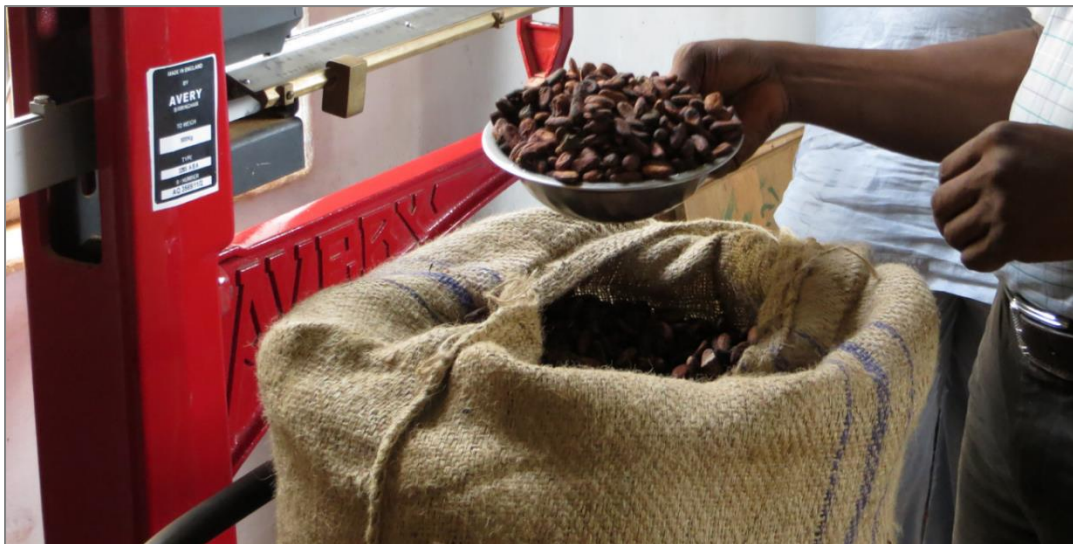


COCOA DEMAND ANALYSIS FOR UGANDA



Disclaimer

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Acronyms

CAOBISCO	Association of Chocolate, Biscuits and Confectionery
CAGR	Compound Annual Growth Rate
CFI	Cocoa and Forest Initiative
CMAA	Cocoa Merchants' Association of America, Inc.
EAC	East African Community
ECA	European Cocoa Association
EFSA	European Food Safety Authority
EU	European Union
FCC	Federation of Cocoa Commerce Ltd.
FFA	Free Fatty Acids
GFSI	Global Food Safety Initiative
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GPG	Gender Pay Gap
HACCP	Hazard Analysis and Critical Control Points
ICCO	International Cocoa Association
ICE	Intercontinental Exchange
ITC	International Trade Centre
LIFFE	London International Financial Futures and Options Exchange
MARKUP	Market Access Upgrade Programme
MOH	Mineral Oil hydrocarbon
MT	Metric Ton (1000kg)
NYSE	New York Stock Exchange
OEC	Observatory of Economic Complexity
PAH	Polycyclic aromatic hydrocarbons
SDG	Sustainable Development Goals
SME	Small Medium-size Enterprises
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
USDOL	United States Department of Labour
VSLA	Village Savings and Loan Association
WCF	World Cocoa Foundation
WINCC	Women in Cocoa and Chocolate

Executive Summary

Ugandan cocoa is high in demand. The main market for Uganda is Asia, which is growing rapidly. According to UNCOMTRADE data, there was a compound annual growth rate in volume of 30% over 2013-2017. Malaysia, Indonesia and Singapore are the top three importers. Interest of Asian buyers in Uganda's beans is due to the very low sea freight costs from East Africa and the increased demand from Indonesia, which is struggling to produce sufficiently for its installed grinding capacity. Though value per tonne is higher for beans going to Europe, imports into Europe in 2017 represented only 22% of the total volume imported from Uganda, down from 56% in 2013. The Netherlands and Italy have been growing their volumes from Uganda, but overall the trend is downwards in the European market. Ugandan beans in the conventional market are mostly used for blends. As single-ingredient volumes are too small and the quality not consistent enough, Uganda beans are not suitable for pressing and cadmium levels in the beans are too high for powder.

Certification is important for the European markets. Maximum volume certified is estimated at 40%, of which RA/UTZ production volumes represent about 20% of the total volume produced (down from almost 70% in 2014). The decline is likely due to a greater interest from Asian buyers and the high costs of compliance in production is not sufficiently offset by the premiums. There has been a push for organic, which promises higher premiums and European market access. FiBL data shows that about 20% of the total Ugandan production is now fully organic from only about 5% during 2006-2015. The Democratic Republic of Congo (DRC) is also investing into organic, and there seems to be a risk of oversupply according to buyers. Even though current market trends strongly favour organic food products, in the short- and mid-term, Uganda will need to compete with DRC and Sierra Leone.

A competitive advantage might be created for organic, if investments are made in strengthening monitoring and traceability systems and reducing the risk of product tampering to a minimum, as there is quite mistrust around organic certified produce. This is where the government could step in and where there is also an opportunity to address social and environmental challenges in the supply chain. The larger European chocolate makers, which have made public commitments like zero child labour and zero deforestation, consider these sustainability challenges of the country a risk, when choosing their long-term suppliers.

Specialty, including *flavour cocoa*, is a niche segment in Europe that Uganda is also serving and is generally bought wet from farmers directly or cooperatives and then centrally fermented. It is estimated to represent about 5% of the total supply. The wet beans are currently bought at such high prices that it is not seen as a sustainable business model by most wet bean buyers.

Uganda is generally well positioned as a cocoa origin country. It is Anglophone and has a good reputation due to its well organised coffee sector. Uganda has valuable experience in supplying different qualities of cocoa, allowing it to serve different market segments. The overall quality of the beans is good and suitable for single-origin, as the beans are said to have a rich chocolaty flavour profile. This is especially suitable for a high-quality milk chocolate, which would fit the taste of the markets in Northern Europe and UK.

Currently, high demand is pushing up farm gate prices quickly, which is a risk to its competitive position, the integrity of the product and sustainability of its supply chain. The challenge for Uganda will be to find a way to manage its growth sustainably while meeting the demands of the markets it serves.

CHAPTER 1: INTRODUCTION

1.1 MARKUP

The Market Access Upgrade Programme ([MARKUP](#)) is a four-year regional initiative focusing on increasing the participation of Small and Medium-size Enterprises (SMEs) in intra-regional trade and the European market for five East African Community (EAC) partner countries (Burundi, Kenya, Rwanda, Tanzania and Uganda). The sectors covered in the programme are (1) coffee in all five countries, (2) tea in Kenya, Tanzania and Burundi, (3) selected horticulture in Rwanda, (4) cocoa in Uganda, and (5) selected spices in Tanzania.

The initiative was jointly designed by the European Union (EU), the EAC Secretariat and the governments of all five countries, and it is implemented by the International Trade Centre (ITC), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the United Nations Industrial Development Organization (UNIDO) and other national partners.

Over the last few years, much of the development effort has focused on the farmers and production, with little attention given to the market-facing elements of the value chains. This cocoa *demand* report, together with a separate cocoa *supply* report, is commissioned by ITC and aims to guide the MARKUP activities and support national regulatory and industry representative bodies in their own cocoa sector strategy implementation and industry development support. It will also serve as the first inventory of potential partners to the programme. It is important to note that this demand report was focused on collecting buyer perceptions as might influence ITC MARKUP activity implementation for SME competitiveness.

1.2 Product & Market

This study focuses on the product *cocoa beans*, known under HS Code¹ 1801, as it is the main cocoa product being traded from Uganda (see below). The report will focus on the European market demand, as this also the focus of MARKUP.

Table 1 List of products exported by Uganda in 2017 in the HS code category 18: cocoa and cocoa preparations

HS Code	Product label	Value exported in 2017 (USD x1000)	Trade balance 2017 (USD x1000)	Annual growth in value between 2013-2017 (% p.a.)	Quantity Exported in 2017 (MT)	Annual growth in quantity between 2013-2017 (% p.a.)	Annual growth of world imports between 2013-2017 (% p.a.)	Share in world exports (%)	Ranking in world exports
1801	Cocoa beans, whole or broken, raw or roasted	54.208	53.907	2%	27.528	2%	5%	0.60%	14
1806	Chocolate and other food preparations containing cocoa	539	-1493	25%	79	30%	0%	0	107
1805	Cocoa powder, not containing added sugar or other sweetening matter	155	-121		11		-1%	0	71
1803	Cocoa paste, whether or not defatted		-9				2%		
1804	Cocoa butter, fat and oil		-13				7%		

Source: ITC Trademap

¹ The Harmonized Commodity Description and Coding System (HS code) of the tariff nomenclature is an international standardised system of names and numbers for the classification of commodities [74].

1.3 Limitations to the Analysis

Most of the data is derived from UNCOMTRADE data and the Eurostat database, supported by what is publicly available from International Cocoa Association (ICCO) and crosschecked via stakeholder interviews. As this report specifically focuses on the demand, it was decided to mainly use the import data. This might not necessarily coincide with production and/or export data or ICCO data, as inconsistencies occur due to time lag in registering data, trade systems used, etc. The figures are, however, estimated to give a relatively accurate indication of sector trends.

It should also be noted that, due to the relatively low volumes, variability is high. A single buyer purchasing 2000 MT Uganda in one year would already have a 7% market share.

CHAPTER 2: COCOA MARKET

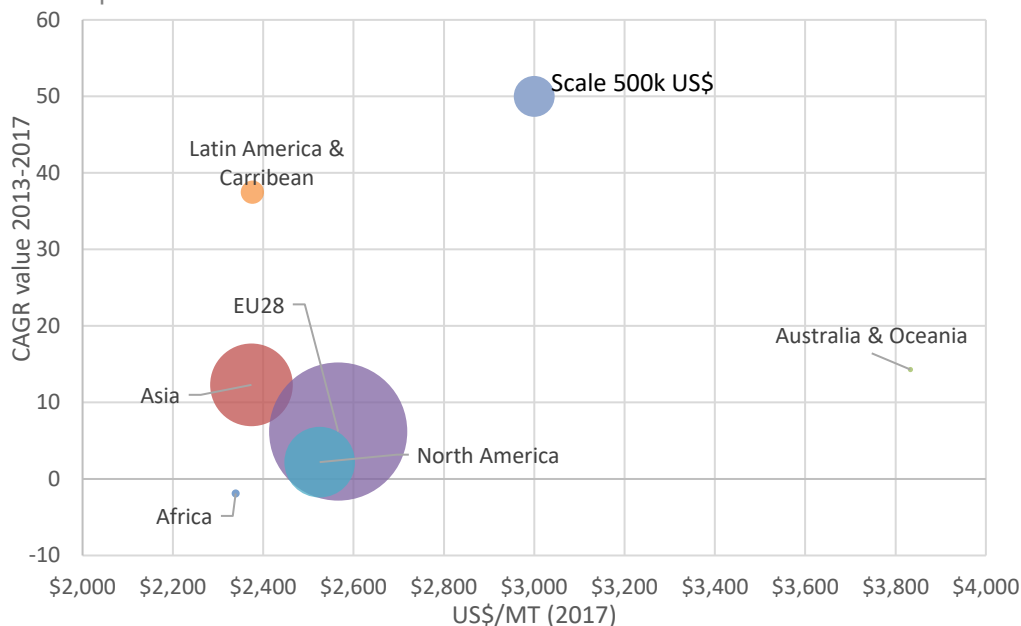
2.1 Cocoa Importers

2.1.1 Major cocoa bean importers in the world

The world cocoa bean production is estimated at 4.7 million metric tons (MT) [1]. In 2017, Europe imported about 1.8 million MT of the total cocoa produced, valued at 4.5 billion USD (3.9 billion EUR).

As can be seen in the graph below, Europe represented the largest cocoa bean market at 64% of total value imported in 2017. It was followed by Asia (~18%) and North America (~15%). In Asia, the growth is led by a rise in cocoa bean imports by Indonesia. Indonesia's own cocoa production is falling as farmers are switching to other crops [2] [3]. Europe, with a weighted average growth of 7% (2013-2017), shows a steady growth in volume and value compared to North America, which only had a 2% compound annual growth rate over the same period. Overall value growth seems to follow volume growth. The premiumisation trend, which can be observed in the beer and coffee industries, does not seem to have reached the chocolate sector at a significant scale yet [4].

