 - 2025. It contributes a significant share to the European cosmetics market owing to the higher demand for cosmetic products in the country. Moreover, the rising trend of natural and organic cosmetic products is

³⁸ Agroscope, 2020

³⁹ Compound Annual Growth Rate



likely to boost the market, according to studies and driven by the rising consumer awareness about the ingredients and formulations in their cosmetic products.





Beauty and personal care saw a positive performance in current value terms in Switzerland till 2019, although growth was rather modest. Sun care saw the strongest growth, driven by higher consumer awareness of the dangers of sun exposure, whilst skin care and decorative cosmetics saw a number of innovative product developments, which contributed to maintaining growth.

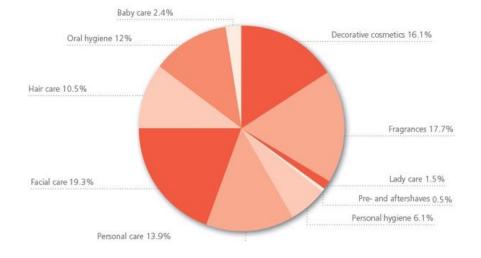


Figure 10. Share of cosmetic market sectors in 2019 in Switzerland. Source: SKW, 2020⁴⁰

The Swiss Cosmetic and Detergent Association compiled the statistics above and reflect the entire Swiss cosmetic market with three main cosmetic market sectors facial care, fragrances, and decorative cosmetics.

In Switzerland, the strongest trends in beauty and personal care are the rising demand for products with a strong natural or organic positioning, which contributed to the popularity of all-natural, plant-derived,

⁴⁰ SKW Swiss Cosmetic and Detergent Association



free-from and "clean beauty" in beauty and personal care. This goes back to consumers' awareness for safe, natural to avoid harmful effects and aiming at sustainability.

The beauty and personal care sector in Switzerland is largely dominated by multinational brand manufacturers. However, independent beauty brands are gaining ground especially in fragrance, colour, and skin care cosmetics. The increasing trend of organic concept stores for organic cosmetic products, among consumers is also anticipated to enhance the growth of the natural and organic beauty products in the country.

The synergies of the mentioned trends open great opportunities for natural ingredients for cosmetics products from exotic supplying countries with a traditional background – not only for the niche labels but also for the big players.⁴¹

⁴¹ Mordor Intelligence, 2020; Euromonitor



Health products & Pharmaceuticals

As a highly specialized production location for pharmaceutical products, Switzerland enjoys an excellent reputation in the world and is at the same time the largest producer of pharmaceuticals in Europe (followed by Italy, Germany and the UK). Complementary and herbal medicines are widely used in Switzerland and enjoy a high level of acceptance by the population. Despite the generally high level of interest in and popularity of natural or herbal/traditional products in Switzerland, value sales remained stagnant in 2019, mainly a result of consumers opting for alternatives, be it changes in lifestyles and diet, alternative traditional medicine, such as Ayurveda, traditional Chinese medicine, including acupuncture and acupressure, or the use of homoeopathic remedies. However, given the long history of herbal/traditional products in Switzerland, it comes as no real surprise that the competitive landscape is highly fragmented, with various international and local manufacturers attempting to position their individual products. In general, the strong presence of domestic players in herbal/traditional products is expected to prevail in the near future as many small and independent local players focus specifically on herbal medicine as a differentiating factor and for traditional reasons.⁴²

2.2.2. Imports & Exports

The Swiss economic structure is characterised by a pronounced orientation towards international trade in goods and services, as well as on cross-border investment activities, besides the banking and pharmaceutical industries. Switzerland has a small domestic market and limited resources, which makes the nation reliant on imports. Key Swiss import commodities are chemicals, metals, agricultural products, textiles, and machinery. The major trade partners are Germany, the US, Italy and France.43 The main food imports of Switzerland are by product category; cereals, fruits, fish and other innovative, premium foods and ingredients that are organic, with proven health benefits (so-called "superfoods") and exotic image, always following the highest quality requirements.

For a more detailed picture of the developments and as baseline Table 5. Selected products from relevant HS code groups imported and exported by Switzerland and the most interesting export/import countries, the values compared 2015 and 2019 (in 1,000 USD) and display a development trend. Source: ITC, 2020.displays selected products imported and exported by Switzerland and the most interesting import and export countries with the export statistics, comparing 2015 and 2019. Products selected according to the relevance for this study, and Liechtenstein's trade numbers not feasible to present separately.

Table 5. Selected products from relevant HS code groups imported and exported by Switzerland and the most interesting export/import countries, the values compared 2015 and 2019 (in 1,000 USD) and display a development trend. Source: ITC, 2020.

Product group, HS code	Top5 of supply- ing countries	Value imported 2015	Value imported 2019			Value exported 2019
	Philippines	2,678	1,583	Germany	149	98
HS 080111 Desiccated	Sri Lanka	359	676	Sri Lanka	0	14
coconut	Ghana	124	507	France	0	11
coconut	Indonesia	93	146	Bulgaria	0	9

⁴² Market research, 2019; EFPIA 2019

⁴³ Sigtax, 2020



	<u>C</u>	274	120	A t	0	0
	Germany	274	126	Austria	0	0
HS 0910 Ginger, saf-	Germany	4,812	5,090	Germany	1,154	1,605
fron, tur-	China	2,117	3,994	France	969	963
meric "cur-	France	2,297	2,440	Netherlands	458	344
cuma",	Italy	1,645	2,047	Norway	930	282
thyme, bay leaves, curry and other spices	Spain	2,057	1,725	Sweden	45	227
	Germany	11,229	12,208	Luxembourg	0	4,992
HS 121190	Italy	2,122	4,267	Germany	2,118	2,319
Plants, parts of plants, seeds, fruits	France	1,877	2,957	Belgium	2	1,880
	Spain	1,460	2,106	Netherlands	312	712
	Morocco	1,247	2,079	UK	50	346
HS 3203 Colouring matter of vegetable or animal origin	US	17,039	17,949	France	2,231	15,323
	France	3,961	3,982	US	14,131	7,712
	Netherlands	2,374	3,604	Ireland	1,312	1,599
	Germany	3,039	2,712	Germany	1,264	, 1,299
	India	377	2,691	Italy	349	873
HS 13	Germany	27,007	27,052	Germany	28,590	30,919
Lac, natural	France	11,094	14,146	· · · · · · · · · · · · · · · · · · ·	11,475	16,736
gums, resins,	Poland					
vegetables		2,937	11,388		3,398	9,837
saps and ex-	US	6,257	10,193	France	5,555	9,332
tracts, incl. thickeners	Spain	2,374	5,606	Austria	8,081	7,560
HS 1513	Solomon Islands	8,407	6,891	Korea	0	57
Coconut "copra",	Côte d'Ivoire	3,027	5 <i>,</i> 853	France	7	26
	Malaysia	2,507	2,908	Germany	79	2
palm kernel	Germany	1,624	1,513	Luxembourg	0	1
or babassu oil and frac- tions thereof	Philippines	550	1,476	Indonesia	0	1
HS 1515	USA	19,407	26,713	Germany	1,238	729
Fixed vegeta-	Germany	5,840	7,558	USA	368	546
ble fats and	India	3,543	4,189	Spain	72	378
oils, incl. jo-	France	2,843	2,527	Russia	243	331
joba oil, and their frac- tions,	Austria	1,233	1,805	France	465	312
3301	France	21,195	30,452	USA	16,384	19,702
Essential oils, whether or not terpene- less, incl. concretes and abso- lutes	USA	30,177	27,587	UK	3,934	7,942
	Indonesia	16,670	12,746			
		,		Germany	2,401	5,468
	India	5,681	10,635	China	6,027	4,166
	Italy	11,613	10,601	Italy	3,263	4,065
			umbors to be calcul:			

Note: "0" means, trade exists or existed, however, too small numbers to be calculated.



Coconut oil (as part of HS 1513) is the main product in the imports of Switzerland and Liechtenstein that is supplied by the Philippines. In terms of value (USD) the Philippines are the third largest supplier of crude coconut oil after Ivory Coast and Solomon Islands. Both in terms of volume and of value, Philippine exports to Switzerland tripled between 2015 and 2019. To a minor extent, palm kernel is also being exported to Switzerland within this product group.

Further, vegetables oils such as linseed, sesame, jojoba, and others are part of the HS 1515. Though, groundnut, soy, rape, sunflower, olive oil are represented by separate HS codes – the Top3 products here are olive oil, sunflower and various specialities under HS1515.

The HS code 13 includes several interesting product groups, such as vegetable saps and extracts, thickeners (e.g. carrageenan, agar-agar) as well as (oleo-)resins, gums, and balsams. Main suppliers for Switzerland are France and Germany.

The HS code 09 "Coffee, tea, maté and spices is dominated in the context of Swiss imports of coffee and tea imports. However, the other spices, vanilla and pepper are similarly important product groups imported by Switzerland, followed by nutmeg, mace, cinnamon, and cloves.

When looking at the HS code 3301 it not only includes products such es essential oils, but also oleoresins, citrus oils and resinoids. Swiss global imports of essential oils amounted in 2019 to 1,258 tonnes, while oleoresins account to 1,175 tonnes and oils of sweet and bitter orange to 1,107 tonnes.

As stated previously, Natural Ingredients are widely spread among the HS product groups codes. For instance, specific MAPs or extracts are not visible in the trade statistics.

To sum up, the European importing countries are stable, whereby the importing countries outside the EU vary depending on the product. The export destinations of the mentioned products are quite broadly spread, with changing focus according to respective products. However, Europe, EFTA and Asian countries are the main export markets for Switzerland.

2.2.3. Trade structure

Switzerland is a small but important market for natural goods for the application in cosmetics, food and health sectors. Also, in terms of organic products, natural ingredients. Switzerland, as a raw material supplier, can only cover small quantities of the demand itself, a corresponding amount of raw material must therefore be imported. The EU, especially Germany, is the largest trading partner, with direct imports also becoming increasingly important. The products manufactured in Switzerland are sold on the local market as well as for export, especially brought to the EU countries.

With regard to Liechtenstein, it is limited in both natural resources and as a domestic market. So foreign trade is of major importance to Liechtenstein's economy. Although, Liechtenstein is not able to produce everything needed, the country's production can also not be consumed by the domestic market. Based on a wide range of international trade agreements, Liechtenstein has created optimal economic conditions through access to important markets.



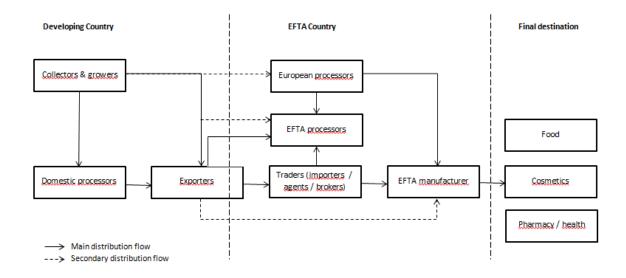


Figure 11. Distribution channels in EFTA countries. Source: own draft, based on CBI figure.

Direct selling and online retailing are witnessing extensive growth in the market, too. The Swiss retail market is dominated by Migros and Coop, who together share about 70% of the market. Further highquality retail chains include Manor and Globus. As a result of the arrival of low-price chains Aldi and Lidl, the established retailers had to reconsider their strategies and the competition has increased. After having introduced a low-price product line which is very successful, the two largest retailers, Migros and Coop, also introduced a high quality – high price line. Despite the strong competition in the market, there is still demand for high quality products where the price is only secondary.

In 2017, organic products worth USD 2.8 billion or USD 336 per capita were sold in Switzerland. According to the Federal Office for Agriculture (FOAG), organic food sales have more than doubled within ten years and now account for 9% of total food sales. Of this organic turnover, 44% were accounted for by supermarket Coop and 33% by competitor Migros. The organic specialist trade has a market share of one tenth. The rest is accounted for by other retailers and direct marketers.

Product innovation remains the most adopted strategy among the players in the country. An advanced and diversified distribution network of the global players gives an upper edge to expand their range of products, across the country.⁴⁴

2.3. Norway

Norway is one of the Scandinavian countries (Denmark, Sweden and Norway), but also part of the Nordic countries, as well as their market and alliances (Denmark, Sweden, Norway, Finland and Iceland) in northern Europe, that covers the Western half of the Scandinavian peninsula. It has a total area of 385,207 km² and a population of 5,312,300. The country is bordered by Sweden, Finland and Russia, as well as Denmark. Norway has a very open economy, trade representing 71% of GDP in 2019 and the country's main trading partners are members states of the EU such as Great Britain (21.6% of exports,

⁴⁴ Presence Switzerland, 2017 & Organic Market, 2018



soon to leave the EU), Germany (16%), and the Netherlands (10.6%) in 2018. Regarding imports, the main partners are Sweden (12.1% of imports), Germany (10.9%) and China (10%).⁴⁵

2.3.1. Consumption & Production

Norway has a very high standard of living compared with other European countries, and a strongly integrated welfare system. The relative per capita consumption in Norway in 2018 was 26% above the average of the 28 EU countries. Only Luxembourg had an even higher consumption level. In general, all Nordic countries consumed a larger volume of goods and services than the average of the EU countries. Norway was at the top in a Nordic comparison, with a relatively high level. Personal per capita consumption in 2018 was 7% higher than in Iceland, and 17% higher than in Sweden. Switzerland and Germany were just behind Norway with indices of 124 and 120, respectively. However,, the Norwegians consumed less food and non-alcoholic beverages in 2018 compared to the EU average.⁴⁶

In general, the use and application of natural ingredients in Norway is comparatively low. There are only a few manufacturers and processors in the country itself. The seaweed sector is an exception. Algae are processed into marine ingredients and used in personal care and life science industries. However, with regards to food production there are several options in Norway. Although the country is self-sufficient in the fish and milk / dairy products sector, there is an increased need for imports in other areas (some of them are seasonal). In terms of cosmetics and pharmaceuticals, Norway is generally a very small market for natural ingredients, as there is little production in Norway itself. The branches of the large international giants are responsible for this.

Food

The food industry is Norway's second largest industry and forms an important part of the food value chain. Unlike most other industries, the food industry is less dependent on economic developments because the demand for food is relatively stable. Import restrictions on foreign products contribute to the stability of production in the agricultural food industry. In general, the Norwegian food market is stable.

