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The Market for Organic Coconut Oil in Germany and the United States

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List of abbreviations

a.s.o.	and so on
ACP	African, Caribbean and Pacific
C	Celsius
CIF	Cost insurance freight
D/A	Documents against Acceptance
e.g.	exempli gratia (for example)
EOS	Export Opportunity Survey
EPA	Economic Partnership Agreements
Est.	Estimated
etc.	et cetera
EU	European Union
€	Euro
FAO	Food and Agricultural Organization of the United Nations
FDA	Food and Drug Organization
FOB	Free on board
FPLA	Fair Packaging and Labeling Act
GATT	General Agreement on Tariffs and Trade
GmbH	Gesellschaft mit beschränkter Haftung
GMO	Genetically Modified Organism
GSP	General System of Preferences
HS	Harmonized Commodity Description and Coding System
IBC	International Broadcasting Convention
Inc.	Incorporation
ISIC	International Standard Industrial Classification
ISO	International Organization for Standardization
ITC	International Trade Centre
kcal	kilocalorie
kg	kilogram
L/C	Letter of Credit
LFGB	Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch

MFN	Most Favored Nation
ml	milliliter
n.d.	not dated
NACE	General Industrial Classification of Economic Activities
NAICS	North American Industry Classification System
NTR	Normal Trade Relations
oz	ounce
RBD	refined, bleached and deodorized
Rev.	review
SITC	Standard International Trade Classification
SPS	Sanitary and Phytosanitary
t	ton
TARIC	Integrated Tariff of the European Communities
tel.	telephone number
T/T	Telegraphic Transfer
TTIP	Transatlantic Trade and Investment Partnership
US	United States
USA	United States of America
USDA	US Department of Agriculture
USITC	United States International Trade Commission
US$	United States Dollar
VCO	virgin coconut oil
WTO	World Trade Organization
WHO	World Health Organization

Executive Summary

This export opportunity survey was undertaken to gain an understanding of all aspects involved in the importation and sale of virgin organic coconut oil to both the United States and Germany. The goal of this project was to accurately assess the viability of these markets so that a prospective importer can comprehend the potential risks and rewards of entering these markets.

The research conducted in this export opportunity survey gives a market prospect based on key findings including information on customers. Such key findings include information on customers. In Germany, consumption has been increasing slowly, and is growing concurrent to increased awareness to the health benefits of coconut oil. In the United States, a stronger potential is evident, as consumption has increased over the past five years. Customers include the food and cosmetics industries, vegans and vegetarians as well as health-aware persons.

In both the United States and Germany, nearly all coconut oil is imported. While Germany trades more often with other EU countries, the United States only re-exports about 10% of imported coconut oil. The Philippines and Indonesia represent 85% of the market share for countries that export coconut oil.

The key findings in this export opportunity survey lead to a positive outlook for importing coconut oil to both the United States and Germany. Barring any severe weather, there is no fear of supply changes. The United States offer a more rapid growing and at the same time established customer base and supply chains, but Germany offers less competition which makes both markets attractive. As this report explores in more detail, the demand for the product is growing in both countries. Additional key findings are positive outlooks in the areas researched which support an exporter to get active in the field of trading organic coconut oil.

1 Product Description

This export opportunity survey covers the market for organic coconut oil in the United States and Germany. Coconut oil is classified under the following codes:

- HS 151319: Coconut (copra) oil and its fractions refined but not chemically modified (International Trade Centre (ITC), 2015)
- SITC 422.39: Refined oil and its fractions (UN Statistics Division, 2015b)
- ISIC Rev. 4 Code 1040: vegetable oils (except corn), margarine, and other edible and inedible oils produced by wet milling (UN Statistics Division, 2015a)
- NACE Rev 2 Code 10.41: Manufacture of oils and fats (Central Statistics Office, 2014)
- NAICS (2012) Code 311224: Soybean and Other Oilseed Processing (Coconut oil made in crushing mills) (U.S. Census Bureau, 2013)

The above mentioned codes are valid for organic and non-organic coconut oil as no differentiation is made.[1]

The Coconut Palm

The coconut palm (*Cocos nucifera L.*) is often called the 'tree of life' as it provides food, fiber and wood. Coconut palms grow in many soil types and are highly tolerant of salinity. They perform better in high humidity (70-80%) and mean temperatures between 20 and 27 C (Rieger, 2006). Therefore, coconuts mainly grow in tropical and coastal areas. The main coconut growing areas are Asia, Oceania, West India, Central and South America as well as West and East Africa (Gupta, 2012).