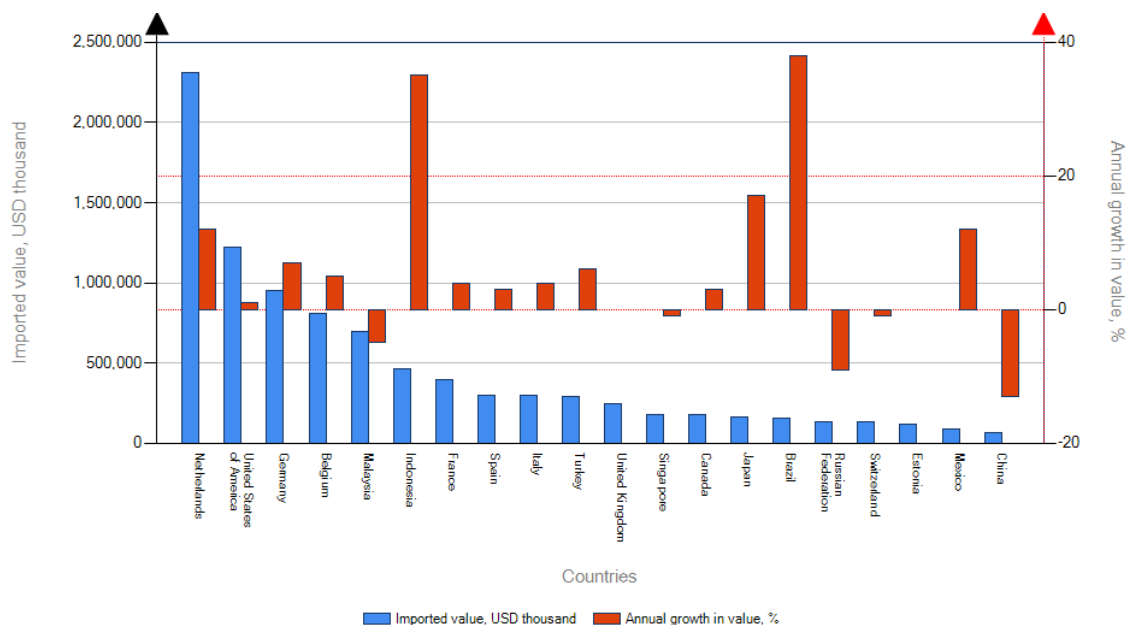
Figure 1 For HS1801 "Cocoa beans, whole or broken, raw or roasted" Weighted Average value US\$/MT of imports 2017, CAGR in value USD/MT in 2013-2017, Bubble size represents the total value imported in USD in 2017



Source: derived from ITC Trade Map

The Netherlands is the largest importer of beans worldwide, representing 25% of total imports in value, followed by the US (13%) and Germany (10%) (see Figure 2) [5].

Figure 2 List of importers of cocoa beans and the value US\$ thousand imported and annual growth value % 2017



Source: ITC Trade Map

Processing or grinding figures are important in the cocoa industry, as they are often used as an indicator for demand. Europe, North America and Asia (Malaysia, Indonesia and Singapore) account for about 60% of the grindings [6]. The ICCO estimated that global grindings rose by +3.9% in 2017/2018 and are estimated to be +2.6% in 2018/2019. According to the same source, Europe represents about 35% of the world's cocoa processing capacity [1], of which Germany and the Netherlands have the largest share, representing about 60%. According to the European Cocoa Association (ECA), the European Cocoa industry ground over a million MTs of cocoa beans during the 2016/2017 season, close to a third of the world cocoa production. The Netherlands alone accounted for 550.000 MTs.

Table 1 Summary of cocoa forecasts and revised estimates from the ICCO [7]

Cocoa year (Oct-Sep)	2017/2018		2018/2019	Year-on-year change	
	Previous estimates a/	Revised estimates	Forecasts		
	(thousand tonnes)				(Per cent)
World production	4 638	4 649	4 799	+ 150	+ 3.2%
World grindings	4 570	4 594	4 712	+ 118	+ 2.6%
Surplus/deficit b/	+ 22	+ 9	+ 39		
End-of-season stocks	1 748	1 734	1 773	+ 39	+ 2.2%
Stocks/Grindings ratio	38.2%	37.7%	37.6%		

Notes:

a/ Estimates published in *Quarterly Bulletin of Cocoa Statistics*, Vol. XLIII - No. 4 - Cocoa year 2017/2018

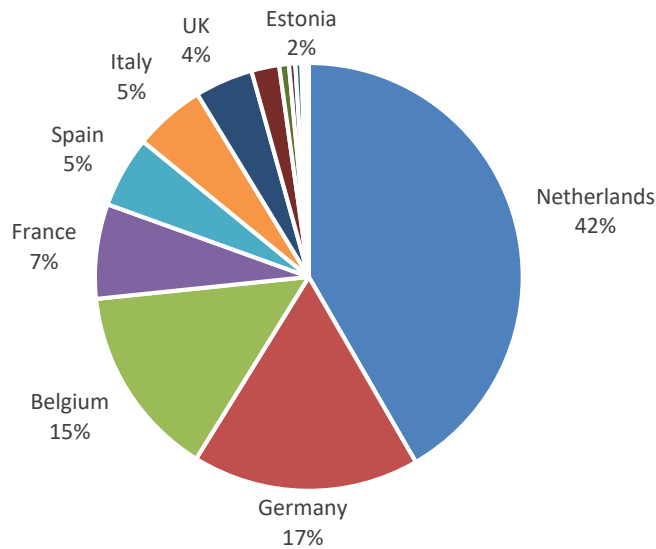
b/ Surplus/deficit: Net world crop (gross crop adjusted for loss in weight) minus grindings

Totals may differ due to rounding.

In Europe, Belgium follows after Netherlands and Germany as the biggest importer of beans (see Figure 3). As can be seen in Figure 4, most of the beans in the Netherlands and Germany are processed. These beans are re-exported from the Netherlands and mostly go to Germany (~65%). Belgium has

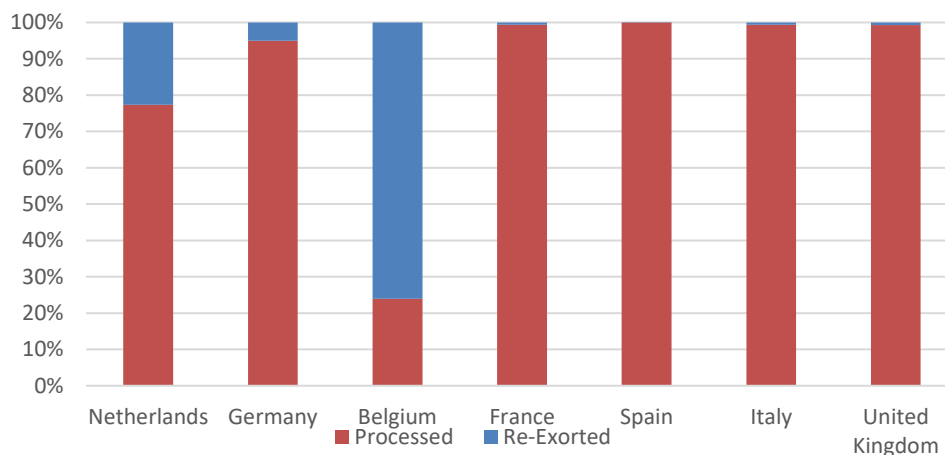
relatively little processing capacity of its own (Figure 4), and its re-exported beans go to the Netherlands, Germany and France.

Figure 3 Share of imports of EU28 countries based on value



Source: derived from ITC Trade Map data

Figure 4 Percentage processed versus re-exported 2017



Source: derived from ITC Trade Map data

2.1.2 Major importers of Uganda cocoa beans

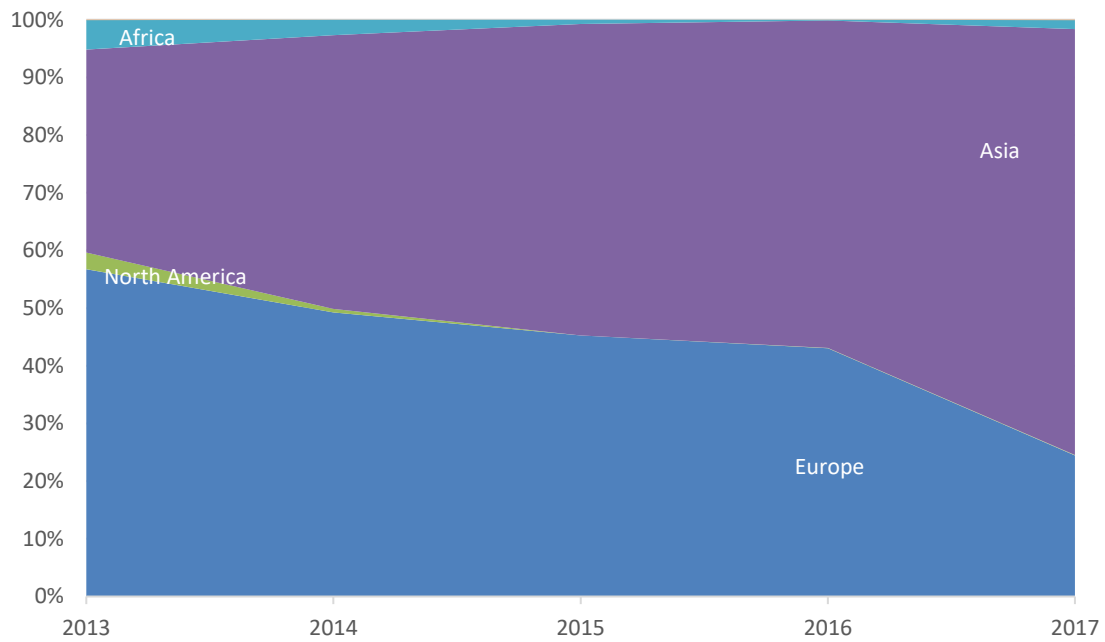
UNCOMTRADE data from 2017 indicated that imports from Uganda equalled about 35.000 MT and about 27.000 MT in exports. Buyers estimated around 30.000 MT, which seems reasonable based on the trade data available. Average annual volume imported between 2013-2017 was 27.000 MT, with an average year-on-year growth since 2013 of 14% [8]. The top three countries importing Uganda beans in 2017 were India, Malaysia and Indonesia; they represent almost 76% of the total value of imports. This is up from 37% in 2013. Imports into Europe in 2017 represented only 22% of the total volume imported from Uganda, down from 56% in 2013, showing a clear decline. This is depicted in the figures below.