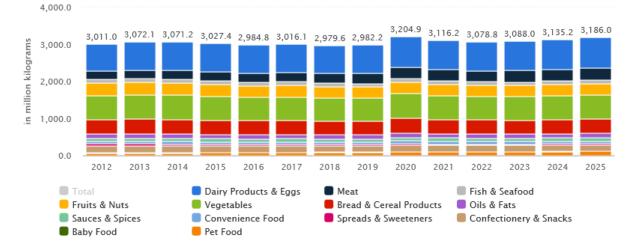


Figure 12. Forecast Norwegian food market consumption per kg. Source: Statista, 2020

⁴⁵ Worldbank, Comtrade

⁴⁶ Business Portal Norway, 2020



In addition, the trend towards conscious nutrition continues to increase. In Norway, however, this does not automatically translate into an increasing demand for organically produced products, since local food is already considered high quality and the label "organic" is therefore not decisive for many Norwegians when purchasing. Nevertheless, health-promoting and organic foods are increasingly imported from abroad.⁴⁷

Cosmetics

The Norwegian cosmetics market's sales value increased constantly in recent years, reaching approximately 1.4 billion USD in 2018, an increase of 1.8% in 2018. This market includes the following product categories: skin care, sun care, hair care, decorative cosmetics, fragrances, and hygiene products. In addition, the demand for natural cosmetic products in Scandinavia is also constantly increasing.⁴⁸ Over the past decade, natural cosmetic products have grown in popularity in Nordic regions and consumer demand will continue to increase in the future. Originally, many consumers' environmental concerns had boosted sales of natural cosmetic products. In the meantime, however, concerns about healthendangering ingredients in cosmetics have become an equally important driving factor for Scandinavian consumers. Thanks to more intensive media reporting, the health and environmental awareness of the Nordic population has increased and the demand for fair traded products from sustainable production is increasing. For Norwegian consumers, the physical and health benefits of natural cosmetics predominate. However, the environmental label "Nordic Ecolabel", which is common in the Nordic countries, could be a hindrance to the further development of natural cosmetic products. One of the most important criteria for obtaining the eco-label is a low environmental impact of the product, but without specifically using individual ingredients for the determination as an organic product. This regulation could be a reason why natural cosmetics in Scandinavia have not yet achieved the same status as in other western countries. Nevertheless, an increase in products with private organic label certifications and the expansion of new sales channels at many manufacturers of natural cosmetics is responsible for the continued high growth of natural cosmetic products in Scandinavia. The increasing health awareness of consumers will also increase the demand for natural cosmetics in the future.⁴⁹

Health products & Pharmaceuticals

The Norwegian health and pharmaceutical industry has a limited reach in Scandinavia and Europe; though, the added value increased significantly in the period 2004-2014. Today there are nine companies that have pharmaceutical production with market approval. Unlike its Scandinavian neighbours, the key players in the Norwegian pharmaceutical market are not domestic companies, but rather branches of major international giants in the sector. Their business focuses on the distribution of imported pharmaceuticals – chemical and of natural origin.⁵⁰

Norwegians do not necessarily choose herbal and traditional products over established medication. The growth of herbal products was mainly driven by increasing interest in herbal sleep aids (as over-the-counter OTC products) in 2019. Moreover, alternative methods as herbal medicine, aromatherapy, ho-moeopathy etc. gain importance in Norway and are predicted to have great potential in future. The same amounts to dietary supplements, which have continued to see strong growth in 2019. Regarding

⁴⁷ Statista, 2020

⁴⁸ Statista, 2020

⁴⁹ Cosmetic Business, 2016

⁵⁰ AHK Norway, 2019 & Statista, 2020



the distribution of herbal products consumers appreciate the availability of the products in grocery shops. $^{\rm 51}$

2.3.2. Imports & Exports

Due to is climate (long cold winters and a short growing season) Norway is one of the world's leading importers, with imports worth USD 74.89 billion in 2019, an increase of 6% over the previous year. Food imports continued to grow, especially for vegetable fats and oils, nuts, and snacks. The largest suppliers include the EU countries, in particular Spain, the Netherlands, the United Kingdom, the United States and also South Africa. Notable Norwegian import products of vegetable fats are rapeseed, colza or mustard oil, vegetable waxes, beeswax, fish, and marine mammal oil. These come from Denmark, the Netherlands, Germany with imports reaching approximately USD 135.29 million in 2018.⁵²

For a more detailed picture of the developments and as baseline, Table 6 displays selected products imported and exported by Norway and the most interesting import and export countries, with the export numbers, comparing 2015 and 2019. The products selected are according to the relevance for this study.

Product group, HS code	Top5 of supply- ing countries		Value im- ported 2019	Main exporting country		Value exported 2019
	Philippines	836	567	Netherlands	0	2
HS 080111	Indonesia	254	313	Belgium	1	0
Desiccated co-	Sri Lanka	74	63	Germany	0	0
conut	Thailand	3	43			
	UK	18	28			
HS 0910	China	2,142	2,572	Sweden	7	42
Ginger, saffron,	Germany	2,306	1,528	Denmark	7	20
turmeric "cur-	India	441	492	Netherlands	0	15
cuma", thyme, bay leaves,	Sweden	411	362	Spain	4	7
curry and other spices	Brazil	121	276	Poland	5	2
	Thailand	417	786	Italy	0	38
HS 121190	Spain	264	685	Denmark	1	4
Plants, parts of plants, seeds,	Denmark	305	398	Belgium	0	3
fruits	Turkey	230	325	Germany	2	2
in arts	Israel	439	271	Finland	0	1
	Netherlands	15,542	20,100	Iceland	0	12
HS3203	France	10,839	111,590	Sweden	17	3
Colouring mat- ter of	Germany	315	1,844	China	0	1
	Korea	0	755	Germany	0	1

Table 6. Selected products from relevant HS code groups imported and exported by Norway and the most interesting export/import countries, the values compared 2015 and 2019 (in 1,000 USD) and display a development trend. Source: ITC, 2020

⁵¹ Euromonitor 2020

⁵² Best Food Importers, 2020



vegetable and animal origin	Ireland	495	661	Belgium	0	0
HS13	Denmark	2,807	2,305	Italy	1,072	71
Lac, natural	France	1,491	2,226	Denmark	32	22
gums, resins,	China	1,308	1,862	Sweden	10	6
vegetables saps and ex-	Spain	644	1,653	US	5	5
tracts, incl.	Italy	447	1,189	Germany	17	2
thickeners	Czech Republic	877	1,086	Estonia	0	1
HS 1513	Netherlands	1,934	1,585	US	0	56
Coconut	Germany	616	672	UK	4	5
"copra", palm	Sweden	557	648	Sweden	8	4
kernel or ba- bassu oil and	Indonesia	28	265	Netherlands	26	1
fractions	Sri Lanka	433	264	Denmark	2	0
thereof	Philippines	587	65	Germany	0	0
HS 1515	Russia	556	14,544	Sweden	122	46
Fixed vegetable	Belgium	7,877	6,691	Italy	0	7
fats and oils,	USA	102	2,998	UK	3	7
incl. jojoba oil, and their frac-	Belarus	0	2,788	Denmark	0	6
tions,	Slovakia	0	1,794	Estonia	0	2
3301	USA	200	9,766	Netherlands	0	51
Essential oils,	Netherlands	14	427	Sweden	1	9
whether or not	UK	1,076	420	Ukraine	0	6
terpeneless,	Denmark	193	332	Germany	2	5
incl. concretes and absolutes	Sweden	125	252	UK	0	5

Note: "0" means, trade exists or existed, however, too small numbers to be calculated.

The HS code 1513 includes coconut oil and palm kernel oil. Norway imports mainly coconut oil (HS 151319) and to a minor extent crude coconut oil. Palm kernel oil imports are negligible.

Within the HS 13 group, the vegetable saps and extracts are the main category with an imported value of 6.6 million USD. Thickeners account for about half the value of this category of Norwegian imports, while resins, gums etc. only play an insignificant role.

Looking at the numbers above shows a sharp increase in the imports of essential oils from the US and in general between 2015 and 2019. Similarly, the imports of natural colorants from France to Switzerland grew in the same time period. The increase of the vegetables oils lies mainly in the import of linseed and similar oils. Though, the imports of coconut from the Philippines dropped significantly, which might have been substituted by imports from Indonesia and Thailand.

Comparing the export figures of Norway with export figure of Switzerland, shows clearly how little Norway is involved in intra-European trade of the central European countries.

In terms of natural ingredients, trading activities in Norway are limited. The major import partners are mainly the neighbouring countries, the Netherlands, as well as the USA. In addition, depending on the product itself, the individual countries of origin are interesting. With regard to the export of natural



ingredients, Norway does not play a major role in trade. The most important business partnerships are mainly among fellow European countries.

2.3.3. Trade structure

A lack of availability of natural ingredients means that Norway has to import the raw or processed materials for the food, pharma and cosmetic industries. The local lack of manufacturing industry also increases the demand for imports. Accordingly, Norway, like the other EFTA countries, too, is dependent on the EU and other supplier countries and countries of origin. However, the same distribution channels apply as in Switzerland (see Figure 11).

After the takeover in the retail sector, of ICA Norge's groceries by Coop Norge, the three chains NorgesGruppen, Coop and Reitangruppen, to which the REMA 1000 discount stores belong, showed combined sales of more than 96% of all sales in the Norwegian food retail sector in 2016. There are only a few independent businesses in Norway. The chains of large corporations often source imported goods from their own agencies. They are integrated vertically so that there are no independent wholesalers. An annual speed dating⁵³ of suppliers and manufacturers with the supermarket chains, is supposed to ease the access for smaller suppliers to enter the market.

While online shopping in grocery stores is minimal, it is assumed that by 2020, 35% of total sales in the Beauty & Personal Care market will be generated online.⁵⁴

2.4. Iceland

Iceland is a sparsely populated island nation in the far northwest of Europe. With around 103,000 km² (of which land area 100,250 and water surface 2,750 km²), Iceland is the second largest island nation in Europe in terms of area. The main island is the largest volcanic island in the world and is located just south of the Arctic Circle. With its 361,313 inhabitants (in 2019), Iceland's population density of 3.5 inhabitants per km² is the most sparsely populated country in Europe and one of the most sparsely populated countries in the world. Over 60% of the Icelandic population is concentrated in the capital region of Reykjavík. Iceland is one of the world's leading countries in terms of living standards and per capita income.⁵⁵

2.4.1. Consumption & Production

Iceland is one of the countries with the highest quality of life worldwide.⁵⁶ However, with this population number, the domestic market is small. Private consumption remains an important pillar of the economy. In parallel to the increase in disposable income, private consumption will continue to grow in the coming years. The central bank expects an increase of 2.4 and 2.5% respectively in the current and next year.⁵⁷

In Iceland, 5.8% of the GDP was generated by agriculture in 2017, with 4.8% of the labour force involved in the sector. The main agricultural products of Iceland are fruit and vegetables, meat and dairy, and mainly products from fishery. As the pillars of the Icelandic economy are aluminium smelting, fishing, and tourism, agricultural production does not play a very significant role. Domestic production

⁵³ organised by the online portal Lokalmat.no in February

⁵⁴ GTAI, 2018 & Statista, 2020

⁵⁵ Wikipedia, 2020

⁵⁶ In terms of social welfare system, openness, gender equality, culture, nature etc.

⁵⁷ GTAI, 2020



contributes to the local consumption, though export is quite limited. At the same time, imports for the food, pharma and cosmetic industry are relevant. For instance, food imports (% of merchandise imports) in Iceland was reported at 11.34 % in 2019 (Worldbank).

Although Iceland's market potential is minor for cosmetic and pharmaceutical products, natural products in general are in demand in Iceland, just as in other European countries. The processing of MAPs and other raw materials is negligible in Iceland. Iceland depends on imports regarding natural ingredients for all three application industries.

To quote some numbers, in 2018, the household consumption expenditure on food and non-alcoholic beverages amounted to around USD 1.36 billion. Whilst households in Iceland spent approximately USD 0.2 billion on personal care in 2019.⁵⁸ However, the natural ingredients for such products and also the final products themselves, have to be imported, as minor production of natural ingredients, as mentioned above, makes the limited industry dependent on sourcing from origins outside the Icelandic borders.

2.4.2. Imports & Exports

Iceland has always been open to international trade, which represented 91% of the GDP in 2018. In this year, Iceland exported USD 6.67 billion and imported USD 7.79 billion, resulting in a negative trade balance of USD -1.12billion.⁵⁹

European Union Member States remain Iceland's most important trading partners collectively, with exports from Iceland to the EU accounting for 72.3% of total exports, and around two thirds of all imports coming from the EU.

For a more detailed picture of the developments and as baseline, Table 6 displays selected products imported and exported by Iceland and the most interesting import and export countries, with the export figures , comparing the years 2015 and 2019. The products selected are according to the relevance for this study.

Table 7. Selected products from relevant HS code groups imported and exported by Iceland and the most interesting export/import countries, the values compared 2015 and 2019 (in 1,000 USD) and display a development trend. Source: ITC, 2020

Product group, HS code	Top5 of supply- ing countries		Value im- ported 2019	Main exporting country		Value exported 2019	
	Indonesia	37	89		· · ·		
HS 080111	UK	57	30				
Desiccated	Netherlands	38	19		No exports		
coconut	Philippines	85	19				
	Germany	1	16				
HS 0910	Germany	379	434	Denmark	0	3	
Ginger, saf-	China	284	271	Greenland	0	3	
fron, turmeric	Netherlands	67	217	Finland	0	1	

⁵⁸ Statista, 2019 and 2020

⁵⁹ Societe Generale, 2020 & OEC, 2020467



"curcuma",	USA	102	163	Norway	0	1
thyme, bay leaves, curry, others	Sweden	166	160	Germany	0	0
UC 121100	US	87	83	Finland	0	34
HS 121190	Netherlands	96	75	Greenland	3	2
Plants, parts of plants,	Italy	1	54	US	0	0
seeds, fruits	Mexico	0	44	-		
	UK	36	41	-		
HS3203	Denmark	78	86	Denmark	0	25
Colouring	Germany	25	57	Germany	0	0
matter of veg-	UK	93	26	China	0	0
etable and an-	Poland	3	12	-		
imal origin	Italy	5	10	-		
HS13	Germany	241	498	China	0	0
Lac, natural	Sudan	150	116	Germany	0	0
gums, resins,	Denmark	184	70	Norway	25	0
vegetables	Iran	41	69	Poland	0	0
saps and ex- tracts, incl. thickeners	US	74	50	_		
HS 1513	US	90	147			
Coconut	Italy	0	85			
"copra", palm	Netherlands	467	70			
kernel or ba- bassu oil and	Switzerland	79	67		No exports	
fractions thereof	Belgium	42	49			
HS 1515	USA	112	270	China	0	46
Fixed vegeta-	Mexico	0	73	-		
ble fats and	Netherlands	30	59	-		
oils, incl. jo-	UK	33	35	-		
joba oil, and - their frac- tions,	Italy	12	31	_		
3301	USA	91	754	Spain	147	0
Essential oils,	UK	203	444	UK	574	0
whether or	Netherlands	12	49	-		
not terpene-	Denmark	35	33	-		
less, incl. con cretes and ab- solutes	Germany	42	32	-		
Note: "0" means tr						

Note: "0" means, trade exists or existed, however, too small numbers to be calculated.