Coconuts for organic coconut oil are mostly cultivated by small landholders (Rieger, 2006). Since this EOS is about organic coconut oil, it is important that the coconuts grow on a coconut plantation with an organic certification. This ensures that no pesticides or artificial fertilizers are used (Staats, 2009).

A palm tree grows coconuts all year round. Its crown has several groups of coconuts that grow independently. Consequently, a palm tree usually has mature coconuts that can be harvested. An average palm tree grows 30 to 40 fruits every year, however,

[1] In this paper, the data refers to organic coconut oil, whenever possible. However, unless it is specifically stated that organic coconut oil data is described, coconut oil data is used.

under ideal circumstances even up to 150 fruits can be harvested (Yahia Kazuz, 2011).

The coconut fruits are large, dry drupes, ovoid in shape, up to 15 inches long and 12 inches wide. The exocarp (the skin) is green, yellow, or bronze-gold, turning to brown, depending on the cultivar and maturity. The mesocarp or middle layer is fibrous and dry at maturity. The endocarp or the inside layer is the hard shell enclosing the kernel (endosperm) (Rieger, 2006).

Figure 1: Structure of a coconut (own depiction after Kopfnuss, 2014, ResearchGate, 2014 & Waynesworld, n.d.)

Harvesting and Processing

Harvesting of the mature coconuts is mostly done by workers who climb to the top of the palm tree with their bare hands and feet. Once the worker gets close enough, he can check the maturity of the coconut, cut it off and drop it to the ground (Coghlan, 2012).

After harvesting the coconut, the fresh fruit kernel is squeezed in oil mills without adding heat to produce the virgin coconut oil (VCO). Virgin signifies that as little processing is possible is used (Fife, 2006). Even though it is refined, it should not be confused with the refined, bleached and deodorized (RBD) oil. RBD oil is made out of the dried fruit kernel also referred to as copra (Fife, 2006).

Nutritional Value

Virgin coconut oil is used for cooking and is gaining popularity because of its heart-protective, anti-cancer and other health beneficial properties. The less processed the coconut oil is, the more antioxidants and phytosterols it contains (Fife, 2006). Coconut oil is also trans-fat and cholesterol free (Kelapo, 2015).

100 grams of VCO contain 878 kcal and 79.75 grams of long-chain fatty acids, which are known for their positive health benefits (Nährwertrechner.de, n.d.).

It also is used as cosmetic and skin care products or massage oil (Bawalan & Chapman, 2006).

Figure 2: Coconut oil (Pelletier, 2015)

2 Production, Foreign Trade & Consumption

Production

Table 1 shows that the majority of the virgin coconut oil originates from the Philippines and Indonesia, accounting for over 70% of the total production; furthermore, about 90% of the total production comes from the South Pacific or Asia. Primary research about the target markets showed that two producers exist in Germany, Ölmühle Solling and Makana (see Annex 2). They import copra and produce organic coconut oil which they sell to wholesalers (30%), industry (10%), catering (5%), specialist shops (30%) and private persons (25%) (see Annex 2). Their amount is such a small part of the production data that it is not listed in statistical data. Primary research in the US revealed that there are no producers.

Since 2009 two of the top three worldwide producers have had declining quantities of production, yet coconut oil sales have been on the rise for the past decade (IndexMundi, 2015). The growers' country regulations, such as the Philippines through their Philippine Coconut Authority, control the overall coconut production levels (Ho, 2011; Mahr, 2012). Since sales of coconut oil have been rising, other countries have started to produce oil as well.

Table 1: Top coconut oil producers and production levels in 2009 and 2014 ('000 tons)

	Country	Production 2009 ('000 tons)	Production 2014 ('000 tons)
1	Philippines	1690	1450
2	Indonesia	968	980
3	India	447	402
4	Viet Nam	153	153
5	Mexico	145	130

Source: IndexMundi

Table 1: Top coconut oil producers and production levels in 2009 and 2014

Only two of the five countries offer data regarding the gross production value. The price per ton is assumed to be approximately equal. I.