Figure 5 List of importing markets for cocoa beans exported by Uganda in 2017



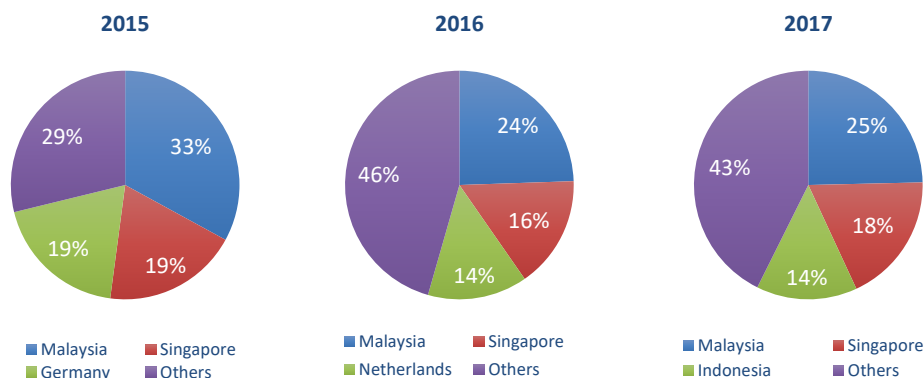
Source: derived from ITC Trade Map

Figure 6 Imports of cocoa beans in EUR from Uganda by its two main importers



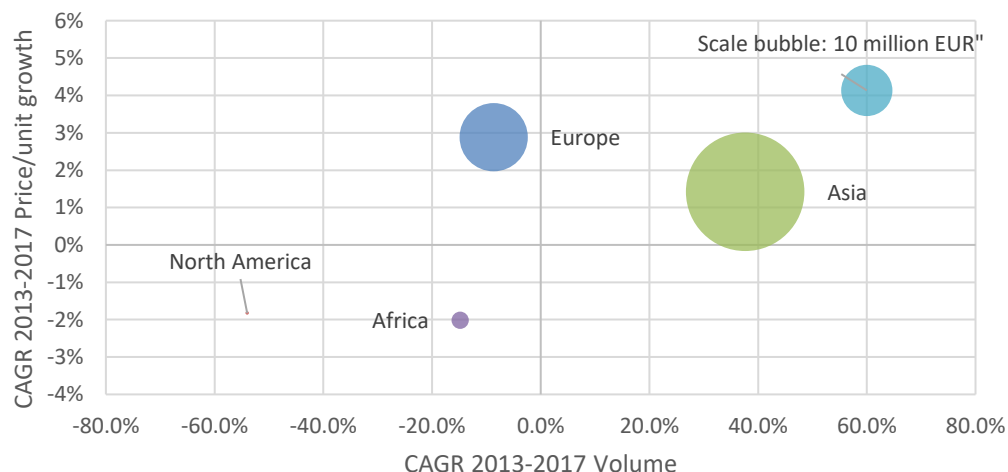
Source: ITC Trademap

Figure 7 Top 3 importers of Uganda beans 2015, 2016 and 2017 based on value



Source: ITC Trademap

Figure 8 CAGR 2013-2017 Price/unit of imports from Uganda (Y-axis); CAGR 2013-2017 Volume of imports from Uganda (X-axis) and Total Value of Imports from Uganda 2017 (bubble size)

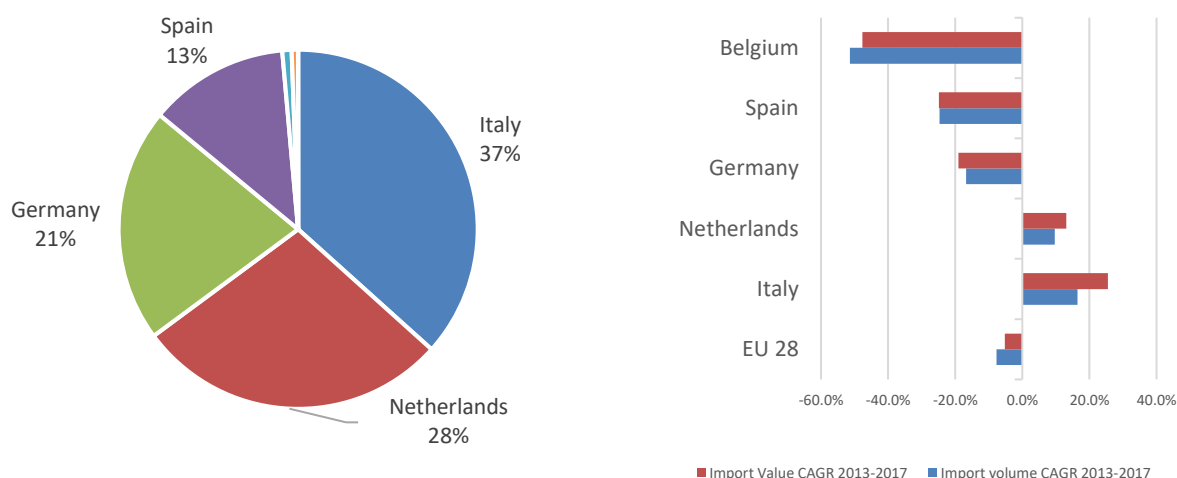


Source: ITC trademap

In 2013 and 2014, Germany and Spain were the number two and three importers; in 2015 and 2016, the Netherlands was number three after Singapore (Figure 7). The variations between the years can be explained by the fact that Uganda is quite a small origin in terms of volumes, and any single buyer that decides to buy a few thousand MTs in a year would significantly impact the statistics.

Main EU importers of Uganda cocoa are Italy, the Netherlands, Germany and Spain. In 2017, it totalled about 8.500 MT, equal to about 20 million USD in value. In terms of unit value, Europe is the more interesting market (see Figure 8). However, with exception to imports to Italy and the Netherlands, imports to the EU of Ugandan cocoa beans show a clear downward trend (see Figure 13). The reason for the increased volume to Asia, according to the buyers interviewed, depends on the very low freight costs to Asia and the increase in demand from Indonesia to compensate for the production decline in their own country. On the supplier side, an explanation of the growth to Asia could be that it is more difficult to meet the quality (certification) demands of European buyers and premiums do not sufficiently cover the additional costs of production. This is to be further verified in the supply study, which is currently being conducted.

Figure 9 Cocoa bean imports from Uganda to EU in 2017 and CAGR 2013-2017 of import values and volumes into the EU in %



Source: Derived from ITC trademap

2.2 Chocolate Market Size and Value

The cocoa market is characterized by a few large international companies. There is a strong dominance of large downstream processors, such as Olam, Cargill and Barry Callebaut in trading, grinding and manufacturing activities. Major chocolate manufacturers include Mars, Ferrero, Mondelez and Nestlé.

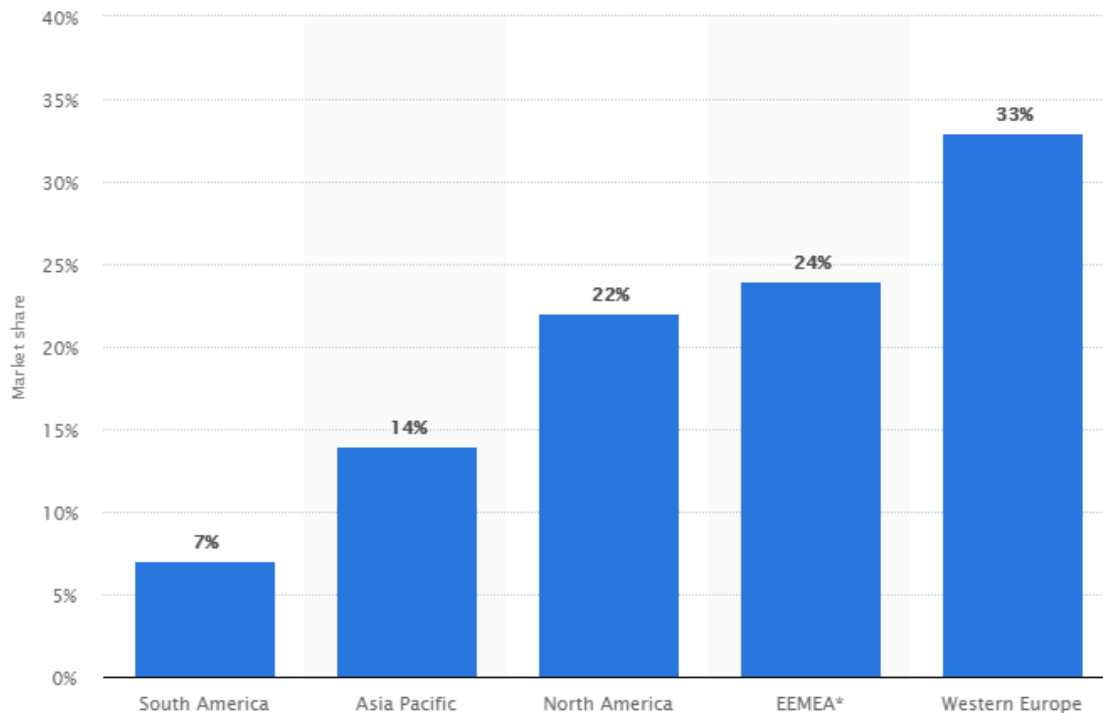
Table 1 Top global confectionary companies producing chocolate bars, biscuits and wafers [9]

Company	Net Sales 2018 (US\$ millions)
Mars Wrigley Confectionery, division of Mars Inc (USA)	18,000
Ferrero Group (Luxembourg / Italy)	12,390
Mondelēz International (USA)	11,792
Meiji Co Ltd (Japan)	9,662
Hershey Co (USA)	7,779
Nestlé SA (Switzerland)	6,135
Chocoladenfabriken Lindt & Sprüngli AG (Switzerland)	4,374
Ezaki Glico Co Ltd (Japan)	3,327
Pladis (UK)	2,816
Kellogg Co (USA)	1,890

Source: Candy Industry, January 2019

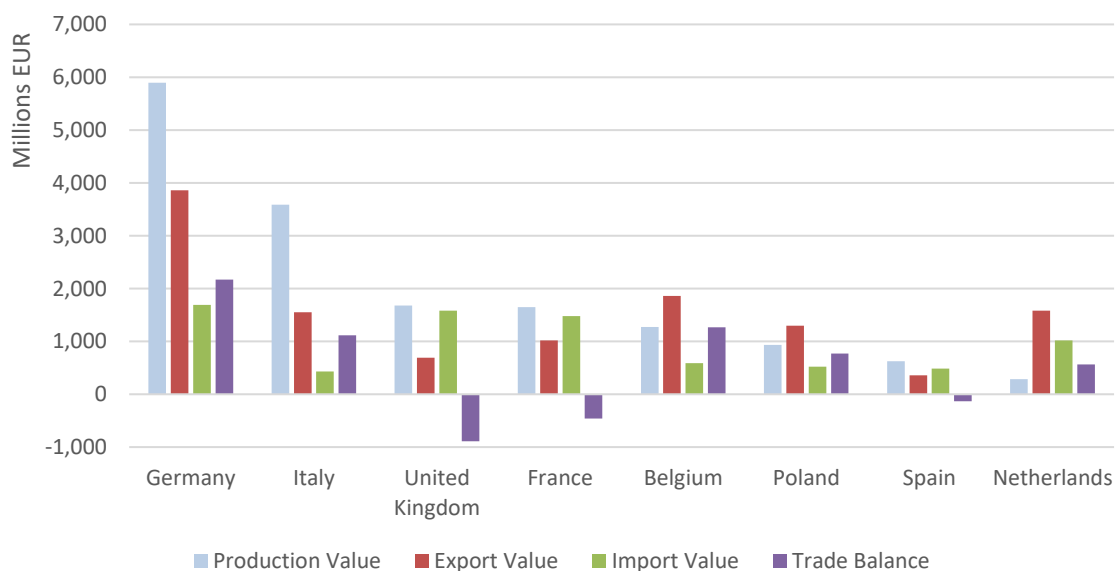
Western Europe has a market share of 33% in chocolate confectionary worldwide. Equal to about 17,341 million EUR [10], hereby following CAOBISCO's product definition [11].

Figure 10 Market share of chocolate confectionery worldwide in 2019, by region (Statista) [12]



Out of the EU 28, Germany, Belgium and the Netherlands are the largest exporters of chocolate confectionery products. Germany, Italy and the UK lead in production value [10]. Chocolate consumption per capita is highest in Switzerland, followed by Germany, Ireland, UK and Sweden [13].

Figure 11 EU Trade balance of chocolate products 2017 and Production Value



Source: PRODCOM EUROSTAT [10]

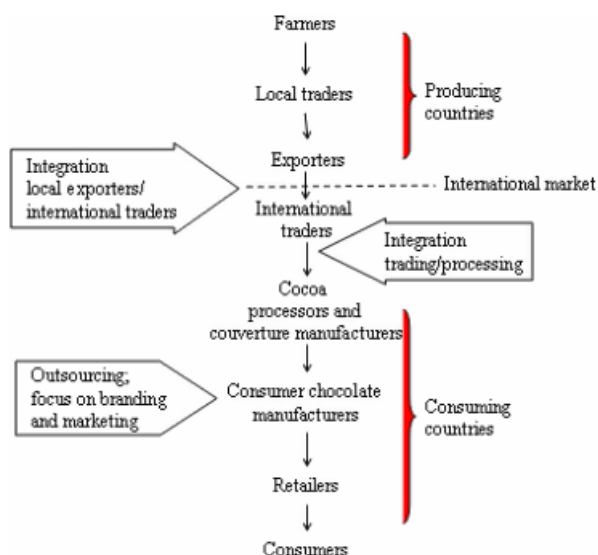
It cannot be said that there is one single European market that would be of interest to Uganda, as it is used in large quantities of chocolate blends. For single origin, the Ugandan bean is very suitable for the

darker milk chocolates, which would appeal to the tastes of the Northern European and UK market, according to the industry stakeholders.