In general, the fact that Iceland is a small market for natural ingredients, is emphasised by the trade numbers. The imports of natural ingredients originate mainly from Europe and the US and to a minor extent from the country of origin. For instance, desiccated coconut is imported from Indonesia and the Philippines, though, imports from the Philippines have declined significantly. The imports from Indonesia have increased, potentially a matter of competition – on price and quality.



In the category HS 1513, Iceland only imported coconut oil (crude and fractions) and no palm kernel oil, which is actually part of this code. The Philippines increased value between 2015 and 2019 from USD 19,000 to USD 44,000 regarding crude coconut oil, however, the country lost their market from USD 12,000 to no Icelandic imports in the same time period.

In terms of natural ingredients, there is only limited trade in Iceland. The main import partners are the EU, UK and the USA. In addition, depending on the product itself, some countries of origin are of importance.

2.4.3. Trade structure

Due to the close trade relationship between Iceland and various European countries (including other EFTA countries), companies from these countries have a very dominant position on the Icelandic market. The strong manufacturing industry in Europe plays a major role as a supplier to Icelandic buyers and many traders export natural ingredients to Iceland.

For this reason, the Icelandic trade channels are similar to the general EFTA channels as presented in the chapter on Switzerland (see Figure 11).

2.5. Germany

Germany is a country with a population of 83 million inhabitants, covering an area of 357,022 km², and shares borders with Denmark, Poland and the Czech Republic, Austria and Switzerland, as well as France, Luxembourg, Belgium and the Netherlands. Germany is one of the 27 members states of the European Union EU, which is closely connected to the EFTA through the EEA. The European Economic Area EEA unites the EU members with the EFTA states in a single market and guarantees equal rights and obligations for individual and economic operators. Not only in terms of natural ingredients, Germany enjoys vibrant trade relations with the EU and EFTA states.



2.5.1. Consumption & Production

In 2019, private consumer spending in Germany was around USD 2.13 trillion. Germany's agricultural sector is among the four largest producers in the European Union, with about 50% of the farmland dedicated as feed to the livestock sector. Germany is aiming at 20% of agricultural land to be organically farmed by 2030, as part of Germany's Sustainability Strategy. Today, about 10% of the agricultural enterprises in Germany are organic farms.⁶⁰

There is growing demand for organically produced food. The European Union (EU) is the second largest single market for organic products after the USA; and Germany is the largest organic food market in the EU, with annual sales revenues in 2019 amounting to USD 14.25 billion. With increasing consumer interest in how food is produced and attention to healthy lifestyles, this trend is set to continue on a long-term basis. Although, there is still a large share of the German population which rarely buys organic products, due to high prices. Others are driven by their concerns about food quality, animal welfare and

⁶⁰ Statista, 2020; www.deutschland.de



wish to support their regional companies. In terms of sales channels, most recently the highest revenue share for organic food products came from health food stores.⁶¹

German consumers are still very price conscious. Only 25% of consumers are willing to spend even 16% more for a better quality of the product. About 11% of the disposable income is spent monthly on food in Germany, meaning a one-person household spends an average of USD 189 per month, while a four-person household spends about USD 595.

Food

The latest consumer trends in the German food and beverage market were influenced by a number of far-reaching changes in society. An aging population is driving the demand for health and wellbeing, as well as functional foods, to prevent or overcome diseases such as diabetes, high blood pressure and cholesterol. Germans are becoming more and more demanding in terms of variety and quality of food. Ethnic foods, beauty foods, "free of" foods (e.g. lactose and gluten-free products) and regionally grown foods are further trends that are currently being accepted by Germany's increasingly demanding consumer base. Germany is a pioneer in the production and consumption of organic food.

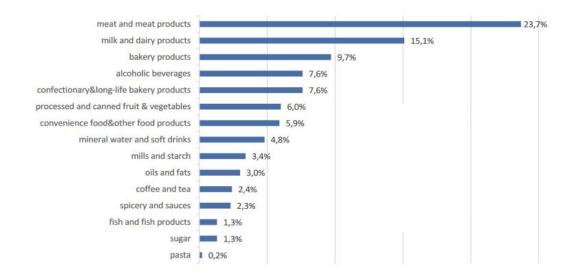
The German food and drink industry rank among the three biggest industries in Germany. Germany is also the largest food and drink producer in the EU in terms of sales. The industry branches with the highest turnover are meat and dairy industry, confectionary and bakery industry, as well as the production of alcoholic beverages. All those mentioned, and the minor ones, are all more and more involved in the use of natural ingredients for their products.⁶²

⁶¹ Federal Ministry of Food and Agriculture in Germany

⁶² Federal Statistical Office Germany, BVE Federation of German Food and Drink Industries



Figure 13. Share of the single industries on the total turnover of the Food and Beverage Industry in Germany by segment in %, 2018. Source: BVE Annual Report, 2018

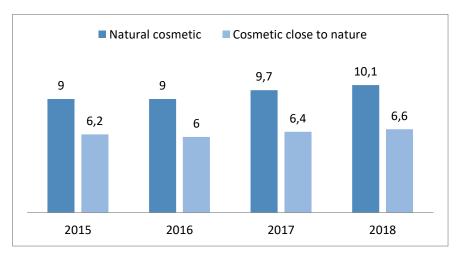


It is crucial to understand the stringent legal requirements, the high safety standards and the amendments according to the consumers demands – affordable, tasteful, available all year, lifestyle, health, "free-from", natural and organic, with sustainability in sight.

Cosmetics

Germany, followed by France and the United Kingdom, is the main cosmetic market in Europe, and those are considered the best prospective European markets for exporters of natural ingredients. This is because these countries have the largest consumer markets for cosmetics in Europe and they are also major production centres. Many conventional and natural cosmetics companies are based there.

Figure 14. Market shares of natural cosmetics and Cosmetics close to nature in Germany in %. Source: Statista, 2019





Germany is the European leader in natural cosmetics. Its USD1.5 billion market gives Germany a 35% share of Europe's total. Natural products comprise almost 10% of total cosmetics sales in Germany. Natural and organic cosmetics have been established in the German market for decades now. The German market for natural cosmetics is expanding by almost 10% every year. Today, one out of five German households purchase natural cosmetic and skincare products, with a rising tendency. Germany is home to some of the leading natural and organic cosmetics brands in Europe, like Lavera, Logona, Dr. Hauschka and Primavera Life. Most of these companies source natural ingredients directly from developing countries and emerging markets.

Between 2020 and 2025, the German beauty and personal care products market is projected to grow at a CAGR of 4.8%. Revenue in the Cosmetics segment amounts to USD 2,534 million in 2020. Within the beauty and personal care market in Germany, natural products - products free of synthetics and possible harmful chemicals, as well as products with essences of herbs and plants as active ingredients faced a strong demand in recent years, which is expected to grow more in the near future. Drug stores are the largest distribution channels in the beauty and personal care industry in Germany.⁶³

Health products & Pharmaceuticals

With 83 million inhabitants, the German healthcare sector is an important and vibrant market with considerable growth opportunities. Improved health awareness has further increased consumer demand for drugs and therapies. Germany is Europe's largest market for herbal medicines and the second largest for homeopathic and anthroposophical medicines. Germany has decades of experience in the production and regulation of herbal, homeopathic and anthroposophical medicinal products. Within the European Union, no other country produces more drugs than Germany.

Figure 15. Pharmaceutical Market Share Differentiation share of revenue. Source: IMS Health Report, 2016

Hospital market (13%)		
Pharmacy market (87%)	Over-the-counter 12%	Homeopathics 1%
market(or /u)		Herbal medicines 2%
	Prescription only 75%	
		Biotech 19%
		Chemical products 65%
	Prescription status	Product type

In general, Europe is a significant producer, exporter and consumer of pharmaceuticals. It has an important market for pharmaceuticals, nutraceuticals, complementary and alternative medicine products. The market is forecast to grow partly because Europe has an ageing population. Consumer demand for healthier and more natural products with better efficacy are encouraging European companies to invest

⁶³ Mordor Intelligence + Statista 2020



in research and development and look for natural ingredients. As part of the healthy living trend, the interest in aromatherapy and natural remedies rises, so cosmetic and pharmaceutical brands use essential oils and their properties in their production innovation. The increasing consumer demand for natural supplements – consumed by all age groups – puts the focus on the origin and safety of the ingredients.

2.5.2. Imports & Exports

Germany is a major importer of food, with a growing focus on organic products. In addition to its diverse and developed internal production, Germany is one of the top importers in many food sectors: fruit and vegetables, nuts, olive oil, tea and coffee, honey, etc.

Germany maintained its position as the third largest exporter in the world (after China, USA) and third largest importer (after the USA, China) in 2018. More in general, Germany's share of world trade (exports and imports of goods in USD) decreased slightly to 7.2%, compared to the previous year. Trade among the EU member states, so-called Intra-EU trade, accounts for 59% of Germany's exports with about 8% going to France and 7% to the Netherlands. Outside of the EU, 9% of exports are destined for the United States and 7% to China. When looking at imports, 66% originate from EU member states - the Netherlands 14%, France 6%, Belgium 6% - while outside the EU 7% of imports came from China and 4% from the United States, in 2018.⁶⁴

For a more detailed picture of the developments and as a baseline, Table 8 displays selected products imported and exported by Germany and the most interesting import and export countries with the export numbers, comparing the years 2015 and 2019. Products are selected according to the relevance for this study.

Product group, HS code	Top5 of supply- ing countries		Value im- ported 2019	Main exporting country		Value exported 2019
	Philippines	15,023	16,146	Poland	6,156	5,671
	Indonesia	12,973	11,207	Austria	1,965	2,085
HS 080111 Desiccated	Sri Lanka	4,650	2,626	Belgium	166	1,959
coconut	Netherlands	2,168	1,262	France	794	1,338
coconat	Dominican Rep	760	523	Denmark	956	1,019
	Ghana	118	327	Czech Republic	690	911
HS 0910	China	15,600	31,072	France	11,038	20,794
Ginger, saf-	Netherlands	23,074	24,126	Austria	13,002	12,649
fron, turmeric	India	9,928	14,158	Poland	7,091	11,632
"curcuma", thyme, bay	Austria	11,198	12,452	Netherlands	9,309	11,584
leaves, curry and other spices	Poland	9,039	11,307	Switzerland	5,110	6,026

Table 8. Selected products from relevant HS code groups imported and exported by Germany and the most interesting export/import countries, the values compared 2015 and 2019 (in 1,000 USD) and display a development trend. Source: ITC, 2020

64 www.europa.eu



	USA	19,620	35,855	USA	15,305	21,746
HS 121190	Poland	29,400	32,726	UK	15,010	20,071
Plants, parts of plants,	India	25,442	30,968	Poland	14,166	19,168
seeds, fruits	Egypt	23,968	21,617	Austria	14,224	18,842
,	Netherlands	4,070	19,934	Switzerland	11,868	13,160
HS13	France	78,277	84,845	USA	27,618	46,243
Lac, natural	Spain	47,786	74,928	Austria	16,937	30,508
gums, resins,	China	50,734	65,228	Netherlands	21,092	30,325
vegetables saps and ex-	India	57,347	58,715	France	33,226	29,845
tracts, incl. thickeners	Ireland	55,683	44,998	Italy	24,745	28,290
HS 1513	Indonesia	698,728	149,211	Poland	9,076	13,903
Coconut	Netherlands	307,126	96,356	Sweden	2,172	6,502
"copra", palm	Malaysia	170,915	94,959	Netherlands	4,310	5,700
kernel or ba- bassu oil and	Philippines	94,580	57,349	France	3,671	5,597
fractions thereof	Singapore	75,823	10,378	Austria	3,700	5,367
HS 1515	India	39,806	96,570	Netherlands	17,618	20,293
Fixed vegeta-	Netherlands	18,913	37,529	Austria	10,943	14,293
ble fats and	Austria	17,756	28,136	France	8,777	12,295
oils, incl. jo- joba oil, and	Italy	16,681	18,892	Switzerland	8,080	10,547
their frac- tions,	Belgium	36,597	16,604	Belgium	14,298	9,959
HS3203	China	11,300	21,257	UK	7,840	9,903
Colouring	Netherlands	17,725	20,999	Netherlands	7,526	9,329
matter of veg-	Peru	7,031	8,708	France	6,061	7,935
etable and an-	Denmark	8,465	8,386	Spain	4,065	5 <i>,</i> 386
imal origin	Spain	6,024	8,128	Switzerland	4,372	3,909
3301	Brazil	86,174	82,779	USA	24,300	23,257
Essential oils,	USA	30,922	40,001	France	15,890	16,731
whether or	France	36,539	37,751	Netherlands	17,399	16,207
not terpene-	India	31,036	36,818	Switzerland	14,887	15,037
less, incl. con- cretes and ab- solutes	China	29,480	35,424	Austria	11,362	14,428

Note: "0" means, trade exists or existed, however, too small numbers to be calculated.

In the category HS 13 the sub-group of vegetable saps and extracts accounts for more than 10-times the import value of lac, gums and resins. Furthermore, thickeners (guar, agar-agar and others) account for the same value as vegetable saps and extracts, being part of the same category. Regarding the trade between Germany and the Philippines, the product focus lies on thickeners with an increase in terms of value: USD 2.9 million in 2017 to USD3.9 million in 2019.

Germany is a strong importer of plant raw material as well as first stage processed goods, which are then further processed and manufactured within the country.



With regard to imports, Germany uses its relations with the countries of origin of the respective products. The Netherlands can be considered here as a constant source of supply as an intermediary country. German exports mostly focus on European partner countries.

As the demand both for conventional and especially organic produce is significantly greater than the domestic production, Germany must rely on imports which in the majority come from other European countries. However, in recent years, as the access to resources moved increasingly into the focus of buyers, direct purchases in the countries of origin have gained in importance.

Following the general trend towards "natural", health benefitting products such as nuts, seeds, dried fruits, spices and natural ingredients for supplements and cosmetics are raising the numbers on the demand side. Due to climatic changes, opportunities for new origins are opened.

2.5.3. Trade structure

As one of the most important markets in Europe, Germany plays a decisive role in the trade and distribution of natural raw materials. Most of the raw materials are purchased at their origin and imported to Germany for further processing. This is done through middlemen, or directly by the manufacturers. Due to the increased demand for traceability and the improved technologies at the origin, local value addition is becoming increasingly important in developing countries. This creates new sales opportunities so that middlemen and EU processors can be avoided more and more. However, for some natural ingredients there will always be a second processing step in Germany before selling the product to the end-product manufacturer.

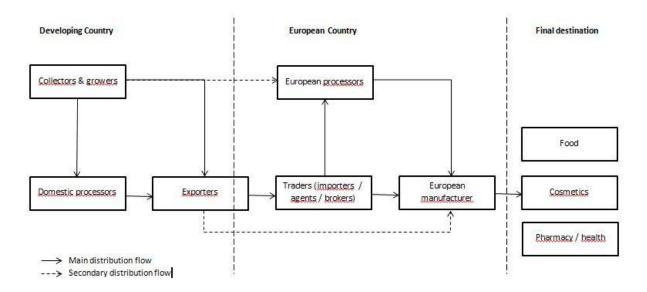


Figure 16. Distribution channels in European countries

The German retail food market is characterized by consolidation, market saturation, strong competition and low prices, although there has also been a consumer preference towards smaller grocery formats, including convenience stores, small grocery retailers and independents. German distribution is divided between the following distribution channels: traditional retail trade (24.8%), specialised hypermarkets (22%), non-food chain stores (13%), DIY hypermarkets (11.7%), discounters (11%), supermarkets (7.9%), distance selling (5.8%), department stores (3.8%). Organic food shops, health food retailers, department



stores and beauty retailers are also important channels. In the case of natural cosmetics, distribution is a major factor behind the high market share in Germany, where these products are sold in a wide range of retail and non-retail outlets. Unlike other countries, a large share of natural cosmetics is sold in drugstores and pharmacies.

2.6. France

France is the largest country in Western Europe in terms of area (640,475 km²) and 67 million inhabitants. It borders Belgium and Luxembourg, Germany and Switzerland, Italy and Spain. The two microstates⁶⁵ of Andorra and Monaco are bordered or even surrounded by France. Due to Frances' wide variety of topographical sets and natural landscapes (Mediterranean, Alpine, Atlantic) it offers a broad spectrum of climatic conditions and thus biodiversity. France's extensive land area offers good opportunities for agriculture and forestry (50% is arable land and one quarter is forest land).



2.6.1. Consumption & Production

a ratio of 53.7% in the previous quarter.

Agriculture contributes only about 2% to the GDP of France. Yet, France is a leading agricultural nation, and is responsible for one-third of the EU's production of oilseeds, cereals and wine. France's private consumption accounted for 53.4 % of its Nominal GDP in March 2020, compared with

Organic land in France grew by 16.7% in 2018, which is a growth of 290,000 hectares and takes France to a total amount of 2.04 million hectares of organic land for production – the second largest organically farmed area in Europe and ranking sixth in the world. This rapid expansion of organic land creates not only opportunities in terms of availability and shrinking price differences between conventional and organic produce, but it will pressure supply chains, increase imports (a positive opportunity for developing country producers) and will have a major influence on sustainability. Agence Bio, a French agency that supports the development of the organic sector, predicts another 50% market growth by 2025.⁶⁶ France is today the world's third biggest organic market, behind the US and Germany, with a growth rate of 15.4% in 2018.

Food

French consumption of food and beverages is around 180 billion euros and is an important part of the wallet for French consumers. The quality standards are high, but due to the different ethnic backgrounds of the people living in France, there is a market for practically every product. The market accounts for around EUR 180 billion or 20% of the entire French manufacturing market. The French agricultural and food sector is not only one of the busiest industries, but also the second-best export market in the country. 63% of French agricultural products are shipped out of the country. 30% of European beverages shipped to non-EU countries and 28% of cereals / cereal products are French products. Organic products are still on the rise. Until 2016, these were almost the exclusive domain of organic food retailers, and organic labels have now also spread widely in traditional food retailing. More and more brand manufacturers are offering organic versions of their products.

⁶⁵ There are six microstates, very small sovereign states, in Europe: Andorra, Liechtenstein, Malto, Monaco, San Marino and Vatican City.

⁶⁶ World of Organic Agriculture 2020



Cosmetics

Over the centuries, France became the hub of beauty products and developed into one of the French economy's revenue generators. With 23% of global market share, the French cosmetic industry dominates its competitors, based on the quality of the products, innovation and the powerful image. Most of the cosmetic companies involved are SMEs and have large distribution markets all over the world – small players are gaining grounds in conventional and natural segments. France is the world's largest exporter of cosmetic products; the country accounts for almost half of the European exports in this industry. French certified organic products are projected to increase by 25% as more manufacturers implement organic standards. The French cosmetic market is projected to grow at a CAGR of 7.1% from 2020 to 2025.

Natural and organic cosmetics represent 6.4% of the total cosmetics market value and are by far the most dynamic segment of the personal care market in France. France has the second (Germany is first) largest natural cosmetics market in Europe, valued at USD857 million. In Europe, sales of natural and organic cosmetics have grown at an average of 7% per year since 2015.⁶⁷

The French market is characterised by a large number of French brands — more than 100 — and an emphasis on sourcing raw materials locally. Though, large multinationals have entered the French natural cosmetics market and launched new natural products in recent years

Health products & pharmaceuticals

France is the second-largest European market and one of the world's largest consumers of pharmaceutical products, in general. In 2018 and 2019 herbal and traditional products performed much better than standard health products and are expected to continue forging ahead in France in the near future, thanks to the controversy over certain substances used in standard products and the general trend towards natural remedies.

Natural, herbal health products, pharmaceuticals and supplements are well established within the French society. Current value sales present continuing growth in dietary supplements, mainly driven by areas like digestion, stress and vitality. Over-the-counter herbal medicines are favoured in Europe, but especially in Germany and France. In both countries, no firm proof of efficacy is required though special attention to product quality is given.

For instance, France has a strong market for aromatherapy products. Aromatherapy products are available in pharmacies across France, being easily available for consumers. France shows not only a strong domestic demand but also has a strong production and processing industry of essential oils. As well, France is a major re-exporter to other European countries. Being a leading importer of essential oils in terms of value, France purchases around 60% of essential oil volumes from outside of the EU.⁶⁸

2.6.2. Imports & Exports

France is a major player in world trade. It is the seventh largest exporter in the world and the sixth largest importer of goods. Trade accounts for more than 60% of the country's GDP.

France's agricultural imports accounted for about 80% from EU countries and for 20% from non-EU countries in 2019, which is a slight increase of 1% in comparison to 2010. About 20% of the imports from EU countries and from non-EU countries are processed products, such as natural ingredients.⁶⁹

⁶⁷ Ecovia & Premium Beauty News 2019

⁶⁸ Eurostat

⁶⁹ <u>www.ec.europa.eu</u> Statistical Factsheet France, June 2020



For a more detailed picture of the developments and as a baseline the table below x displays selected products imported and exported by France and the most interesting import and export countries with the export numbers, comparing 2015 and 2019. The selection of products was according to the relevance in this study.

Table 9. Selected products from relevant HS code groups imported and exported by France and the most interesting export/import countries, the values compared 2015 and 2019 (in 1,000 USD) and display a development trend. Source: ITC, 2020

Product group, HS code	Top5 of supply- ing countries	Value imported 2015	Value imported 2019	Main exporting country	Value exported 2015	Value exported 2019
	Philippines	11,163		Belgium		
HS 080111	Indonesia	1,952	3,209	Italy	-	
Desiccated	Ghana	499	,	Spain	359	244
coconut	Sri Lanka	4,258	1,695	Netherlands	157	209
	Netherlands	717	1,453	Poland	156	166
	Spain	90	1,134	Germany	160	164
HS 0910	Germany	17,622	21,549	UK	6,496	4,908
Ginger, saf-	Spain	7,787	12,301	Switzerland	2,901	4,514
fron, turmeric	China	5,846	8,212	Nigeria	5,552	4,452
"curcuma", thyme, bay	Netherlands	2,639	6,468	Saudi Arabia	5,027	4,249
leaves, curry and other spices	India	4,880	5,258	Belgium	4,276	3,136
	India	4,717	11,682	Germany	5,647	9,479
HS 121190	Germany	7,995	10,326	Switzerland	4,029	5,814
Plants, parts	Morocco	6,883	9,905	Italy	5,142	5,359
of plants, seeds, fruits	China	9,115	8,335	Spain	6,870	5,179
secus, mans	Spain	6,338	6,986	Belgium	3,348	4,076
HS13	Sudan	61,895	51,210	USA	106,361	136,450
Lac, natural	Italy	30,819	39,073	Germany	72,834	91,813
gums, resins,	Germany	42,205	37,973	Italy	37,487	42,322
vegetables	Spain	25,218	34,631	Spain	18,445	32,348
saps and ex- tracts, incl. thickeners	USA	19,610	28,840	UK	26,731	31,916
HS 1513	Netherlands	27,856	25,028	Germany	1,003	2,198
Coconut	Spain	6,723	15,967	UK	113	1,644
"copra", palm	Philippines	9,867	11,240	Italy	383	706
kernel or ba- bassu oil and fractions	French Polyne- sia	7,349	5,728	Turkey	3	637
thereof	Germany	15,694	5,691	Belgium	736	461
HS 1515	India	89,956	94,591	Italy	28,099	26,481
Fixed vegeta-	Spain			, USA	-	
ble fats and	Belgium	22,669		Spain		



oils, incl. jo-	Germany	17,575	26,554	Germany	14,725	14,509
joba oil, and their frac- tions,	Netherlands	33,739			,	10,242
HS3203	USA	18,299	15,549	Netherlands	16,294	13,106
Colouring	Netherlands	3,660	7,992	Italy	5,936	7,522
matter of veg-	Germany	4,590	6,992	UK	4,299	4,196
etable and an-	Denmark	5,468	5,410	USA	2,012	2,791
imal origin	Spain	5,267	5,313	Germany	2,369	2,629
3301	Switzerland	927,805	1,055,469	Germany	1,996,237	2,370,180
Essential oils,	Germany	611,190	726,998	USA	1,407,063	1,928,436
whether or	Italy	455,583	683,509	Spain	1,073,074	1,434,212
not terpene- less, incl. con-	Ireland	777,322	547,096	Singapore	662,845	1,418,286
cretes and ab- solutes	USA	417,601	545,422	UK	1,249,542	1,410,880

Note: "0" means, trade exists or existed, however, too small numbers to be calculated.

The French trade figures presented show a lively intra-European trade for almost all product categories. Spices and herb imports, as well as exports gained importance in the years 2015 to 2019, with China and India as main partners, except for the Europeans. The exchange (trade) of essential oils presents by far the highest values in terms of import and export among EU countries and the United States of America.

The Philippines are partners of France directly in the context of desiccated coconut, though, the country lost approximately half of the value of exports between 2015 and 2019. For the copra coconut oil, the imports from the Philippines increased slightly.

Depending on the product group, France increasingly purchases the raw materials from the origin, or through European intermediaries. French exports of natural ingredients are mostly destined for European partner countries.

2.6.3. Trade structure

Similarly, to Germany, France also plays a decisive role in the trade and distribution of natural raw materials. However, France sources many of the natural ingredients from neighbouring European countries that act as middlemen. Other raw materials are purchased at their origin and imported into France for further processing. This is done through middlemen or directly by the manufacturers. Due to the strengthened demand for traceability and the improved technologies at the origin, local value addition is becoming progressively important in developing countries. This creates new sales opportunities so that middlemen and EU processors can be avoided more and more. However, for some natural ingredients there will always be a second processing step in France before selling the product to the end product manufacturer. Please refer to for a display of possible distribution channels.

The food trade in France provides the population with everyday necessities. A distinction can be made between food wholesale and food retail. While the former is aimed at commercial customers such as large customers in industry and gastronomy, the retail sector has its eye on private end consumers. The retail trade in turn, is differentiated into the unspecified retail trade with goods of various types (mainly



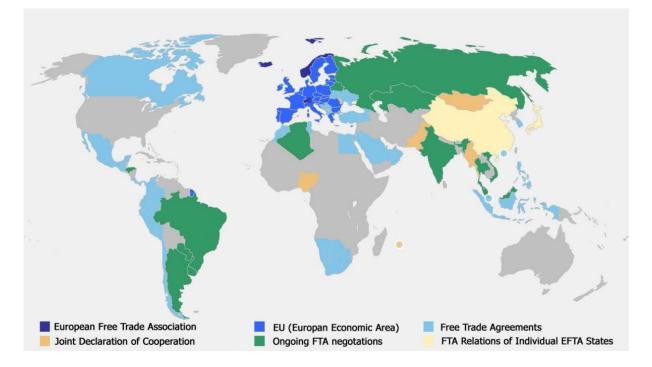
food, beverages and tobacco), which includes supermarkets etc., and the traditional specialist retail trade with food, e.g. includes small grocery stores, bakeries and butchers.

3. EU and EFTA Market

3.1. Present trade regulations

The EFTA States jointly negotiate free trade agreements (FTAs) with partners outside the European Union in order to strengthen their competitive position and increase market access for their products. As a result, economic operators in the EFTA countries enjoy access to one of the world's largest networks of preferential trade relations, which continues to expand thanks to an ambitious agenda of negotiations. Today, EFTA has 29 FTAs covering 40 countries and territories outside the EU.⁷⁰

Figure 17. The Free Trade Map. Overview of EFTA's preferential trade relations with partners world-wide. Source: EFTA 2020



Trade agreements – individual countries' commitments to specific custom tariffs - are negotiated at the World Trade Organisation WTO⁷¹, as a forum for governments. And the WTO operates a system of international trade rules, legal ground-rules for international commerce, to which the EU and EFTA states adhere. Meaning, in principle the same legal requirements account to all European countries. When it comes to standards, the International Organisation for Standardisation ISO provides a broad set of technical guidelines and standards for a various products and process management.