2.3 Trade Structure, Quality and Pricing

2.3.1 General

Figure 12 Cocoa Supply Chain [80]



Based on conversations with buyers from Uganda, it is clear that there are two distinct markets for Ugandan cocoa: the specialty niche bean-to-bar and the bulk market. Both markets can have a certified or non-certified supply chain. Current certification standards are UTZ/RA, Organic and Fairtrade, though the last is available in only very small quantities.

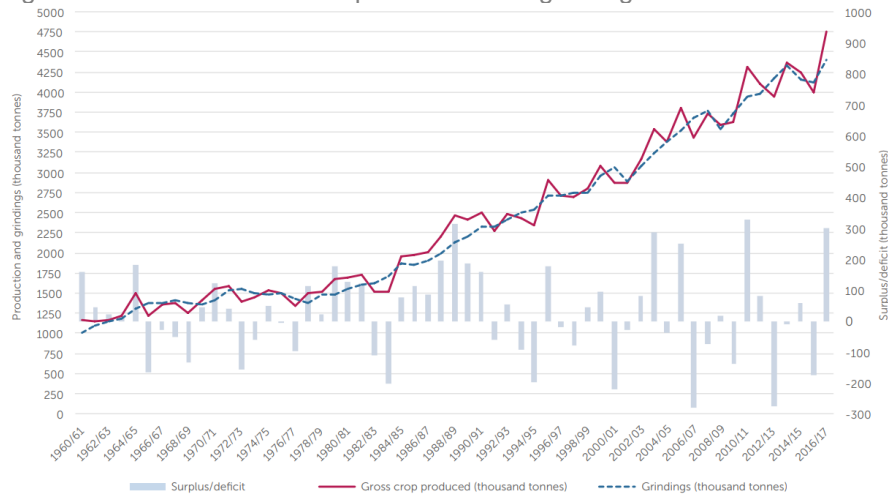
Cocoa is either traded on the spot or the futures market. The spot market is for immediate delivery and immediate payments [14]. Specialty buyers generally buy spot, as do some of the smaller traders. The larger buyers hedge against the London or New York futures market, also called the exchange market or the terminal market, to offset the

risk of adverse price movements. The trade in cocoa futures in London is operated by the London International Financial Futures and Options Exchange (LIFFE) and in New York by Intercontinental Exchange (ICE) [15]. Contracts for beans destined for Europe follow the contract terms set by the Federation of Cocoa Commerce Ltd. (FCC), which is based in London. Contracts include quality specifications, terms of sale, shipment, insurance and arbitration.

The graphs on the following page provide an illustration of the supply and demand developments (see Figure 163) [16], as well as price developments over time (Figure 14, Figure 15). Though production (supply) is more volatile than the grind (demand), the two have followed each other over the years, growing about 3% year-on-year. The stocks-to-grindings ratio is used as an indicator of price levels and trends, as it is seen as most closely representing the market's view on supply and demand (Figure 14, Figure 15) [16], whereby a lower stock-to-grindings ratio results in a positive effect on price trends.

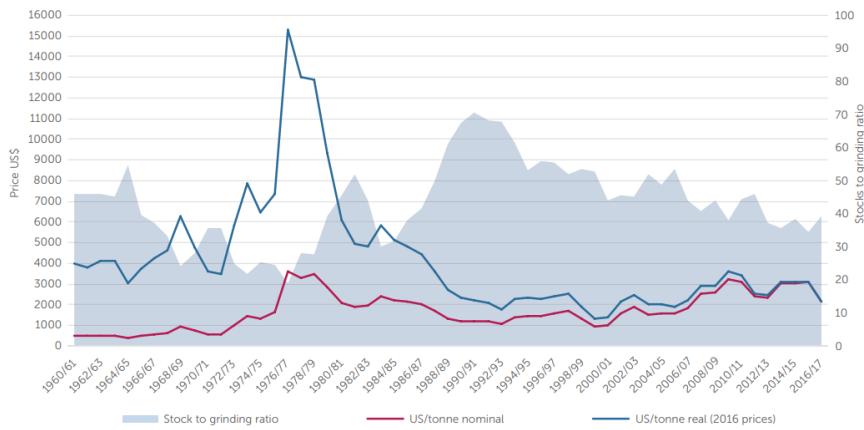
In 2016/17, the market saw a considerable price drop that is believed to be caused by a bumper crop and weakening demand [16] [17] [18]. Côte d'Ivoire even halted the distribution of high-yielding seeds and other yield improvement measures in an effort to tackle oversupply [19]. However, the overall trend shows that the cocoa market generally follows the economic principles of supply and demand, and the 16/17 crop can be seen as an outlier. It is recommended to read the KIT (2018) publication *Demystifying the Cocoa Sector*, Chapter 11, for a more elaborate historical analysis on price development.

Figure 13 Global Increases in production and grindings



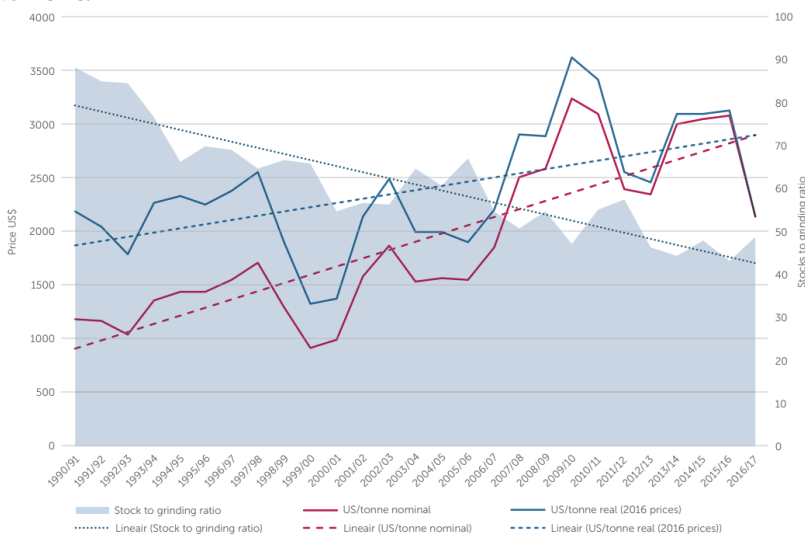
Source: KIT derived from ICCO data [16]

Figure 14 Global Cocoa Prices US\$/MT (nominal and real 2016), and stocks to grindings ratio 1960/61 to 2016/17



Source: KIT derived from ICCO data [16]

Figure 15 Global Cocoa prices US\$/MT (nominal and real 2016), and stocks to grinding ratio 1990/91 to 2016/17



Source: KIT derived from ICCO data [16]

2.3.2 Uganda

Uganda trades in conventional cocoa; certified UTZ/RA, Fairtrade, Organic (or combination of the certifications); and specialty cocoa, including fine flavour. Specialty cocoa can also be traded certified.

2.3.2.1 *Conventional*

Conventional Uganda beans are used by the processing industry most commonly as a substitute for Ivory Coast cocoa beans. For Ugandan beans to be interesting to the grind, they need to trade at a discount and at least a few percent under Ivory Coast FOB prices. This has lately been more challenging as farm gate prices have gone up considerably over the last few years due to increased competition. Farm gate prices are said to lie around or even above 80% FOB. Uganda has the reputation of being 'expensive' in this market segment.

2.3.2.2 *Certified cocoa*

European buyers tend to say that all Ugandan production is certified, likely because the traders they deal with only offer certified and the percentages of certified have historically been high (Figure 17). However, total volume of certified product is currently estimated at a maximum of 40%; this does not include double certification, which would bring the number down further.

The most common certifications in cocoa are Rainforest Alliance/UTZ, Fairtrade and Organic. The figure below shows global figures of what is sold as certified and produced as certified UTZ, Rainforest Alliance (RA) and Fairtrade.

Figure 16 Produced and Sold as Certified for UTZ, RA (Rainforest Alliance) and Fairtrade [20]

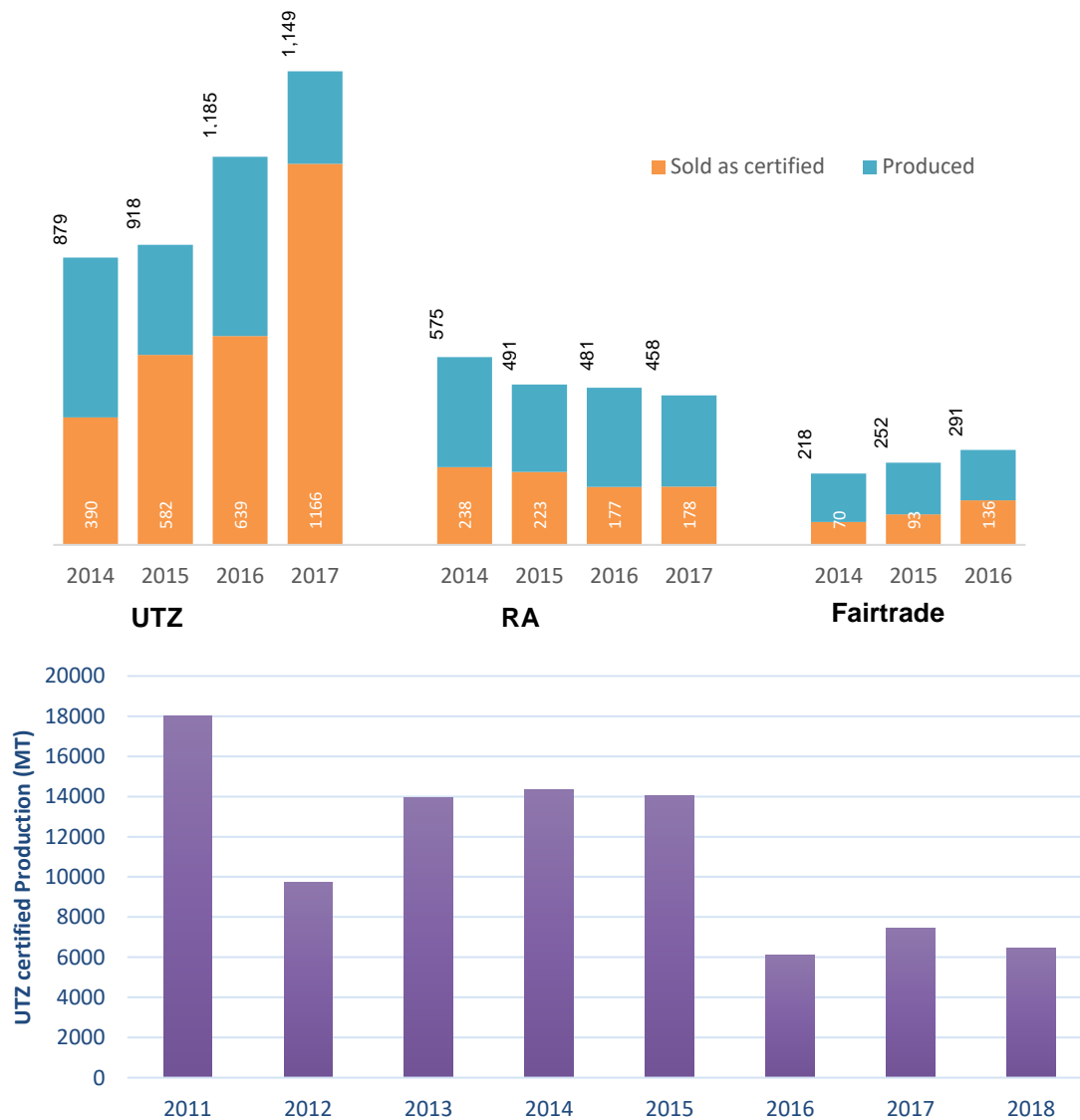


Figure 17 UTZ Certified Production of cocoa beans in MT for Uganda

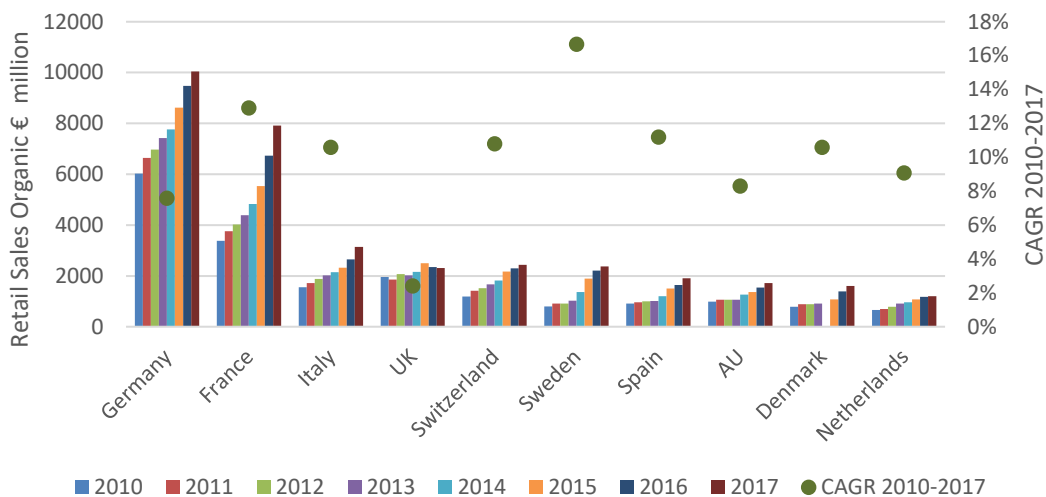
Source: UTZ

Rainforest Alliance and **UTZ** joined forces and merged in January 2018, continuing under the brand name Rainforest Alliance. By mid-2019, the two standards will be operating under one standard. Uganda has only known UTZ certified cocoa farms (not Rainforest Alliance). There used to be two certificate holders, though there is currently only one. The production figures (Figure 17) are based on a yield estimate of more than 700kg/ha, which seems on the high side. However, there has been a loss of interest for producing certified, as depicted in the figures. This could very likely be due to increased demand from Asia for non-certified conventional and because of the relatively low premiums for certified compared to the cost of production of certified. Most of the UTZ/RA certified is allegedly sold as mass balance, which currently brings in a premium of 70-80 USD per MT. For segregated, premiums can go up an additional 50-100%, though these quantities seem to be very limited in Uganda.

Organic has seen a continuous growth over the previous years, globally as well as in Europe. This is due to the trend of healthy living and the increasing desire for natural products. The European organic

retail food market has a value of about 34.3 billion EUR (2017); including EFTA, this is 37.1 billion EUR [21]. Organic has shown a compound annual growth rate (CAGR) of 9.6% between 2010 and 2017. It is expected to reach a value of 45.0 billion EUR in 2021. Germany and France represent almost 50% of the European market, with retail sales of 10 billion EUR and 7.9 billion EUR in 2017, respectively [21].

Figure 18 Top 10 countries in EU & EFTA based on organic retail sales 2010-2017



Source: FiBL statistics

Organic cocoa sales are estimated at less than 0.5% of total production [22]. When looking at total cocoa area under fully converted organic, one would come to theoretically 2% of the production according to FiBL statistics, when taking an average yield of 300kg/ha [23].

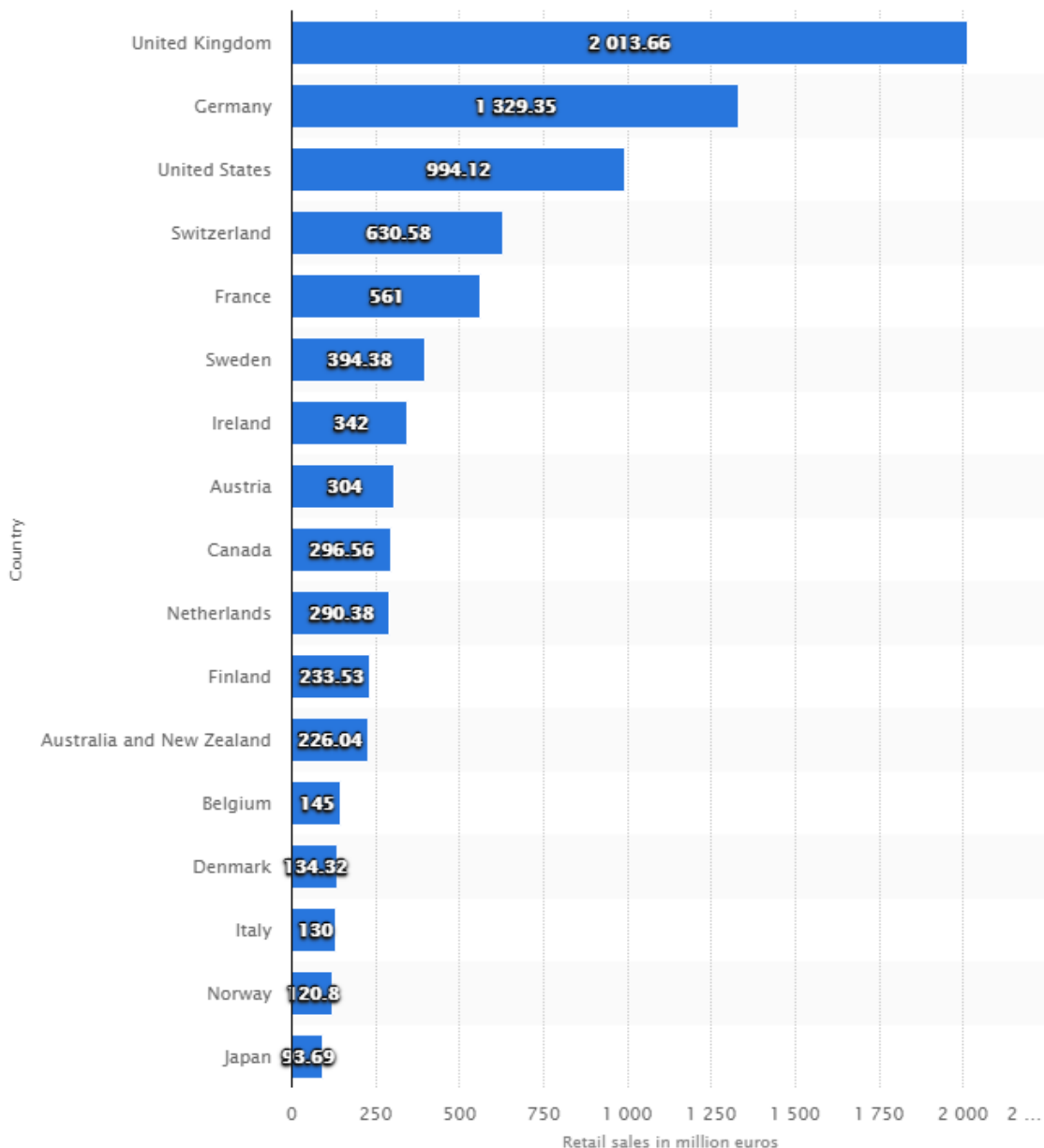
For Africa, it is indicated that 127,114 ha has been fully converted to organic production, which, in theory, could produce a quantity of about 38,000 MT of organic cocoa. This would come to 0.8% of total global cocoa production, or 40% of the total organic cocoa production worldwide [23]. The compound annual growth rate in the Organic Area (fully converted) between 2007 and 2017 for Africa, according to the FiBL stats, has been 34% [21].

Uganda, according to the same statistics, has a bit over 17.000ha of fully converted organic area for cocoa. Theoretically, 400kg/ha would mean a production of 6.800 MT, or about 20% of the total Ugandan production. Premiums lie around 200-300 USD; this is often in combination already with UTZ or Fairtrade certifications.

The main concern for buyers is related to the product integrity, which has known to be problem in cocoa. Buyers are concerned if the product is 'real organic' and if it can be proven that it's from Uganda and not DRC. Investing in a more robust food integrity system, possibly supported by government regulations, would help address these concerns.

Fairtrade, out of three main certification standards, is the only one that applies a minimum price, which was recently adjusted to 2,400 USD/MT from 2,000 USD/MT FOB. There is also a fixed premium of 240 and 300 USD for organic cocoa, paid above the market price or the Fairtrade Minimum Price, whichever is higher at the time of sale [24]. Fairtrade, in combination with Organic, are import certified when aiming for the specialty/flavour market. Important Fairtrade markets are the UK, Germany, Ireland and Sweden.

Figure 19 Estimated Retail Sales of Fairtrade International products in selected countries in 2017, by leading country (in million Euros) [25]



Individual company sustainability commitments, such as those by Mars, Ferrero, Barry Callebaut, has led next to increased investment in certification projects and/or **company programmes**. Examples of such programmes are the [Cocoa Horizons Programme](#) of Barry Callebaut, Nestlé’s [Cocoa Plan](#) and Mondelez’s [Cocoa Life](#). These programmes are set up for companies to differentiate their product on the market, as well as to come up with more cost-effective alternatives to the current certification systems in place. Most of the companies’ programmes are rolled out in the larger origins where the companies also have offices, as this is where the most impact can be obtained. Programmes in Uganda, as a small origin, will probably be limited and will focus on the monitoring and control of (sustainability) risks.

2.3.2.3 Specialty flavour cocoa

The specialty buyers and traders, such as Uncommon Cacao, Meridian Cacao, Daarnhouwer, Tradin Organic, Twin Trading, Cocosource, Cocoanect, York House and ICAM, search for high-quality cocoa.

They buy directly from the farmers through cooperatives or dedicated traders. Beans can either be bought dry or wet (unfermented).

Olam, ICAM and Latitude Trade buy wet beans to centralise fermentation in order to develop the flavour profiles of the beans, allowing it to be of such a quality that it can be used for single origin chocolate. It is estimated that about 5% (industry estimate) of the total beans are bought wet. The buying of wet beans allows farmers to obtain higher prices for their cocoa. Prices of wet beans at farm gate are at almost 95% FOB when taking dry/weight equivalent. It is difficult to maintain margins at these prices, even in the fine flavour chocolate market.

The development of the wet bean market also excludes certain buyers. For example, the bean-to-bar chocolate makers, interested in small quantities of quality (dry) cocoa directly from a coop, find it difficult to get the beans, as they are not able to compete at the wet bean price levels. It might be worth investigating if this market can be served better, as the wet bean flavour market is such a niche market.

CHAPTER 3: TREND ANALYSIS CONSUMER MARKET

3.1 Trends

3.1.1 Social

3.1.1.1 Food trends

Current food trends are all about healthy living (i.e. organic, low in sugars, lactose free, fat, sodium), product personalisation (i.e. direct consumer engagement, convenience, luxury, higher service levels), ethical/sustainable living, global influences (i.e. Middle Eastern flavours, Asian fusion), as well as tech developments [26, 27, 28].

For cocoa, this means different things. Firstly, consumption in Europe might slow down since mainstream chocolate, especially milk chocolate, is considered unhealthy due to its high sugar and fat content. On the other hand, dark chocolate with high (>70%) cocoa content, in addition to organic or vegan production, has been associated with health benefits [29] [30]. These chocolates would often fall into the specialty segment. Ugandan cocoa beans would be especially suitable for the darker milk chocolates, which would fall between the two. It would serve the taste of consumers, especially those from northern Europe and the UK. Uganda, as a single origin, would also be considered an *exotic* product to western consumers who are continuously in search of new flavours and experiences in food. The specialty segment is where most growth is expected to rise, but it also has the highest cost of production.

3.1.1.2 Industry and multi-stakeholder collaborations

Collaborations within the industry exist in tackling issues on the production side, such as [CocoaAction](#) of the World Cocoa Foundation or [International Cocoa Initiative](#) (ICI), with the latter promoting child protection in cocoa communities.