⁷⁰ www.efta.int

⁷¹ Established in 1995, located in Geneva, Switzerland and has 164 members representing 98% of world trade



The internationally acknowledged standard Codex Alimentarius focusses on food safety and builds the base for the European food legislation.

The EU Trade Helpdesk offers the latest and comprehensive information on the requirements for the import and export to and from the EU, even specifically for the respective, relevant HS code. Those requirements are also valid for the EFTA markets.

In the EU, the Generalised Scheme of Preferences GSP removes import duties from products coming into the EU market from vulnerable developing countries, with the aim to alleviate poverty by increasing the means of income generation. This is to integrate developing countries and emerging markets into the world economy. Standard GSP reduces EU import duties. As a special incentive arrangement for sustainable development and good governance, GSP+ grants full removal of tariffs on over 66% of EU tariff lines. For least developed countries, the EU offers a duty-free, quota-free access for all products except arms and ammunition – EBA Everything But Arms.⁷²

3.1.1. Trade Relations between the Philippines and the EFTA & EU Market

The Philippines is a member of the WTO since 1995 and since 2014 enjoys enhanced trade preferences with the EU under the EU's Generalised Scheme of Preferences plus GSP+. In order to maintain GSP+, the Philippines is subject to a regular monitoring of its obligation to the effective implementation of 27 core international conventions on human and labour rights, environmental protection and good governance.

Trade in goods between the two partners equalled \in 14.9 billion in 2019 while bilateral trade in services between the EU and the Philippines reached \in 3.7 billion in 2018.

The EU is the Philippines' fourth largest trading partner, accounting for almost 9% of the country's total trade in 2018 (after China, Japan and the US). The Philippines is the EU's 39th largest trading partner globally, accounting for 0.4% of the EU's total trade. EU exports to the Philippines are dominated by machinery, transport equipment, chemicals and food products whilst the Philippines' main exports to the EU are office and telecommunication equipment, machinery, food products, and optical and photographic instruments.⁷³

3.1.2. Free Trade Agreements between the Philippines and the EFTA & EU Market

In 2016 the Free Trade Agreement between EFTA states and the Philippines was signed and entered into force on 1 June 2018 for the Philippines, Switzerland, Norway and Liechtenstein. Iceland followed on 1 January 2020. As a broad-based agreement, the FTA covers trade in goods and services, investment, competition, the protection of intellectual property rights, government procurement, and trade and sustainable development. In the area of trade in goods, EFTA abolishes all customs duties on industrial products as of the entry into force of the Agreement, whereas the Philippines will gradually lower or abolish its duties on the vast majority of such products. In the context of this study, it is important to state that the FTA provides tariff concessions on both basic and processed agricultural products (Annexes VIII to X of the Agreement).⁷⁴

⁷² For further information please check the EU website: <u>https://ec.europa.eu/trade/policy/countries-and-re-gions/development/generalised-scheme-of-preferences/</u>

⁷³ European Commission EC, Trade policy

⁷⁴ EFTA



The EU-Philippines Framework Agreement on Partnership and Cooperation entered into force in March 2018. As key aspect thereof the trade and investment agreement was developed with the aim to conclude an agreement covering tariffs, non-tariff barriers to trade, trade in service and investment and others. The Philippines' strategic objectives in engaging the EU in an FTA is to secure additional duty-free market access beyond those covered under the GSP+ scheme and on a permanent basis, to provide a conducive framework for attracting greater investments from the EU, and to be on par with other ASEAN member states who are pursuing FTAs with the EU.⁷⁵

3.1.3. Identification of non-tariff measures and technical regulations of importing country

In a globalised world with increasing economic liberalisation, the importance of trade barriers resulting from non-tariff measures has increased. Non-tariff measures⁷⁶ NTMs refer to government regulations that affect exports and imports. For the most part, these are non-discriminatory regulations aimed at preserving security and health of consumers or the environment. While such regulations are most often perfectly legal and legitimate, compliance with differing requirements across countries might be complex and costly for companies seeking to export, particularly for small and medium-sized enterprises (SMEs). As a result, multilateral rules in the World Trade Organization (WTO) and most regional and bilateral trade agreements (already implemented or under negotiation) include provisions on NTMs. The objectives of these rules are to facilitate regulatory convergence, promote transparency and prevent and address trade frictions resulting from NTMs without challenging their legitimate objectives.⁷⁷

To conclude, non-tariff measures NTMs are policy measures, other than ordinary custom tariffs, that can potentially have an economic effect on international trade in goods – changing quantities traded, or prices, or both.⁷⁸

The Top3 Non-tariff Measures reported in the context of import and export from and to Europe are meeting technical and conformity assessment requirements related to technical barriers to trade (TBT). As well as sanitary and phytosanitary measures (SPS) imposed by respective partner countries. Importers and exporters raise further issues regarding compliance procedures with EU or home country regulations (export-related measures), and procedures to obtain certificates of origin.

The classification of NTMs include those measures considered relevant to international trade – import and export measures. Import measures are applied by the government of the importing country and encompass technical measures and other instruments of commercial policy. On the other hand, export measures can be restrictions on quantity of goods, price-control measures, etc. The most frequently identified NTMS for the EU, which importers and exporters commonly encounter, are the SPS and TBT measures. SPS measures apply to protect human or animal life from risks arising from additives, contaminants, toxins etc. Technical barriers to trade are measures referring to technical regulations and procedures to assess conformity with technical regulations and standards, including product identity requirements or labelling requirements.⁷⁹

⁷⁵ European Commission & DTI

⁷⁶ NTMs including technical requirements, conformity assessment requirements; pre-shipment inspections and other entry formalities; trade remedies; quantity control measures; charges, taxes and price control measures; finance measures; anti -competitive measures; trade-related investment measures; distribution restrictions; restrictions on post-sales services; subsidies; government procurement restrictions; intellectual property requirements; preferential rules of origin and related certificates of Origin; Non-preferential rules of origin and related certificates of origin; and export-related measures.

⁷⁷ ITC & European Commission study: Navigating NTMs.

⁷⁸ UNCTAD

⁷⁹ UNCTAD



Import measures	Export measures		
Technical measures	Non-technical measures		
 A: Sanitary and phytosanitary (SPS) B: Technical barriers to trade (TBT) C: Pre-shipment inspection and other formalities D: Contingent trade-protective measures 	 E: Non-automatic licensing, quotas, prohibitions and quantity control measures other than for SPS or TBT reasons F: Price-control measures, including additional taxes and charges G: Financial measures H: Measures affecting competition 	 I: Trade-related investment measures J: Distribution restrictions K: Restrictions on post-sales services L: Subsidies M: Government procurement restrictions N: Intellectual property O: Rules of origin 	P: Export-related measures (e.g. export taxes, export quotas and export prohibitions)

Figure 18. International classification of non-tariff measures. Source: UNCTAD.

NTMs regarding specific regulations (REACH⁸⁰, Novel Food etc) or the labelling, claims, certification and standards are rather procedural, compared to regulatory obstacles of trade. Import and export requirements according to CITES⁸¹ also set limitations to trade, however, not questioning their need and benefits for the environmental protection.

To address NTMs, to name a few aspects, standardisation of processes and documentation – aligned with international market requirements - along the entire chain is crucial. Human resource development by capacity-building and awareness-raising builds the grounds to understand traceability, customs in the country of origin and target market. But to start with, a clear identity of the product – raw material, (semi-) processed or final – is key in terms of safety for the workers along the chain, consumers and the environment.

3.2. Market Access Requirements

What are the requirements natural ingredients must comply with to be allowed on the European market?⁸² These are Market Access Requirements MARs. Specific import rules, regulations and legislation create the baseline for any export activity to the EU and EFTA states. All relevant Internal Market legislation is integrated into the EEA Agreement so that it applies throughout the whole of the EEA with minor variation in Switzerland (as not a member of the EEA).

Apart from the customs procedures which differ between EU and EFTA states, almost all mandatory requirements for the import of natural ingredients relate to product safety. In the context of food ingredients, the General Food Law is the legislative framework regulation for food safety in Europe and is built on the "Farm to fork" approach, which implies full traceability throughout the entire supply chain. For cosmetic ingredients, the Cosmetic Regulation (EC 1223/2009) is the main regulatory framework for cosmetics products on the European market. The majority of natural ingredients for the health sector are used in supplements (EU supplement legislation) and herbal medicinal products, meaning the target segment decides on the regulations to comply with. For instance, essential oils for the use in aroma-therapy have to follow requirements that apply to the cosmetics sector. For more detailed information

⁸⁰ European Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals

⁸¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora

⁸² EU Trade Help <u>https://trade.ec.europa.eu/tradehelp/</u>



on respective applications of natural ingredients, refer to the "market information" website⁸³ of CBI, the Dutch Centre for the Promotion of Imports from developing countries.

Buyers in the European markets require compliance with the EU and national laws and regulations - legal requirements. Further, buyers could possibly request additional requirements, beyond the EU, EFTA and national laws – non-legislative requirements.

For the imports of natural ingredients, general conditions include:

- General principles and requirements of the Food Law
- Traceability
- Sanitary and Phytosanitary requirements
- Rules on microbiological criteria, residues, pesticides etc.
- Specific marketing and labelling requirements and for certain product groups.

It is important to note that there are legally binding requirements to these points, plus potentially specific buyer requirements which can apply.

Product Safety is the overarching objective of the compliance with legal and non-legal requirements: aspects of the product quality, the consumers' and staff's health and safety, social responsibility and the environment, determine and govern the MARs.

- Product quality including components of documentation and communication
- Consumer and staff safety including management systems, labels, standard procedures especially for dangerous substances beyond legislation
- Use and protection of the environment through Good Practices, labels, e.g. organic procedures, waste management, sustainability in harvesting etc.
- Social responsibility in the terms of CSR⁸⁴, labour conditions according to the Conventions of the ILO (International Labour Organisation), management systems, codes of conduct etc.

For natural ingredients, which were not sold in the EU before 1997, these fall under the Novel Food Regulation and are listed in the Novel Food Catalogue. The latest version of the Novel Food Regulation came into force in 2018. Additionally, to protect threatened wild plants, the Convention on International Trade in Endangered Species of Wild Fauna and Flora CITES became part of the EU law and entails obtaining an export permit from the respective CITES authority if a natural ingredient is listed there.

3.2.1. Packaging, size marking and labelling

European buyers of natural ingredients request that exporters provide them with well-structured and organised product and company documentation. Traceability along the entire supply chain is mandatory for a trustworthy seller-buyer relationship. Information on the ingredient, the product, is summarised in a Specification, also called Technical Data Sheet, TDS and contains a product description, classification, quality analysis results, information on applications and certificates. For health and cosmetics product applications an additional Safety Data Sheet SDS provides information on hazard identification and safety measures.

First and foremost, natural ingredients have to be labelled and packaged in a way that protects workers, consumers, and the environment. Packaging used for ingredients to be marketed in the EU and EFTA

⁸³ <u>www.cbi.eu/marekt-information</u>

⁸⁴ Corporate Social Responsibility e.g. ISO26,000 or SMETA audit by SEDEX (sedex.com), BSCI



states must meet both environmental and health requirements: general rules on packaging, sizing, and special rules for materials in direct contact with foodstuffs.⁸⁵ This implies an adequate weight and volume of the packaging to meet the required level of safety, hygiene and the use of reusable and recyclable materials.

The Classification, Labelling and Packaging (CLP) Regulation (CE) 1272/2008 aligns previous EU legislation with the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), with the aim to facilitate global trade and the harmonised communication of hazard information regarding chemicals and to promote regulatory efficiency. For cosmetic ingredients, the CLP regulation supplements the REACH regulation.⁸⁶

Labelling of ingredients and products enables consumers to be informed of comprehensive information about content and composition of products. For food products, presentation of allergens and labelling of energy value and quantities of components are obligatory.

For specifics on different natural ingredients, the EU Trade Helpdesk provides guidance.

3.2.2. Standards and certifications

European buyers often require proof of any implemented food/product safety standards in the form of third-party audits and certificates. Even own control and audit systems are applied by European buyers regarding own quality requirements. Aside from product safety and quality aspects, there is an increasing demand for proof of sustainable and ethical business practices.

Ethical sourcing is becoming increasingly important in the export of natural ingredients to the European markets. Therefore, the implementation of Good Practices, is of high value. The Good Agricultural and Collection Practice GACP accounts both for the cultivation, as for the wild collected natural ingredients. Specifically, for ingredients finding applications in health products the GACP guidelines are crucial. With traceability as key.

Quality management can be adopted in terms of internal risk management, safety of staff and consumers, and quality consistency. Among GACP, the most relevant standard is HACCP – the Hazard Analysis & Critical Control Points. Here the implementation of the principles and documentation is required, with certification not necessarily needed. If natural ingredients such as essential oils are destined for use in perfumes, standards of the International Fragrance Association (IFRA) need compliance.

The most relevant trend over recent years has actually lost its status as such, as organic produce has left the niche section already. The consumers all over Europe increasingly demand organic production of natural ingredients to achieve and consume the best possible quality. In Europe, demand is outpacing supply, which encourages imports of organic products from all sources/markets. It is essential to comply with the EU organic regulation to be accredited for the EEA. Today what can be called organic+ is to add to the organic certification a social component by auditing or certifying social aspects such as CSR (Smeta by Sedex). Cosmetic ingredients can be certified not only organic but also natural, for instance with the standards COSMOS or NaTrue.⁸⁷

Further voluntary, non-legal standards taking social and environmental components more into the focus, are standards for fair trade. The most known is the Fairtrade certification by FLO, however, also Fair

⁸⁵ <u>https://trade.ec.europa.eu/tradehelp/technical-requirements</u>

⁸⁶ <u>https://echa.europa.eu/regulations/clp/understanding-clp</u>

⁸⁷ www.natrue.org and www.cosmos-standard.org



for Life is well-respected. When focussing on wild collection, FairWild standard would be the matching for certification.⁸⁸

Although food safety certification is not obligatory under European legislation, it has become a must for almost all food European food importers. The main requested certifications by buyers are certification programmes under the umbrella of the Global Food Safety Initiative⁸⁹, such as IFS, BRC and FSSC 22000.