Next to individual company commitments and industry collaborations, there are also **national cocoa platforms** in Germany, Switzerland, the Netherlands and recently Belgium, that strive towards a 100% sustainable chocolate industry. In Belgium, the charter 'Beyond Chocolate' was signed December 2018, striving for 100% sustainable chocolate by 2025 [31]. The platform is a group of national actors from the chocolate industry, retail, government, NGOs, trade unions, investors, research institutes, etc. Though the commitments made in the charter are voluntary, they do represent the long-term goal of the industry and the consumers in Europe and is something to consider when targeting the European market.

3.1.1.3 Child labour

Within the scope of sustainability, child labour is the most prominent social issue in the cocoa supply chain in West Africa. This is a concern of European consumers, especially those who have made public commitments to eradicating child labour from their supply chains, such as Barry Callebaut, and thus is a risk to chocolate makers. The European (and US) markets consider these social issues when choosing to source from an origin.

According to [UNICEF's Children's Right Atlas](#), Uganda scores below average on many of the children's rights indicators, and companies are advised to do an enhanced level of due diligence on the severity and likelihood of adverse children's rights violations. *The right to education, right to health and nutrition* and *right to protection* score low. The 2017 report of [USDOL](#) indicated that 30% of the children ages 5-14 are in child labour in Uganda, of which over more than 95% occur in agriculture.

3.1.1.4 Gender equality

In cocoa, the gender discussion is mostly industry-driven and focuses on the critical role women play in livelihoods and communities. Investing in women in cocoa makes sense, as women make up a large part of the labour associated with food production and are more likely to reinvest household income in expenses related to education, health and food security [32]. A World Bank Report (2012) argues that closing the gender gap among cocoa producers can generate significantly higher yields and improve the quality of cocoa beans because women are involved in almost all stages of cocoa production. The cocoa sector has therefore also developed different programmes such as the Village Savings and Loans Associations (VSLAs) and platforms such as Women in Cocoa and Chocolate (WINCC).

Women's equality and women's rights have gained importance in the political and business arena. The high profile cases within the #MeToo movement, and the introduction of new gender pay gap (GPG) transparency regulations by the UK government in April 2017, have also further increased media attention among consumers to women's rights. This represents a momentum that could be tapped into. Hereby think about women-grown cocoa and chocolate brands that aim to empower women. More common in coffee, but also visible in cocoa, women's empowerment is also being used in marketing and brand positioning. Some examples are the Femmes de Virunga of Original Beans, which empowers the women cacao farmers and their community leadership for peace and prosperity in Eastern Congo, and the Rokbar chocolate bar that is made and owned by women.

The table below shows where Uganda scores in different gender-related rankings compared to some of the other smaller cocoa-producing countries. It is unlikely that gender inequality in the cocoa value chain will negatively influence trade volumes; however, it might have an impact on the perceived risk of a buyer when sourcing from and intervening in Uganda, especially for more consumer-oriented buyers.

Table 2 Ranking from the Human Development Reports UNDP

Rankings	Uganda	DRC	Tanzania	Madagascar
2017 Human Development Index (HDI)	162/189	176/189	154/189	161/189
2017-18 Women Peace and Security Index (inclusion, justice and security)	100/153	148/153	85/153	132/153
2017 Gender Inequality Index (GII)	126/160	152/160	130/160	..
2017 Gender Development Index (GDI)²	Group 5	Group 5	Group 3	Group 2

3.1.1.5 Living income

Living income is a topic that has been debated within the sector for the last couple of years. Large industry players are especially criticised because farmers continue to live in poverty while the sector is profiting. The [Living Income Community of Practice](#), a partnership between The Sustainable Food Lab, GIZ and the ISEAL Alliance, is actively working on providing methods and guidance on measuring and reporting existing and living incomes and to identify and discuss strategies to help actors take actions that can contribute to closing income gaps. These discussions are especially prevalent in the European markets.

3.1.1.6 Supply chain integrity

All European buyers interviewed agree that traceability is key to ensuring integrity of the cocoa product. Ensuring traceability is an important risk management tool in terms of food safety, but also when it

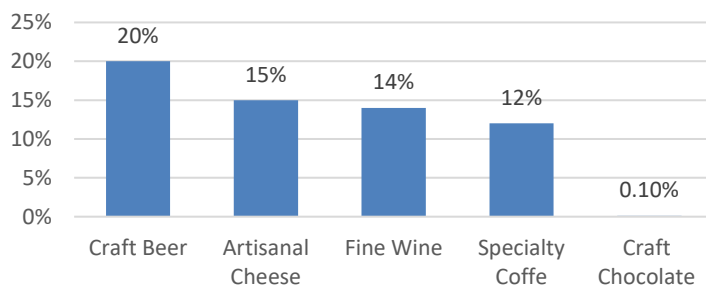
² Group 1 comprises countries with high equality in HDI achievements between women and men (absolute deviation of less than 2.5 percent), group 2 comprises countries with medium to high equality in HDI achievements between women and men (absolute deviation of 2.5-5 percent), group 3 comprises countries with medium equality in HDI achievements between women and men (absolute deviation of 5-7.5 percent), group 4 comprises countries with medium to low equality in HDI achievements between women and men (absolute deviation of 7.5-10 percent) and group 5 comprises countries with low equality in HDI achievements between women and men (absolute deviation from gender parity of more than 10 percent)

comes to compliance with regards to environmental and social standards. A credible traceability system is becoming almost a mandatory requirement from the markets in the EU and US. Different tools have been developed to facilitate this, and the trend seems to go towards increased digitalisation. More on this also in the following section.

3.1.1.7 Bean-to-Bar movement and specialty chocolate

According to research done by CBI [33], specialty chocolate, including fine flavour, single-origin, terroir and craft, accounts for about 5% of the market. Specialty chocolate is said to be the fastest growing segment in the chocolate market [34] [35]. Demand for specialty chocolate can be found in Belgium, France, Germany, Italy, Switzerland and the UK according to the CBI report. Compared to the US, this 5% does seem quite high. A recent blog by Hyman (2019) shows an estimated penetration of craft chocolate only to be 0.10%.

Figure 20 US craft penetration levels (best estimate value) [36]



Buyers from Uganda, more focused on specialty market, do see opportunities for Uganda in this premium market. Next to single-origin, terroir was also mentioned. Terroir is an all-encompassing term to describe how the various environmental and habitat factors can affect and/or enhance the flavour of a crop [37].

3.1.2 Technological

3.1.2.1 Traceability

The future of traceability is most likely digital. In order manage and mitigate risks, more and more insight into the supply chain is needed and is being requested by the market, especially the European and the US markets. Brands are held accountable by consumers and policy makers for any supply chain related issues, which can be social, such as child labour, or environmental, such as deforestation. Traceability in Uganda is important because of its border with DRC, which evacuates much of its (organic) cocoa via Uganda. Ensuring the cocoa is indeed from Uganda and not from DRC is of great importance to some of the major chocolate industry brands.

Different technological solutions are offered by private companies for traceability, such as [Farmerline](#), [ChainPoint](#), [GeoTraceability](#) and [Sourcemap](#). In some cases, they are linked directly to a buyer, such as [AtSource](#), are developed under Olam or are developed by a certification standard, such as the Good Inside Portal of RA/UTZ. Another platform is blockchain, with the promise of offering traceability, risk reduction, accountability, audibility, sustainability, performance improvements and all-round business efficiency for all participants in a given chain [38] [39]. There is definitely a lot of interest in this technology. However, investments of blockchain technology in agriculture are still in its early stages.

Most initiatives are less than two years old, with none currently reach more than 1.000 beneficiaries, and 93% are either in concept stage or have started a small pilot. In both coffee and cocoa, players like Starbucks with its *Bean to Cup* pilot [40], Mars chocolate [41] and Dutch chocolate maker Tony Chocolonely [42] have been piloting blockchain. A Ugandan firm, Carico Café Connoisseur, also recently started using blockchain to certify shipments of coffee [43]. York Cocoa works with [Satoshi](#) as a blockchain/traceability solution. Other examples are [Beyco](#), set up by Progreso [44], and an

interesting, successful example of blockchain from a completely other sector is [Fishcoin](#). Blockchain and related smart contracts especially holds an opportunity for all the paperwork related to shipping and financing of goods that are ex-/imported, which is traditionally still very much paper-based.

There are, however, still many hurdles with regards to blockchain. The fact that the raw material generally comes from developing and/or emerging markets increases complexity due to challenges such as poor connectivity, lack of computing power, low penetration of devices that can interact with blockchain technology (e.g. smartphones), (digital) literacy, as well as limited technological skills. Thereby to have the system work and be trusted, it needs to be adopted by all stakeholders in the supply chain and enough people need to use it. Then, there is the disconnect between physical and digital flow; this also goes back to the reliability of the data input. Cocoa is a natural ingredient, and it will not be possible to tag every individual bean. It is definitely much easier to follow a sealed barcoded package than it is to follow a physical flow of an agricultural commodity like coffee and cocoa.

3.1.2.2 Farm and community performance measurement

Ethical and sustainable products are a food trend in Europe, further incited by media coverage during seasonal holidays when it is tradition to give chocolate. In cocoa, it translated into the chocolate industry showing consumers that they are able to increase incomes, that farmers are not encroaching on protected forest areas, that children are attending schools, etc. Proof of any impact has always been difficult; therefore, data collection at the farm level, nowadays often via mobile phones and tablets, is becoming increasingly important. In addition to the earlier mentioned traceability systems in the previous section, which to a certain extent can also monitor farm data, other tools are also used such [Farmer Field Book](#), [Green Fingers Mobile](#) and [OFIS](#) by Olam. The main concern with these systems are related to data privacy of the farmers registered in these different systems.

Figure 21 UTZ Risk map [45]



Another development is the increased use of Nano-satellites. These can provide information on crop yields and test interventions. Risk mapping is now being tested by different actors in industry, such as by RA/UTZ [45]. When combined with weather, soil and other big data, it could be used to create crop disease and weather alerts, for example, allowing crop monitoring and forecasting, crop insurance and certification. Quite a few organisations, such as WaterWatch, are already experimenting with this, often in collaboration with the European Space Agency (ESA).

3.1.3 Ecological

3.1.3.1 Cocoa Forest Initiative (CFI)

Following the 2017 UN Climate Change Conference (COP23), top cocoa-producing countries Côte d'Ivoire and Ghana, alongside leading chocolate and cocoa companies, announced far-reaching Cocoa & Forests Initiative (CFI) Frameworks for Action. Central to the frameworks is a commitment to allow no new conversion of forest land for cocoa production [46]. The initiative has been signed by 33 industry partners. In 2018, the Colombian government and the largest local cocoa and chocolate companies signed the Cocoa, Forest & Peace Initiative to eliminate cocoa-related deforestation [46]. Traceability and satellite data imagery are key strategies to mitigate risk of deforestation.

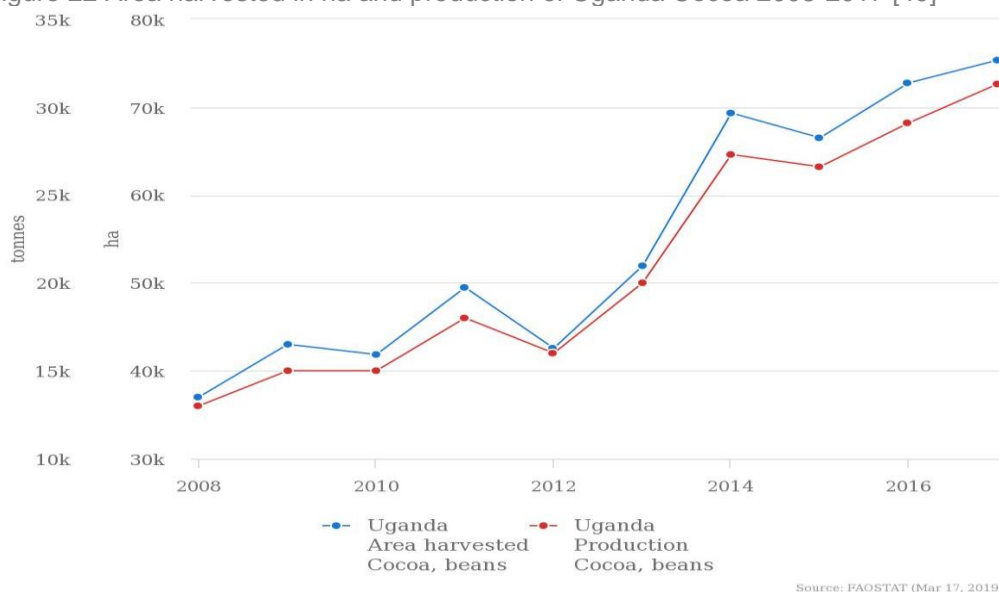
In January of 2019, the European commission launched an open public consultation on *Stepping up EU Action against Deforestation and Forest Degradation*. This initiative aims to present an integrated EU approach to combat deforestation, protect forests and promote sustainable supply chains [47]. It follows a European Commission study on "The impact of EU consumption on deforestation" (2013), the

follow up publication of the “*Feasibility study on options to step up EU Action against deforestation*” (2018), which laid out several options on concrete action that could be taken by the European [47].