3.3. Trade related environmental and social issues

Globalisation has led to an increasing geospatial separation of production and consumption, and consequently, to an unprecedented displacement of environmental and social impacts through international trade. It is the linkage between the production in social and environmental vulnerable origins and consumption in prosperous regions of the world – along international supply chains. The harvesting of resources, the inefficient use of those resources, and the waste products entering the environment at the end of the supply chain are degrading the natural world. The general direction of impact shift is from developed to developing countries and emerging markets. When talking about carbon footprints, the awareness raises that consumption-based accounting is required, as for instance, imports of products decrease the footprint of consuming countries. However, the increasing impact in the countries of production, origin, are neglected. These effects go back to complicated supply chain, with consumers not knowing where the raw material, the ingredients of their purchases originate from. Thus, a sustainable development requires the inclusion of footprint indicators to avoid loopholes in national sustainability assessments.⁹⁰

This increased awareness slowly reaches consumers and explains the consumers' interest and demand for natural and organic certified products, fair traded products and involvement of social aspects along the supply chains.

The procurement has changed, too. No longer is it just about purchasing goods, ingredients, but it's about ensuring operations run smoothly all year round. This means establishing requirements, researching the market and evaluating suppliers, as well as negotiating contracts and managing risk, is key. In the end, to create sustainability and share the benefits of the development of a sustainable supply chain, as well as a value chain integrating small producers, cutting the supply chain short and leaving as much value addition in the countries of origin, presents a best-case scenario.

4. Information on Philippine Products and Communications Tools

The Philippines, the fourth-largest country in South-east Asia, is home to a rich biodiversity across 7,641 islands. The tropical climate influenced by monsoon and the El Nino weather phenomenon, together with the risk of earthquakes due to its proximity to the equator, creates an unstable and risky environment for living and agriculture. Within the decade, the Philippines had to face several natural disasters with unpredictable changes caused by the climate change.

At the same time, the mentioned factors influence the biodiversity in these specific natural conditions.

The Philippines host an outstanding richness of biodiversity, of natural resources regarding natural ingredients. Natural ingredients can originate from wild collected or cultivated plants. Wild collected plant

⁸⁸ www.fairwild.org and www.fairtrade.net and www.fairforlife.org

⁸⁹ <u>https://mygfsi.com/</u>

⁹⁰ Wiedmann & Lenzen: Environmental and social footprints of international trade. Nature Geoscience.



species are often also mentioned in the context of the so-called, non-wood forest products NWFP. As consumers are increasingly demanding that natural, indigenous, social and environmentally friendly natural products, especially from the forests, comply to these aspects. Plant products (wild and cultivated), are essentially contributing to the rural income generation, food security and the conservation of the biological biodiversity. It is estimated that around 80% of the population in developing countries and emerging markets use particularly NWFP for own nutritional and health needs, but also as a source for income in rural areas. Moreover, their significance in international trade should not be underestimated.⁹¹

There is wide knowledge available on the botanical identification and properties, on harvesting, extraction and utilisation of Philippine (forest) plants. Hence, before looking into specific products more in details, an overview of main natural ingredients from the Philippines is presented in Table 10.

Product groups	Main products	Key markets
MAPs	Cassia alata, Momordica charantia, garlic, guava, Noni (Morinda citrifolia), ginger, tumeric, black pep- per, vanilla, bay leaf, roselle/hibiscus, moringa, lemongrass, Capsicum fructescens, black mulberry, holy basil, oregano, mangosteen, calamansi and oth- ers	United States, Europe, Asia
Essential oils	Geranium, lemon, orange, bergamot, peppermint, vetiver, lime, ylang-ylang, patchouli, sweet Acacia, eucalyptus, citronella, lemongrass, cinnamon, tulsi, ginger, turmeric	United States, Europe, Asia
Oilseeds	Coconut, soybeans, rapeseed/canola/colza, linseed, sesame seed	United States, Europe, Asia
Vegetable oils	Coconut oil, moringa oil, palm kernel oil, canola oil, corn oil, soybean oil, jojoba oil, linseed oil, peanut oil, cashew nut oil	United States, Europe, Asia
Extracts	Guava, Moringa, Phyllanthus niruri, Centella asiatica, Piper betle, Curcuma, Ginger	United States, Europe, Asia
Seaweed/hydro- colloids	Agar-agar, Carrageenan (marine)	United States, Europe, Asia

Table 10. Main Philippine product groups, respective products and key markets.⁹²

In the Philippines, the CHIPI Chamber of Herbal Industries and its partners compiled a list of "Champion herbs" with competitive advantages on the domestic and export markets. Firstly, establishing this list should initialise the development of the natural ingredients sector – by raising the awareness of its relevance – in the Philippines.

⁹¹ Razal: Non-Wood Forest Products of the Philippines, 2009.

⁹² Razal: Non-Wood Forest Products of the Philippines, 2009.



Table 11. The 12 "Champion herbs" identified by CHIPI working group in 2016, based on aspects such as significance for local and export market, competitiveness, application, suitable for small-scale farming and income generation as well as safety & efficacy. Source: 1st natural ingredients summit, November 2016.

Local name	Name - Botanical name	Primary application
Malunggay	Moringa - Moringa oleifeira	For immune support
Luyang dilaw	Curcuma – Curcuma longa	Inflammation, antioxidant
Virgin coconut oil VCO	Coconut oil – Cocos nucifera	Food, supplement, cosmetics
Carrageenan	Carrageenan – Kappaphycus sp.	Functional food ingredient, excipient
Lagundi	Vitex negundo	Cough, mild asthma, flu
Sambong	Blumea balsamifera	Anti-urolithiasis, urination
Amapalaya	Momordica – Momordica charantia	Non-insulin dependent diabetes, tea
Mangostin	Mangosteen – Garcinia mangostana	antioxidant
Banaba	Lagerstroemia speciosa	Antidiabetic, diuretic, weight loss
Sinta	Kalmegh - Andrographis paniculata	Antibacterial, flu and liver support
Tawa-tawa	Euphorbia hirta	Asthma, anti-thrombocytopenic
Elemi / Pili	Elemi - Canarium spp.	Cosmetics, perfumes, anti-arthritic

On the European market, coconut oil and desiccated coconut are the main import products from the Philippines. MAPs⁹³ and their raw material are increasingly used for processing, which has a positive effect on the (rural) income generation due to value addition.

Also, seaweeds, especially carrageenan, have found a good standing on international markets. The Philippines are one of the global players in hydrocolloid production, directing to in-country processing of the raw material.

When taking a closer look, focussing on the most relevant products of the last few years, the following are the top speciality products from the Philippines in the international context.

Product	Form/species/variety	
Coconut	Oil, VCO, desiccated, milk, sugar, water, syrup	
Seaweed – Carrageenan	Dried, powder – use as thickener	
Native essential oils	e.g. Vetiver	

4.1. Existing Competition Studies in the NI sector (pricing, logistics and distribution channels)

The pricing of products should be done according to a profound cost calculation, which can be shared transparently with the importer. Though there are different aspects to consider, such as pricing, as well as logistics and distribution channels which are determined by the respective product group and its application.

⁹³ MAPs include, among other products, also to the main part the NWFPs.

⁹⁴ Tradeline Philippines, Statistic data from 2019.



For instance, essential oil prices vary widely and depend on the oil yield of the raw material. However, raw material again influences the price, as changes in availability (natural disasters, harvest etc.) or change of regulations can cause high fluctuations.

Spices and herbs have a much lower global trade price than European retail prices, which does not necessarily imply benefits for the producers, as European processors and retailers add high margins. Value addition is here key – the more value that can be added (processing stages, standards & certifications etc.) in the country of origin, the higher the selling price to the Europeans. Together with an accurate cost calculation regarding value addition and high quality of the product, price negotiations are based on a strong foundation. Quality in terms of product quality, meaning, but also implying documentation for traceability and communication standing for reliability and trust-building among exporters and importers. An indicative price break-down is: raw material 10% - processing 10% - transport 5% - import & processing 25% - retail 30-50%.

The main buyers of spices and herbs are European importers, distributors and wholesalers. As importers have their own processing and packaging facilities, they might also be competitors and high quality is even more of a decisive factor. Supplying mixtures to Europe is prone to strict requirements and strong competition, due to the fact that most mixtures and seasonings are created in Europe.⁹⁵

Essential oils still have to pass several stations when entering Europe, before reaching the consumers. Additionally, during each step, value is again added to the product for logistic services, transformation of the products by manufacturers, flavouring etc. If essential oils find applications in aromatherapy, or are used as cosmetic ingredients, they can be sold directly to the manufacturers with further processing not required.

Also, for the other products, which will be discussed more in detail, the channels are directly interlinked with the application. The CBI market information⁹⁶ offers a valuable source, for a wide range of products for exporters from emerging markets and developing countries.

4.2. Coconut – desiccated and oil

The coconut tree, as part of the palm tree family, is a resilient tree, though with the need for ample rainfall. Most of the world's coconuts are produced on small native plantations and are abundant in coastal tropical regions. From the coconut tree (Cocos nucifera) various products can be obtained - coconut sugar and syrup (see study on processed food) from the palm sap, water as the liquid of the coconut fruit and milk, extracted from the meat, coconut oil from the copra and desiccated coconut as dehydrated coconut meat in flakes (can be further ground to flour). And even beyond food, health and cosmetics, also fibres can be sourced from the husk of the kernel or the shell processed to charcoal.

4.2.1. Coconut production in the Philippines

In the Philippines, the coconut industry plays a key role in shaping national development. Agricultural products are the second-largest category of export products (after electronic goods) with fruits and coconut products being the main exported goods.⁹⁷ Traditional goods are processed out of coconut, but also non-traditional with the most relevant for export to Europe such as coco sugar, VCO (virgin coconut

⁹⁵ <u>https://www.cbi.eu/market-information</u>

⁹⁶ www.cbi.eu

⁹⁷ Oxford Business School: The Report. Philippines 2019.



oil), desiccated coconut and chips, coconut milk, water and vinegar⁹⁸. About one third of the country's arable agricultural land or 3.26 million hectares, is planted to coconut, representing 64 out of a total 79 provinces, and 1,195 out of the 1,554 municipalities in the country.⁹⁹ The plantations in the Philippines are in average small to medium size with limited productivity, as result of lack of information on processing, narrow supply chain development, with the consequence of decline in terms of number of farms. Although the continuing demand for the trending coconut product and VCO becoming popular worldwide, palm oil plantations are replacing coconut trees. This development entails the risk of extinction of coconut trees, while the coconut sector at present provides livelihood to about 3.5 million Filipino farmers.¹⁰⁰

In the context of organic coconut production, the limiting factor is the availability of organically cultivated coconut plantations. As yet conventional plantations face a hard time fighting their existence against palm trees (due to low prices of palm oil, even traditional cuisine has supplemented coconut by palm oil) organic plantations are mainly found under the umbrella of a non-Philippine importer engaged in organic cultivation.

Today, the Philippines are the second-largest producer of coconut products after Indonesia, coconut oil as the leading product. At the same time, the Philippines is the world's main producer of VCO. In recent years, the development of processing technology of coconut mills increases the quality and accessibility of value addition. A thriving coconut oil production process, as well as the successful direct export of desiccated coconut, achieved considerable foreign trade earnings. In terms of statistics, the Philippines sells over 70% of its coconut oil to the export market, of which about 80% goes to Europe and the United States.

4.2.2. Coconut products on the EU & EFTA markets

Coconut products as an ingredient, as well as flavour, have experienced steady demand and left the category as a niche product. The health benefits derived from coconut are the driving force and the flexibility to apply the product on many different levels.

The European market for virgin coconut oil has grown significantly during recent years, due to consumers' attention to a healthy diet, vegan lifestyle and the rising awareness of palm oil being a threat to the environment and people in the origin. Especially virgin coconut oil VCO has reached supermarkets' standard assortment and even in industrial applications, VCO has gained ground. Without any chemical additives, and only by a mechanical process, VCO is obtained from the fresh meat of the coconut and keeps, in this way all of its valuable content of vitamin E, minerals and healthy medium chain fatty acids. Good quality VCO retains its smell and taste of a fresh coconut when of best quality.¹⁰¹

The extraction is conducted in the countries of origin, as the extraction of VCO needs to be done within 48 hours after harvest and assures thus, that the value addition remains in the country of origin. This fact makes Europe dependent on imports of VCO. However, the steady growth in demand – globally and in Europe – linked with stagnation in coconut production, causes concern regarding the availability of raw material in the near future.

⁹⁸ Speciality in the Philippines: made from fermented coconut water or sap

⁹⁹ Business Diary PH

¹⁰⁰ UCAP United Coconut Association of the Philippines 2020

¹⁰¹ Food Navigator: coconut oils and spreads on trend in Europe.



Within Europe, Germany, the Netherlands, the UK, Belgium and Sweden are the main importers of virgin coconut oil, mainly from the Philippines and Sri Lanka. Virgin coconut oil is a speciality oil and traded in relatively small quantities. The oil goes directly to importers in Europe, where some do filtering and bottling of the oil before it finds its end-consumer. A direct contact between producer/exporter and importer/manufacturer is essential.¹⁰²

The European Union is the world's largest importer of desiccated coconut, accounting for more than 30% of global imports. Desiccated coconut is a traditional baking ingredient in many European countries and additionally due to growing consumer interest in Asian cooking, the demand is increasing. Europe's leading importing countries being the Netherlands, Germany, the United Kingdom and Belgium, acting as hubs for intra-EU and EFTA trade.¹⁰³

4.3. Calamansi Extract - oil and juice

Calamansi (or Kalamansi, Citrus microcarpa¹⁰⁴) is a Philippine, native citrus species widely cultivated and does not occur naturally outside the Archipelago. This essential oil-rich citrus is used in beverages and condiments. ¹⁰⁵

4.3.1. Calamansi production in the Philippines

In the Philippines, the calamansi tree is commonly grown in the backyards and appears naturally on the Archipelago and is cultivated on a large scale, too. The fruits are available throughout the year with the main season from August to October.

The use of calamansi is wide and all parts of the fruit can be processed differently. Essential oil is obtained from the calamansi peel by cold-press or steam distillation, while the pulp is made into juice concentrate. The juice concentrate can be transformed further into powder, by spray-drying, resulting in a water-soluble powder which is used for flavouring, pharmaceutical preparations, supplements, etc. Jams, candies and marmalade contain calamansi peel.

Calamansi is rich in vitamin C and A, antioxidants and calcium among other beneficial nutrients. The sour juice can be used in any kind of beverage as it is nutritious and traditionally made into a fruit drink that helps prevent respiratory diseases and stimulates growth. Further it can be used as a flavouring ingredient or as an additive in food preparations. The same applies to the spray-dry extract of calamansi. The scent of calamansi has been proven to help alleviate depression and anxiety and neutralises bad smells, which is why it is added to cleaning products, deodorants, skin bleach, hair shampoo and others, including health applications.

4.3.2. Calamansi on the EU/EFTA markets

Calamansi is quite a new product to the European market. Apart from being a versatile souring ingredient in cuisines – today rather an insider tip – calamansi is, where it has been introduced into the market, an acknowledged ingredient, due to its health benefits, as an immune booster.

¹⁰² <u>https://www.cbi.eu/market-information/vegetable-oils/virgin-coconut-oil</u>

¹⁰³ <u>https://www.cbi.eu/market-information/processed-fruit-vegetables-edible-nuts/desiccated-coconuts/europe</u>

¹⁰⁴ Also known as Calamondin or Citrofortunella microcarpa

¹⁰⁵ Science Direct & Quisumbing: Medicinal plants of the Philippines



On the European market, Calamansi products can only be discovered by looking very carefully for them. Calamansi juice is considered a very exciting new discovery as a flavouring to food and beverages. What is known as exotic today, has high potential for a new taste trend, according to a German importer sourcing calamansi juice from Vietnam, as organic quality can be found there. For example, instant calamansi, ginger and kale juice can be found, as well as vinegar, with calamansi juice, coco-calamansi syrup, and various drinks (cold brew coffee, juices, lemonade) with calamansi juice added.

4.4. Carrageenan

Carrageenan is a thickening and gelling agent with viscosity-increasing, stabilizing and emulsifying properties, obtained from red algae (Rhodophyta) and brown algae (Phaeophyta) it forms a gel with water – therefore, they are used for hydrocolloid production. Carrageenan is used, amongst others, for the production of processed foods, for personal care products, cosmetics and as a pharmaceutical excipient. In the EU it is approved as a food additive with the number E407 and semi-refined as E407a.

4.4.1. Carrageen production in the Philippines

The largest producer of carrageenan is the Philippines, which accounts for around 77% of the world's supply. The Asia-Pacific carrageenan market is large compared to the markets in North America and Europe.¹⁰⁶ About 70% of Philippine carrageenan exports are refined carrageenan, while about 27% are semi-refined. In 2015 and 2019 the general exports of carrageenan from the Philippines to the world amounted to USD 180,461 million and USD 198,061 million, respectively. The United States as the main importer of Filipino carrageenan (one-fifth of all exports) has seen a slight decrease in imports over the period between 2015 and 2019. After the USA, Spain, Denmark, Russia and the Netherlands are the Top 5 importers.

There are two different methods of producing carrageenan. The traditional method (refined carrageenan) for the production of carrageenan is the alcohol precipitation process. This process is difficult and expensive relative to the costs of the second method. The semi-refined carrageenan SRC, only feasible since farming of Eucheuma species was introduced, is the gel-press method, which has gained popularity. The semi-refined process was developed originally to produce a high gel strength, cheap carrageenan for use in the petfood industry. It has since developed into the fastest growing carrageenan technology and in conjunction with gel pressing has been the major cause of the decline and closure of many alcohol precipitation plants. SRC has experienced strong growth in the meats industry and in the dairy industry where clarity is not an issue. The main advantage of semi-refined carrageenan is the low cost.¹⁰⁷ Nevertheless, there is still potential for growth in the production of carrageenan through investments in the production of raw materials (volume is sufficiently available) and advanced processing technologies. Especially, if an innovative, qualitative way of organic carrageenan production can be developed. ¹⁰⁸

4.4.2. Carrageenan on the EU/EFTA markets

Carrageenan has found a strong position in the EU and EFTA markets. As seaweed extracts in general and carrageenan specifically, have a wide range of application options, continuous growth is driven by

¹⁰⁶ Businesswire, 2016

 ¹⁰⁷ More details on the process can be found here: <u>http://www.fao.org/3/Y4765E/y4765e0a.htm</u> and <u>http://www.cybercolloids.net/information/technical-articles/introduction-carrageenan-production</u>
 ¹⁰⁸ DTI http://industry.gov.ph/industry/carrageenan/ Republic of the Philippines & ITC 2020



increasing consumer demand for high quality, natural products. Carrageenan is used as a gelling agent in dairy products including the ice cream industry, the meat processing, as well as the pet food industry. As thickener, carrageenan is applied to beverages, sauces, dressings and syrups.

Consumers increasingly demand plant-based products to support healthy eating habits due to changes in lifestyles. Carrageenan also functions as a stabiliser of packaged foods. In addition, in terms of the vegan food trend, carrageenan substitutes gelatine.

In order to enter the carrageenan market, the supplier must generally be able to prove that the product and its use are considered safe. However, the sales opportunities for carrageenan are usually hampered by the required quality standards, relative to the market price level. In addition, depending on the type of carrageenan and its application, European buyers may have different quality requirements and insist on possible certifications regarding quality standards.

Spain is the largest European importer of carrageenan from the Philippines (globally ranking second supplier) followed in Europe by Denmark, the Netherlands, Belgium and Germany. More than five times the value of Carrageenan was imported in 2019 by Spain in comparison to 2015 (USD 3,253 million to USD 16,880 million). Additionally, , the Netherlands increased the import value from USD 1,319 million to USD 10,461 million within four years. The abovementioned entry points to the European market are at the same time the sources of supply of the EFTA countries for carrageenan, due to the vivid intra-EU and EFTA trade.

European carrageenan producers typically source their raw materials from farmers in countries like the Philippines. In general, the European demand for carrageenan is currently increasing gradually. Consumers are buying more treated foods, which often include thickeners. In the coming years, growth should continue to increase steadily. However, the availability of carrageenan substitutes will limit market growth.

The changes in the production processes affect the European market for carrageenan in Europe, as quality and product safety are crucial. Further, the market is affected by a high volatility of prices. Also, primarily, recent discussions around the negative effects on health, have resulted in food and beverage companies looking out for alternative food additives. Even in organic products, carrageenan is mostly allowed to some extent as additives, thus it is not possible to certify the production of carrageenan as organic. Carrageenan is also banned in baby food products.

Despite the negative reports, seaweed extracts and carrageenan are still allowed as food additives, both in the EU and EFTA markets. High quality of the product is a basic requirement to enter the European market successfully, combined with sustainability becoming an important buyer requirement. However, suppliers of carrageenan need to understand the general trend towards additive-free products on the European market.

4.5. Moringa

Moringa oleifera is acknowledged for a multitude of uses in nutrition, medicine, cosmetics and water purification. In many parts of the world, the full potential of this plant could be capitalized on, with resulting huge economic benefit to the communities who depend on indigenous plants.

Moringa is native to the foothills of the Himalaya and can be found in parts of Asia and Africa. It is a resilient tree (also called the "miracle tree") whose plant parts serve various purposes: the moringa leaf powder is used as a food ingredient from bread to tea, and also as a food supplement and herbal medicine. As moringa is a highly nutritious plant, its leaves (rich in antioxidants and iron, specifically) and fruit pods ("drumsticks") are commonly consumed and contain various vitamins, proteins, minerals,



fibers and other essential nutrients. The oil is obtained from mature seeds by cold press or solvent extraction. As a vegetable, edible oil, it is predominantly applied in cosmetic and personal health care products as a lubricant, emollient, with soothing properties, but also added to food as a supplement.¹⁰⁹ Moringa oleifera oil is also known as ben oil, due to its high content of benhenic acid.

4.5.1. Moringa production in the Philippines

Moringa in the Philippines, not only has high value due to its nutritional properties, but also due to its financial potential, if the quality is appropriate for export. Therefore, it requires high-end manufacturing and international trade.

In the Philippines, moringa's commercialization is an emerging industry. Locally, all parts of moringa are used traditionally for food and herbal medicine. Yet, there is enough volume available to shift from local to commercial use, including processing. With the adequate value chain development including the establishment of knowledge on raw material quality, leaf processing and oil extraction, export required qualities and volumes, can be achieved. Already, during the last decade, the moringa industry in the Philippines has seen significant growth as the focus of national research and development efforts have focused on this culture. Despite the growing significance of the moringa industry in the Philippines, the bottleneck is the good quality raw material of moringa. For instance, resulting from unsteady moringa seed supplies, the oil seed processing faces supplementary challenges. Further the significance of the drying process needs a clear understanding of the process. Moringa leaves need to be dried right after harvesting, in order that leaves can retain their nutritional content. Thus, and underlined by the two latter examples, establishing good agricultural practices, stringent guidelines and regulations to ensure the quality and stability of Moringa products needs to be addressed thoroughly.¹¹⁰

4.5.2. Moringa on the EU/EFTA markets

In Europe, based on the general increasing demand in natural ingredients and change in lifestyle – e.g. the vegan and vegetarian population – nutritional supplements, natural remedies for health and rich components for cosmetics, have good potential. Even the Covid-19 pandemic did its part by stimulating demand for immune-boosting supplements and natural ingredients. These trends will potentially increase the awareness of consumers of moringa products in Europe. It is important to note that the promotion of moringa by European importers, retailers and even bloggers are of high relevance for the acceptance of the products on the European markets.

The good news is that moringa is not considered a Novel Food product, so both as leaves (dried or powder) and the oil of moringa, are allowed for food applications in Europe.¹¹¹

However, the main challenge is complying with the strict requirements for market entry in Europe regarding natural ingredients for the respective applications. Especially, as for food supplements, an organic certification is often requested from the buyers' side.

The most prospective countries for moringa are the Western European countries. These include Germany, the UK, France, the Netherlands, Italy and Spain. Foremost Germany, the UK and France have the largest nutritional supplements markets, as well as relatively high awareness of moringa products and their benefits. The European food industry uses moringa in the powder, leaf, seed and oil formats

¹⁰⁹ ISHS Acta 1158, 2017 & <u>www.cosmeticsandtoiletries.com</u>

¹¹⁰ ISHS, 2017

¹¹¹ <u>https://ec.europa.eu/food/safety/novel_food/catalogue/search/public/index.cfm</u>



because of its functional and nutritional properties, while the European cosmetics industry values moringa oil for its moisturising, cleansing and emollient properties; it is also used in aromatherapy and massage oils, as it blends well with other essential oils, and it is also a good oil carrier.. In the European health products market, the leaf powder and seed oil are applied as ingredients for supplements due to their nutrients and beneficial health properties, such as lowering blood sugar levels, against diabetes, reducing inflammation and oxidation, anti-viral and bacterial, strengthening skin and hair. Moringa is also increasingly used as a plant-based protein source in vegan and vegetarian products.¹¹²

Only for moringa tea, loose dried leaves are imported into Europe. Importers mainly source the moringa leaf powder from the countries of origin. Concerning moringa seed oil, the moringa seeds account for the highest export volumes from the Philippines and are mainly exported without value addition, as the extraction of the oil is undertaken in the importing countries. Competitors of the Philippines are India, as the largest moringa producer, followed by other Southeast Asian countries, as Indonesia and Taiwan, African countries such as South Africa (clear botanical identification is critical to distinguish M. oleifera and M. stenopetala) and the northern countries of South America.

4.6. Other natural ingredients from the Philippines

The rich biodiversity of the Philippines offers a vast population and variety of plants, which hold great potential for the use as natural ingredients for food, health or cosmetic applications. Additionally, processing and therewith, value addition in the country of origin, creates opportunities for income generation.

In this chapter, products are highlighted, which show potential for the European market and have been highlighted by local Filipino institutions and are based on EU/EFTA importers' interests.

Natural colorants are gaining in importance, based on the aspects discussed earlier. In the Philippines, to name only two, the butterfly pea flower and turmeric, have potential to enter the European market. Another, though less known, is the **Ube** or purple yam (Dioscorea alata). Its edible tuber is a traditional part of Philippine cuisine, similar to the sweet potato taste, which contains also starch. Ube is valued as a medicinal plant, as well as food colorant.

Turmeric's root is commonly used as a spice (dried, slices or powder) and as a natural colorant (resin) as well as a flavour component containing various active substances. In the Philippines, Curcuma longa is a traditional medicinal herb. One of the main curcuminoids, called curcumin, has proven to have antioxidant, anti-inflammatory, and anti-cancer properties. Mainly, turmeric is used in the food industry, but also in the pharmaceutical/health products and nutraceutical industry.

The turmeric industry in the Philippines is still developing, regarding farming techniques and suitable cultivars. It is essential to be aware of two other similar, but different species (C. aromatica and C. xanthorrhiza) which lack the active compound curcumin. As Filipino turmeric contains one of the world's highest curcumin contents, by applying best practices throughout the chain and with high quality processing, the products offer unique properties for the international market. The largest turmeric producers and therefore competitors are India, China, Indonesia, Bangladesh, Myanmar, Vietnam, Peru and Pakistan.¹¹³

¹¹² CBI, 2020

¹¹³ Science Direct & CBI, 2020 & Final Report of 1st Philippine Natural Ingredient Summit



Butterfly pea flower, Clitoria ternatea or blue ternatea, in Philippine Puki-reyna, grows throughout the Philippines in thickets and is cultivated for its blue flowers. It is also a nitrogen fixer. The blue (and white) varieties of Clitoria ternatea contain significant amounts of crude protein, crude fibre, ash, carbohydrates and minerals, such as potassium and iron. Other than the flower, the roots, leaves and seeds can also be used, for instance in Ayurveda. The Ayurvedic medicine tradition regards the flower as a tranquilizing, sedative, stress-reducing, and memory-enhancing herb. Traditionally in the Philippines, poultices of leaves are used for swollen joints.¹¹⁴ The flower extract finds application as a cosmetic ingredient, too. However, the focus lies on the flower pigment for food and beverage colouring. Adding dried butterfly pea flower to boiling water changes the colour, turning blue. A great effect for various drink options – either hot or cold, and in the traditional way after a meal.

With regard to a national and company strategy for organic cultivation in the Philippines the combination of, e.g., coconut trees and cultivation of butterfly pea flower, under the trees can be taken into consideration.

Indigenous and endemic in the Philippines, the **Elemi** tree (Canarium luzonicum) which originated from the Burseraceae family is known for its resinous substance, coming from the bark of the tree. The Philippines export mostly the raw oleoresin as "Manila gum elemi" to Europe, to mainly France, Germany, Switzerland and also India. When the resin undergoes steam distillation, the Elemi essential oil is obtained. Elemi resin finds its application in herbal medicine, while Elemi essential oil is used commercially in skin care products and a valuable ingredient in perfumes. In ancient Egypt, Elemi Essential oil companies as Young Living from the US, promote Elemi essential oil – imported from the Philippines - like this: "Elemi has a spice, incense like scent that is soft and somewhat balsamic. A member of the same botanical family as frankincense and myrrh, it has been used traditionally in Europe for the skin. Elemi is highly regarded for reducing the look of fine lines and wrinkles, skin support, and for soothing muscles after exercise."¹¹⁵

Lastly, wild collected plants (MAPs and also NWFPs) have a high potential, not only on the commercial side, but also in terms of increasing chances for employment in the countryside. Therefore, it is essential to promote this sector on a large scale – both for rural income generation as for conserving old, traditional knowledge on the biodiversity and properties of Filipino nature.