Much of Ugandan cocoa comes from the Rwenzori area, close to Virunga National Park. Some chocolate makers are reluctant about sourcing from these regions because of their sustainability commitments. Extra care ought to be taken by the cocoa stakeholders to prevent forest encroachment for new plantations.

FAO stats show that the increase in production follows the increase in production area. Also, the UNDP Human Development Reports show that , from 1990 to 2015, the forest area has decreased in Uganda with -56.4%, which is a very high percentage compared to DRC (-4.9%), Tanzania (-17,6%) and Madagascar (8.9%) [48]. Uganda is part of the bottom-third of the list.

Figure 22 Area harvested in ha and production of Uganda Cocoa 2008-2017 [49]



3.1.3.2 Climate change

Climate change affects the cocoa sector at two levels. First, climate change is a high priority of the consuming countries. This is led by the Paris Agreement signed within the United Nations Framework Convention on Climate Change (UNFCCC), which has the long-term goal to keep the increase in global average temperature to well below 2 °C, above pre-industrial levels; and to limit the increase to 1.5 °C, since this would substantially reduce the risks and effects of climate change [50]. Thereby it falls under the Sustainable Development Goal (SDG) 13: *Take urgent action to combat climate change and its impacts* [51]. The cocoa industry is very much part of this and is being pressured into reducing the environmental footprint of the products put on the market. Second, climate change is shown to negatively impacting cocoa production [52] [53], and thus there is a direct interest of industry in the topic.

Different mitigation and adaption strategies are applied within certification and company programmes. This includes crop diversification, promotion of shade trees and linked to this REDD+ certification, and the promotion of improved cook stoves and solar solutions for lighting on the community level.

The 2018 Environmental Performance Index (EPI) ranks 180 countries on 24 performance indicators across 10 issue categories covering environmental health and ecosystem vitality (Table 3). On Forest and Water and Sanitation. This data shows that Uganda has not been able to keep its rank and has further dropped on the list, when comparing it to its baseline rank.

Table 3 Environmental Performance Index Ranking 2018 [54]

	Uganda	DRC	Tanzania	Madagascar
2018 Environmental Performance Index (Regional Standing)	145 (23)	178 (45)	119 (10)	175 (44)

3.1.4 Political

Europe is heading towards an economic slowdown, though growth is still foreseen. Forecasts by the European commission predict that the Euro area GDP will grow 1.3% in 2019, down from 1.9% projection in November, and for 2020, it predicts a growth of 1.6% [55] [56]. The European Commission indicated in their Winter 2019 Economic Forecast that there is a high level of uncertainty in the projections and are therefore subject to downside risks. Trade tensions, Brexit and the slowing down of the Chinese economy all contribute to this uncertainty.

3.1.4.1 Brexit

Brexit is one of the major European political developments creating uncertainty in the market. The price of cocoa has a strong correlation with the British pound versus the US dollar currency relationship. The physical market tends to use the pound to price cocoa, particularly in Europe. The historical correlation between the currency and the commodity shows that a stronger pound, versus the dollar, tends to lead to a higher price of cocoa over time [57].

Though Brexit will influence imports and exports to and from UK from the EU27 countries, the country itself is not a relevant market to Uganda in terms of bean trade volumes.

3.1.3.2 Ghana and Côte d'Ivoire

In 2017, Ghana and Côte d'Ivoire set out to develop a joint cocoa body, including members of Côte d'Ivoire's Coffee and Cocoa Council (CCC) and the Ghana Cocobod, with the objective to set farmer prices in order to discourage cross-border smuggling and to enhance collaboration between the two countries' cocoa marketing departments [58]. In June 2018, these two top-producing countries announced that they would harmonize forward sales for the 2019/2020 season [59]. The collaboration will increase supplier power of these two countries. This is potentially beneficial to Uganda, as buyers will seek to further diversify their suppliers.

CHAPTER 4: EUROPEAN REQUIREMENTS

4.1 Food Safety

CAOBISCO/ECA/FCC state in their cocoa bean quality manual that the principal food safety concerns for the cocoa industry are [60]:

- Allergens;
- Dioxins & polychlorinated biphenyls;
- Bacteria;
- Foreign matter;
- Heavy metals;
- Infestation;
- Mineral oil hydrocarbons;
- Polycyclic aromatic hydrocarbons;
- Mycotoxins including Ochratoxin A; and
- Pesticide residues.

The list above is compiled by the industry, and these concerns are not new or recent developments. European buyers have different food safety management systems, such as hazard analysis and critical control points (HACCP). These systems include measures (allergen control programmes, contaminant monitoring, sterilization, etc) to manage the above-mentioned risks.

For sellers entering the European market, it is advised to implement one of the recognized Global Food Safety Initiative (GFSI) standards.

There are two food safety concerns for which regulations have recently changed. This has been the case for the heavy metal: *cadmium* as well as *mineral oils*. These are elaborated on in the sections below.

4.1.1 Cadmium

Recent European legislation was enacted on January 1, 2019, specifying limits for different cocoa preparations, which has an implication on cadmium levels in products [61]. Cadmium is a heavy metal and an environmental contaminant commonly found in volcanic soils. Origins such as Ecuador and Peru are the most affected by this regulation. Concerns, however, were also put forward by some industry stakeholders with regards to Uganda, as the volcanic Rwenzori mountain range in western Uganda is an area where much of the cocoa is sourced from.

Cocoa trees absorb cadmium from the soil through their roots and the metal accumulates in the leaves and beans. Several factors influence the presence of cadmium in cocoa beans, such as variety of the tree, cadmium levels in the soil and post-harvest practices.

Cadmium is classified as a human carcinogen by the European Food Safety Authority (EFSA). A large scale dietary assessment in 2012 identified the main sources of cadmium in the human diet. Cocoa and chocolate products accounted for approximately 4.3% of total cadmium exposure through diet across different age groups. This research and the lowered tolerable weekly intake (TWI) levels for cadmium eventually led to new EU regulations and limits in 2014, which began being enacted in January of this year [62] [63].

Table 4 Maximum permitted levels of cadmium in cocoa and derived products [61]

Specific cocoa and chocolate products as listed below	Maximum permitted levels (ppm) as from 1 st of January 2019
Milk chocolate with <30% total dry cocoa solids	0.10
Chocolate with <50% total dry cocoa solids; milk chocolate with >=30% total dry cocoa solids	0.30
Chocolate with >=50% total dry cocoa solids	0.80
Cocoa powder sold to the final consumer or as an ingredient in sweetened cocoa powder sold to the final consumer (drinking chocolate)	0.60

For exact definitions, it is best to refer to the cocoa directive [2000/36/EC](#) [64].

The cadmium limits are defined for cocoa powder and chocolate preparations but are not easily translated to limits for cocoa beans. Cadmium is associated with the fat-free parts of cocoa beans, which means that levels will be higher in chocolates that contain higher cocoa solid contents. Cocoa mass (*ground cocoa nibs, coming from deshelled and roasted cocoa beans*) typically consist of 50-55% cocoa butter and 45-50% cocoa solids, whereas fat-reduced cocoa powder contains only 11% cocoa butter and 89% cocoa solids. This has led to a lot of discussion on the chosen levels per product category and the practical implementation for the sector since these levels are not easy to work with.

European importers consider beans with a cadmium level <0,5 ppm to be good. Up to 0,8 ppm is still be accepted, but cocoa beans with levels above that value are likely to be rejected, depending on the proposed product application.

Specialty chocolate typically has a high cocoa solid contents (>50%), which means that the cadmium limit for these chocolates is 0,8 ppm. Also with these chocolates often being single origin, the risk is higher [65] [66].

According to the larger grind, cadmium levels of Uganda beans (~0,45 ppm) are relatively higher than in West-African countries, but lower when compared to the South American beans. This means that they are suitable for chocolate, but cannot be used for powder as cadmium levels would double. Some of the smaller chocolate makers producing single-origin Uganda have indicated that their lab results on cadmium levels did not give direct rise to concern. The suggestion was to look into relevant legislation for Uganda related to this particular issue.

4.1.2 Mineral oils

An EFSA opinion published in 2012 classified some mineral oil hydrocarbons (MOH) as potentially carcinogenic [67]. MOH is a complex group of substances, and the potential human health impact varies widely. Sources of MOH in foods include food-packaging materials made from recycled paper and board, printing inks applied to paper and board, lubricants used in industrial processing, adhesives used in food packaging and jute or sisal bags with mineral batching oil.

In recent years, Foodwatch has put pressure on the confectionary industry and policy makers to set EU regulations and limits on mineral oils in foods and specifically chocolate. The consumer group tested a large number of Easter chocolates and found 8 out of 20 to be positive for specific MOHs [68] [69].

There is no legislation currently in place on MOH in foods, but because of consumer pressure, cocoa processing companies are actively working on contamination prevention. For Uganda this means that when exporting cocoa beans to the EU, caution should be taken and proof may be needed to show that no recycled cardboard or mineral oil containing printing inks were used within the supply chain.

The topic of mineral oils in chocolate is on the agenda of European industry organizations CAOBISCO and ECA, and it can be expected that monitoring systems will improve in coming years, ambiguity in lab tests and potential human health effects will be clarified, and regulations (either industry standards or European legislations) will come into play. Managing packaging and transport must be taken care of in origin in such a way that contamination with MOH is prevented.

4.2 Quality

4.2.1 Conventional

For bulk cocoa, the physical market has developed standardised practices set out by international trade associations such as the Federation of Cocoa Commerce London (FCC) and the Cocoa Merchants' Association of America, Inc. (CMAA).

The FCC distinguishes two grades: good fermented cocoa beans and fair fermented cocoa beans. Samples of good fermented cocoa beans must have less than 5% mould, less than 5% slate and less than 1.5% foreign matter. A sample of fair fermented cocoa beans must have less than 10% mould, less than 10% slate and less than 1.5% foreign matter. These tests are carried out through the so-called cut test. Such a test involves counting off a given number or weight of cocoa beans, cutting them lengthwise through the middle, and then examining them. Separate counts are made of the number of beans that are mouldy, slaty, insect damaged, germinated or flat [70].

Bean size standards, per ISO 2451, is defined by bean count and is expressed as the number of beans per 100g.

- Large beans: bean count of less or equal to 100;
- Medium beans: bean count of 101 to 120;
- Small beans: bean count greater than 120.

The Uganda bean quality is considered average but has been improving according to the perceptions of buyers interviewed. Defects are on the low side. There are some indications of a high bean count of the Uganda beans, signifying medium to small beans following the definitions above. The beans from Uganda have relatively low free fatty acid (FFA) levels when compared to, for example, Nigeria. High FFA levels reduce the technical and economic value of the cocoa beans.

4.2.2 Specialty including fine and flavour

Specialty coffee has Q graders and a clear grading system; this is absent in cocoa. As a generalization, fine or flavour cocoa beans are produced from Criollo or Trinitario cocoa tree varieties, while bulk (or ordinary) cocoa beans come from Forastero trees [71], though the distinction mostly lies in the flavour. High-grade (fine flavour) cocoa beans are generally of higher quality than common-grade cocoa beans, as their distinctive flavour is popular among manufacturers of high-quality chocolate.