4.7. Relevance of Social Media / Media tools for the promotion of NI products to EU/EFTA markets

In the context of natural ingredients, social media channels – both for marketing purposes, as well as for sales - is not a relevant tool in the EFTA and EU markets.

COVID19

Although, due to the covid-19 pandemic and the resulting disturbances, the virtual channels are gaining importance. Trade fairs are taking to the virtual world with online meetings during specific days for an initial get-together. Even for sourcing from new companies, visiting suppliers for trust-building, audits and product development, new paths must be taken into consideration. It is too early to predict any clear development; however, the chances are high that general business travel will decrease and more

¹¹⁴ <u>http://stuartxchange.com/Pukingan.html</u>

¹¹⁵ Final Report of 1st Philippine Natural Ingredient Summit & Young Living & <u>www.aetherische-oele.net</u>



meetings will take place in the virtual context. However, the personal contact, live face-to-face meetings will not be replaceable after all. A healthy mixture will be found.

In recent years, paper brochures have lost acceptance as marketing material and websites increased its importance. Using the website as a digital business card to be visible in the globalised world is crucial. A website containing basic information on the company, its history & story, its employees and people engaged, also displaying the social & environmental component is essential to companies. Furthermore, detailed product information from the field to the product, including all documentation and quality information ("specifications") and a quality set of pictures, can support promoting the feeling, with only the two senses available, when using digital marketing material.

5. Conclusion

The Natural Ingredients market in Europe is prone to immense competition and is very complex in its regulations on Union level and when going more into the specific national levels. However, European buyers understand the value of direct access to producing countries and are open to new suppliers. This fact is underlined by the latest developments in our globalised world, the changing environmental conditions and with Covid-19 showing at the same time the limits of international trade. Apart from the bestseller coconut, the Philippines has intrinsic opportunities for certain small windows in the European natural ingredient sector, although the variety is limited. Therefore, it's the specialities of the Philippines that could have the best chances on the EU and EFTA markets and therewith facilitate the structural conditions and development of the Philippine natural ingredient producing industry.

There is in fact a group of medium-sized and large Philippine producers-exporters with the motivation and capacity to prospect new markets and foster new export opportunities. Companies that depend on well-established, fully traceable supply chains to develop the capacity and methods to prepare produce that meet all European mandatory market requirements and even comply with voluntary standards, should consider prospecting this market.

To encourage even smaller producers to approach foreign markets, with a cooperation along the domestic supply chain to consolidate volumes with regards to the demands of importers, implies a cooperation of homogenous quality producers, within a supportive environment. Horizontal cooperation and aggregation models, as well as vertical integration in the chain, might be part of the solution. Such approaches would greatly help overcoming the obstacles to reach export competitiveness (in volumes and quality) and also increase the indirect participation of small and medium scale farmers in export market channels.

Paying more attention to market intelligence with respect to trends and buyer requirements in the target markets of the EU and EFTA certainly will help the entire sector. It is important to closely follow the latest trends and developments in these markets. Regional markets, and especially Europe, increasingly require tailor-made and specific approaches because of the dominance, negotiating power and strict requirements of buyers.

In this respect, it is essential to continuously monitor the developments of the European markets. Understanding, for instance, that organic products in Europe have left the niche sector and evolved into an inherent part of each supermarket, drug store and further entire supermarket chains.

As the production in the Philippines is often a natural one, without chemical inputs, fields and plantations can be regarded as organic without certification – in many cases – due to lack of financial means, supply chains and lastly, know-how. Organic certification is a realistic short-term option for products



from the Philippines, if given legislation, support and structures assist achieving this goal. Such a development can be a door opener for the diversification of export markets.

However, even with the step before, establishing sustainable supply chains, implementing a profound traceability system, assuring adequate cultivation, post-harvest treatment (GACP) as well as processing under simple, but standardised circumstances, are important. Additionally, pro-active communication, increasing the quality of products crucially will lead to growing interest from the European buyers' side.

There is an obvious global tendency for market requirements to become stricter. Consumer preferences in the national market and in regional markets follow the same trends as in European high-end markets. The need arises to improve working methods along the value chain and prepare for this new reality. Corporate Social Responsibility (CSR) might be perceived as an obstacle in the views of some Philippine entrepreneurs. Nevertheless, CSR merits to stay high on the agenda of purchasers, as the social aspects of production take a decisive stand in value addition. Improving an already existing national vision on sustainable agriculture, awareness campaigns and increasingly addressing CSR issues with producer associations, processors and exporters might help open the doors to the European and EFTA markets for the natural ingredients of the Philippines. Opening doors to a small number of countries within the EU or EFTA, but countries which act as trade hubs are crucial ensure that and the produce continues their journey further over several European doorsteps.

5.1. Unique Selling Position of Natural Ingredients

Unique Selling Points (USP) or the unique position determines what differentiates a product from its competitors. Meaning, each company needs to define its respective uniqueness and therewith point out clearly the aspects of the individual competitive advantages.

Why shall an importer from Europe rather buy coconut water from the Philippines then from Indonesia? Why is the Butterfly Pea flower from the Philippines more attractive than from Sri Lanka or Ghana? After presenting the national frame, diving deeper from the country level to the company level is required. What makes the quality of my product/s differ from others (even other Filipino producers)? What is my value added? Why is my price different from that of other companies or origins? What can I offer that others cannot? What is it that makes my company unique?

These aspects need to be identified by the respective companies themselves. A proper market analysis and steady monitoring of both the target market, but also competing producers, is essential to adapting the strategy accordingly. Steady updates on the international market, as well as buyer requirements, provide incentives to apply standards, practices, and certifications to every step along the chain to assure high quality, product safety, also keeping the occupational safety and own risk management in mind.

In the end, it is the uniqueness - which shall be complemented with frank, and timely communication to build trust - that will raise the interest and finally be the benefit of the buyer to start business together.

5.2. Market Advantages

With natural ingredients being an indispensable part of the international food, cosmetics and health product market and also having already shaken off the trend image for some time, the Philippines are in a unique position to become a supplier of indigenous and innovative, though traditional, natural



ingredients and can therefore benefit from an international growing "natural" industry. The Filipino market for natural ingredients can offer a number of advantages, however, those need to be strengthened and consolidated institutionally, to also evolve into an advantage for the Filipinos engaged in cultivation, collection and processing of respective ingredients.

To mention a few, herewith a short list of the main market advantages of the Philippines:

- High biodiversity with a high percentage of endemic species offering diverse natural resources (land to marine)
- Traditional knowledge exists on indigenous plants and the use in herbal medicine, as food ingredients, or for the cosmetic application
- Diversification of products and markets feasible with the establishment of sustainable supply chains
- Fast developing sector the Philippines is among the fastest growing economies in Asia
- Large pool of skilled and high resource people, with perfect English skills, as crucial for international communication
- Supportive network for extensive market intelligence which provides an advantage on the market.
- High potential in the development of technologies for the processing of native raw material into high quality natural ingredients

To take advantage of the mentioned aspects, a national strategy to shape a sustainable commercialisation of the "natural treasures", also in the context of organic production. In many cases this is about strengthening of the existing offer.

5.3. Bottlenecks

After introducing the EFTA and EU markets with specific focus on natural ingredients, and the access opportunities for the Philippine exporters, only to a minor extent was the deep sight into the value chains, feasible. Thus, also in the exchange with importers from the EFTA and EU markets, several bottlenecks emerged.

The bottlenecks¹¹⁶ are listed to raise awareness, to analyse and finally to elaborate on those for a successful market entry to the EFTA- and some selected EU countries' trade hubs.

- Compliance with international basic and legal standards are a must, starting at production level (cultivation) ending with the export ready natural ingredients – amending national legislation to comply with international legislation.
- Availability of adequate processing technology according to international standards.
- Product safety on national and international level: product quality monitoring along the chain
- Traceability thorough documentation on company (history, size, equipment, process charts, R&D, etc.), products (product fact sheets/specifications, precise cost calculation integrating all

¹¹⁶ The Bottlenecks are based on the author's collected information from European importers, Filipino resource persons, as well as studies and documents used during the compilation of this study.



company expenses, product and packaging innovations, etc.), CSR activities (community empowerment, water recycling, waste (water) management, energy saving activities, etc.) is a prerequisite for export to Europe and crucial for internal risk management

- Going beyond legal standards, for instance GACP, Organic, SMETA, Fairtrade etc., adds value to the product and accomplishes many buyers' requirements in EFTA and EU countries.
- Market intelligence comprehensive market research tailored to the specific natural ingredient, with the broad sight from competitive market to target market/s
- Introduction of phytochemical standardisation, phytosanitary standardisation
- Consistent supply of raw material sustainable supply chain development: profound seasonal long-term planning with producers and respective associations supports availability of sufficient raw material, a high degree of processing capacity utilisation and in consequence always the necessary space to negotiate with buyers backed by the company's relatively stable costs of operating. Consolidation of volumes, e.g. by creating cooperatives, can converge towards buyers' needs.
- Creation of an innovative environment for product development innovation on indigenous ingredients.
- Strengthening of associations to frame a supply chain structure amongst the sector's players.
- Aim for direct-sourcing partnerships with EU and EFTA importers to facilitate compliance management with gradient requirements, jointly between exporter and importer, possibly involvement of foreign investments and fostering of a sustainable, long-term partnership - > cutting the supply chain short, assures that the main part of the value chain remains in the country of origin

Consolidating efforts from the production, through the processing, to export environment and institutional framework development can achieve the objective to meet interest and demand of importers, manufacturers, on the international market so doors open for the entrance of Philippine natural ingredient products.



Importing company +	Website	Remarks
country		
Blattmann Schweiz AG, Switzerland	www.blatt- mannschweiz.com	Supplier of food industry in Switzerland with or- ganic and conventional speciality ingredients, e.g. proteins, sweeteners, starches, hydrocol- loids, emulsifiers
W. Kündig &CIE AG, Switzerland and Germany	www.kuendig.com	Old Swiss raw material trader. Specialist in the processing of raw produce, various cleaning methods for food&feed safety, produce trans- formation (granulate, milling, degerm): Dried & frozen products, cereals & seeds, leg- umes, juices and fodder and specialities
Kräuter Mix, Germany	www.kraeuter-mix.de	Trading and production/processing of air-dried herbs, vegetables and spices for food, phyto- pharmaceutical, tea and pet food industry. Con- ventional and organic quality.
Galke, Germany	www.galke.com	Importer, processing and refining of dried herbs, spices and raw plant materials: tea, fruit pow- der, gums & resins. Conventional and organic quality.
Fuchs Group, Germany	www.fuchsgruppe.com	Largest European spice manufacturer and the leading privately owned global spice company, supplying food trade and food industry – spices and delicatessen products
SoulSpice, Germany	www.soul-spices.com	Food-Brand with spices and herb mixtures and single products – sourced directly from the pro- ducers/farmers in organic quality.
BioPartner, Switzerland	www.biopartner.ch	Specialized trader for organic foods for the Swiss and German organic retail, catering and food in- dustry.Offering a broad portfolio of services.
Dr Goerg, Germany	www.drgoerg.com	Importer of various organic coconut products (VCO, milk, desiccated, flour, syrup etc.), direct souring mainly in the Philippines, also processing in origin.
Harke Group, Germany	www.harke.com	Internationally acting marketer and distributor in the field of chemicals – chemistry, pharma, food, cosmetics. Also offers affiliated contract packing and manufacturing, and extensive ser- vices. E.g. algae, natural plant extracts, proteins, proteins, essential oils, etc.
Tropextrakt, Germany	www.tropextrakt.com	Importing and supplying natural raw materials for exotic specialities for processing, beverage, supplement and confectioner industry + applica- tion laboratory for product development. Puree, juice, juice concentrate, aroma, extract, powder

6. Overview of relevant buyers of Natural Ingredients in Europe



		and flakes. Products: exotic dry+liquid extracts, e.g. calamansi
C.E. Roeper, Germany	www.roeper.de	Roeper sources natural raw materials all over the world, is involved in logistics, warehousing and distribution. Products: Thickeners, colours, gums, resins
Worlee, Germany	www.worlee.de	Worlee houses three divisions – Chemical, Natu- ral and Cosmetic Raw Materials – and is a family- owned business supplying, refining and produc- ing of dried plant-based raw materials: balms/tree resins, fruits, vegetables, spices, me- dicinal herbs, garlic, culinary herbs, blends, nut kernels, oil seeds, pastes/purées, mushrooms, specialities, sweeteners, tea, but also thickeners, and cosmetic oils etc.
EDEKA, Germany	www.edeka.de	One of Germany's main retailers, with own brand and private label use. Conventional and organic quality.
Migros Group, Switzerland	www.migros.ch	Switzerland's largest retail company and super- market chain. Migros is a cooperative society as form of organisation with a large part of Swiss population being a member. Most products are manufactured by own sub-company in Switzer- land, but also intensive importing of ingredients and products. Organic and conventional quality.
Mane, France	www.mane.com	Mane is a producer/manufacturer, developer and distributor of flavours, fragrances and ingre- dients.
Symrise, France	www.symrise.com	Working with fragrance, flavour, natural nutri- tion and cosmetic ingredients solutions - re- search and development, purchasing, and pro- duction as well as sale of products and solutions
Tradin, the Netherlands	www.tradinorganic.com	Tradin works globally in the context of sourcing, developing sustainability initiatives, processing and distribution of organic ingredients.
Neupert Ingredients, Germany	<u>www.neupert-ingredi-</u> <u>ents.de</u>	Supplier to the food processing, cosmetics, phar- maceutical and animal feed industries with raw. Product range includes thickening, binding and gelling agents, sweeteners, raising agents, phos- phates, psyllium, proteins, oils, oil seeds, dried fruits, nuts, fruit powder and plant extracts, co- conut products and others
Voegele Ingredients, Germany	www.voegele-ingredi- ents.de	Working with ingredients for food, feed, cosmet- ics, detergents and others - both individualized customer solutions in sales and distribution and tailor-made products