Ugandan cocoa is typically associated with the Forastero variety. The cocoa trees in Uganda, according to the buyers, are not of the best genetic varieties, limiting the possibilities of unique flavours to develop, as would be the case in some of the South American varieties. On the other hand, with strict control on post-harvest processes using centralised box fermentation, the flavours developed using the Ugandan bean are much appreciated by the specialty industry. The flavour of the beans is described as *rich and chocolaty*, low in *astringency* and *bitterness*, and '*a perfect bean to just roast and eat*'.

These characteristics make it a bean that has potential for high-quality milk chocolate in countries such as UK, Northern Europe and Scandinavia. According to those developing the flavour cocoa from

Uganda, the farm gate prices are so high that the cost of production is covered by the higher retail prices that can be fetched for this niche product.

CHAPTER 5: COMPARATIVE AND COMPETITIVE ADVANTAGE

5.1 Sector Organisation

In more general terms, when asking buyers what they consider the largest potential of sourcing cocoa from Uganda, many answer that they see it especially in the organisation of the sector, based upon what they have seen and heard from how the coffee sector has been organised. The experience already obtained in different processing techniques, such as box fermentation, is considered by some of the more niche players as a major benefit. An advantage that Uganda has over some other cocoa-producing countries is that it is Anglophone, making it a much easier origin in terms of communication for some non-French speaking European buyers.

5.2 Volumes

When comparing cocoa volumes to DRC and Tanzania, Uganda is clearly leading (see graphs below).

Figure 23 Imports to the World from DRC, Tanzania and Uganda and CAGR growth in value 2013-2017 [72]

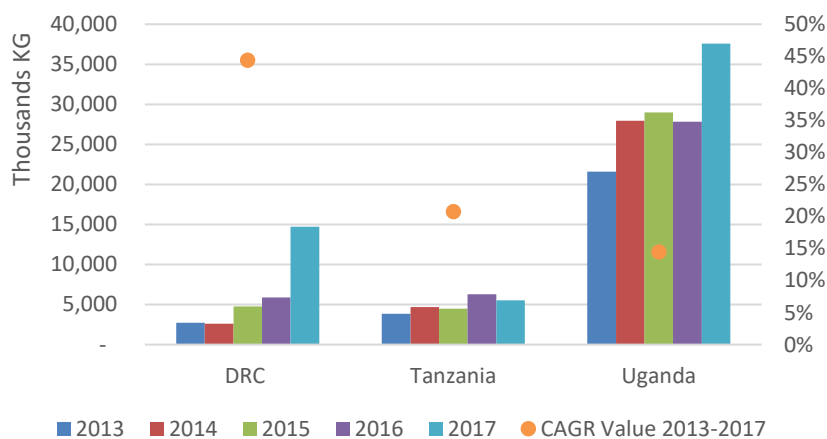
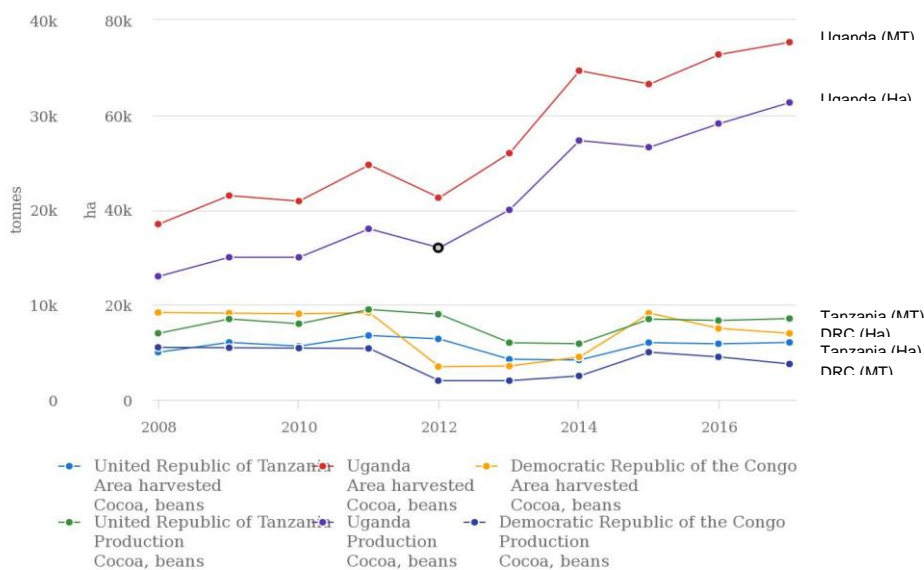


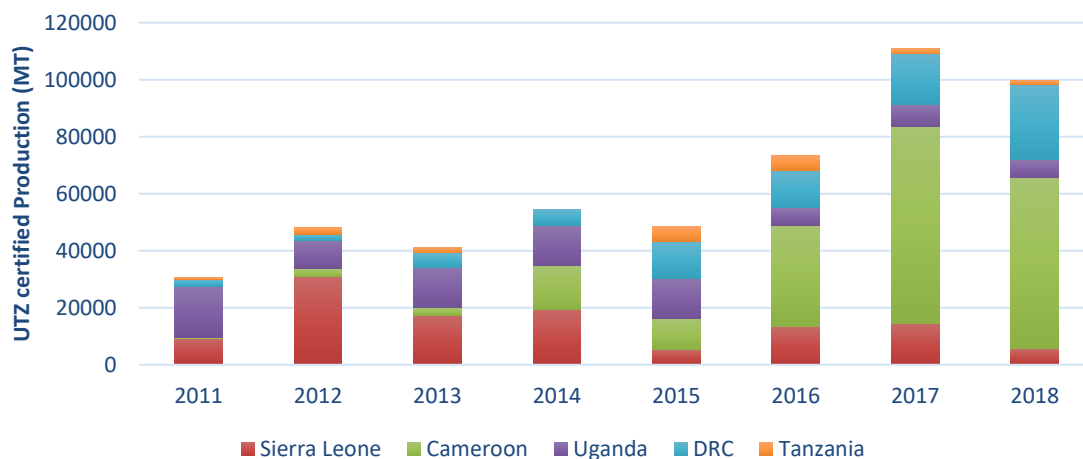
Figure 24 Production and hectares of cocoa in Uganda, DRC and Tanzania [49]



Source: PAOSTAT (Mar 17, 2019)

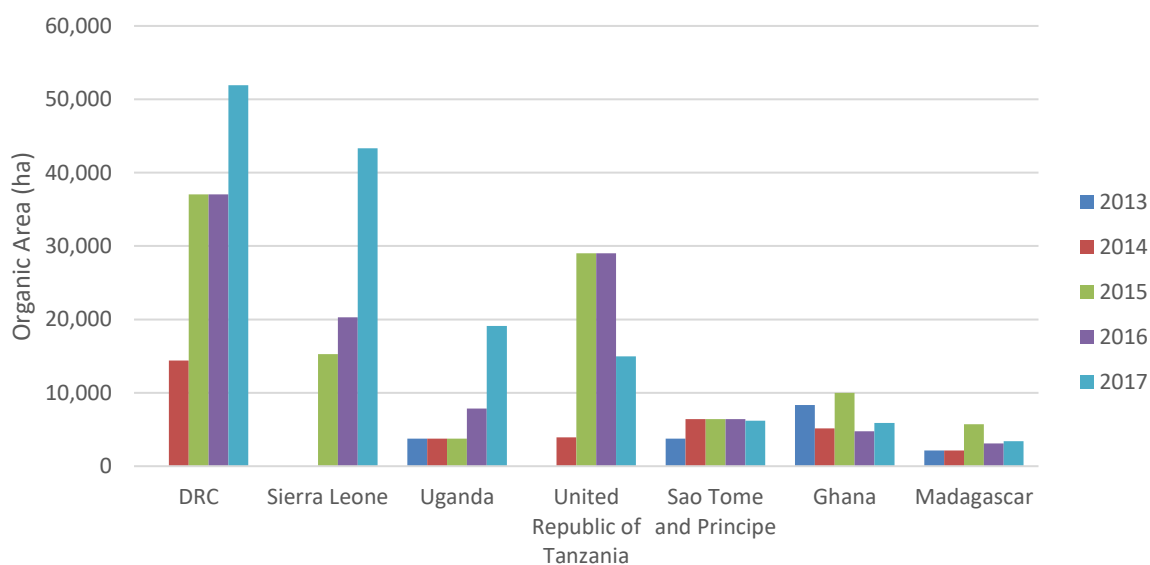
When it comes to certified cocoa, a clear decline can be seen in the production of UTZ/RA (Figure 25). Organic seems to have replaced the UTZ/RA, with the promise of high premiums and European market uptake (Figure 26).

Figure 25 UTZ Certified Production of cocoa beans in MT for selected African cocoa producing countries



Source: UTZ

Figure 26 Organic area in hectares for 2013 to 2017



Source: FiBL stats

Some of the buyers indicated an oversupply of organic cocoa in Uganda, which can be due to the fast growth of organic in DRC, which if from the Kivu area and goes through Uganda when evacuated. Key in obtaining a competitive advantage in the organic market is ensuring traceability and integrity of the product. This seems to be the biggest concern expressed by (potential) organic buyers. A high level of organisation of the sector would address this concern.

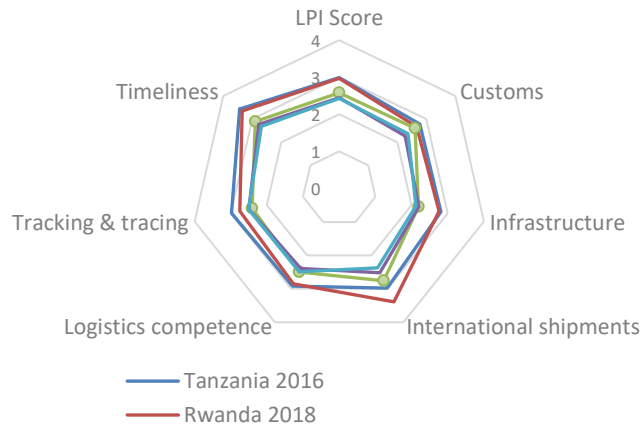
Tanzanian exports of organic seem to have come to a halt due to strategic political decisions that, in the short term, can be seen as favourable to the demand of organic Uganda.

5.3 Logistics

Since Uganda is a landlocked country and it only has access to the Kenyan port of Mombasa, logistical costs are relatively high. From interviews, the main constraints encountered by buyers seem to have been delays at the port. In-country is thought to be less of an issue, with the exception of one of the buyers mentioning that the freight trains had stopped running.

There is, however, room for improvement (see the figure below). Compared to the Sub-Saharan region, Uganda scores low on Infrastructure (*quality of trade and transport related infrastructure*) and it scores relatively low on Tracking & Tracing compared to the region. The latter, also indicated in the trends, increases the risk for buyers considerably. It is also at the level of logistics that Uganda could improve upon its competitive position compared to its cocoa-growing neighbours.

Figure 27 Logistics Performance Index (LPI) The World Bank [73]



CHAPTER 6: CONCLUSIONS

Cocoa from Uganda has a lot of potential, as long as it maintains consistency, quality and sustainable volume growth. Its bean is appreciated for its relatively good quality and its rich, chocolaty flavour. It has therefore been able to serve different market segments, from conventional to specialty, and should certainly continue to do so. Uganda has a good reputation in the way it has organised its coffee sector, and is seen as a very promising *new* cocoa origin.

Export growth over the last few years has mainly been to Asia. There are different reasons for this: low freight costs to Asia, the high demand for beans from the Indonesian grind, and the relatively high cost of compliance and production of European quality and certification specifications.

In order to grow its exports to Europe, Uganda should focus on continuing to develop its supply in specialty, organic and (third-party verified) sustainable cocoa in addition to strengthening the overall organisation of the sector to ensure better product integrity and food safety and reduce logistical costs.

Attention should be given to addressing challenges that exist both on the social side as well as the environmental side. Not doing so would increase the perception of risk regarding origin for European chocolate industry, and it would be a threat to its own future cocoa production and the livelihoods of the people contributing to professionalisation of the sector.

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