Table 2: Production value and producer prices for coconut oil				
	Country	Gross production value 2014 ('000 US$)	Price per ton 2014 (US$)	% of World 2014
1	Philippines	1,563,100	1,078	43.2
2	Indonesia	1,160,320	1,184	29.2
3	India	434,194	-	12.0
4	Viet Nam	166,441	-	4.6
5	Mexico	141,113	-	3.9
Source: IndexMundi				

Table 2: Production value and producer prices for coconut oil in 2014

Foreign Trade

World exports

Table 3 shows the major exporting countries of virgin coconut oil for the years 2010-2014. The trade value of the world export has been almost constantly rising over the past five years. It summed up to US$ 1,631,817,885 in 2014. During the past five years no strong fluctuations in the top seven exporting countries took place. The leaders are the Philippines, followed by Indonesia (UN Comtrade Database, 2015).

Table 3: Top 15 Exporting Countries of the World 2010 - 2014																
		2010			2011			2012			2013			2014		
	Partner	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)
1	Philippines	287	287	1.00	463	264	1.76	372	311	1.20	415	435	0.95	582	329	1.77
2	Indonesia	209	205	1.02	407	246	1.66	308	253	1.22	212	243	0.87	410	328	1.25
3	Netherlands	171	153	1.12	322	161	2.01	276	188	1.47	264	233	1.13	262	180	1.45
4	Malaysia	126	112	1.12	218	116	1.89	145	107	1.35	120	119	1.01	203	155	1.31
5	Germany	15	11	1.31	26	12	2.19	26	16	1.65	22	15	1.47	38	24	1.61
6	USA	17	12	1.40	26	17	1.54	27	17	1.60	26	18	1.45	35	22	1.57
7	India	7	6	1.17	13	5	2.65	19	8	2.48	15	7	2.06	22	7	3.00
8	Italy	3	2	1.33	9	4	2.32	9	5	1.62	8	6	1.32	8	6	1.41
9	Singapore	6	5	1.33	7	4	2.07	13	7	1.82	9	6	1.61	10	5	1.95
10	Canada	6	1	6.21	11	1	8.71	20	2	8.87	33	4	8.43	40	5	8.40
11	Spain	14	13	1.10	8	4	2.14	7	5	1.44	8	7	1.13	6	4	1.51
12	Sri Lanka	1	0	1.42	1	1	2.11	1	1	1.96	4	2	1.70	10	3	3.71
13	Sweden	2	1	1.63	3	1	2.66	2	1	2.23	2	1	1.78	4	2	2.05
14	France	5	4	1.23	9	5	1.98	4	3	1.29	4	3	1.09	3	2	1.79
15	Guyana	0	0	1.41	0	0	2.39	0	0	0.60	0	0	0.51	0	1	0.05
Source: UN Comtrade Database																

Table 3: Top 15 Exporting Countries of the World 2010 - 2014

World Imports

The world total import value in 2014 amounted US$ 1.2bn. The major importer of refined coconut oil over the past five years has been the USA with an almost constant rise in net quantity. In 2014, they imported 37.3% of the total trade value of all importers (UN Comtrade Database, 2015).

	Table 4: Top 15 Importing Countries of the World 2010 - 2014	2010			2011			2012			2013			2014		
	Partner	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)
1	USA	233	232	1.00	451	242	1.86	418	291	1.44	350	314	1.11	461	293	1.57
2	China	60	58	1.03	115	61	1.90	100	75	1.34	99	100	0.98	151	109	1.39
3	Rep. of Korea	67	65	1.03	108	58	1.85	78	60	1.30	56	61	0.93	76	57	1.35
4	Japan	50	47	1.07	86	46	1.87	59	44	1.34	42	42	0.99	73	48	1.51
5	Germany	60	58	1.03	98	51	1.93	86	61	1.40	78	70	1.12	66	47	1.39
6	Belgium	46	45	1.03	63	33	1.89	46	32	1.43	50	44	1.14	62	43	1.44
7	Malaysia	47	46	1.03	89	51	1.75	49	34	1.45	14	13	1.07	55	42	1.30
8	Singapore	14	12	1.13	21	11	1.87	33	25	1.34	30	32	0.94	46	33	1.38
9	Russian Federation	89	78	1.15	89	53	1.69	48	33	1.46	38	34	1.11	46	32	1.44
10	Italy	24	22	1.08	41	26	1.57	31	23	1.34	26	23	1.14	36	26	1.38
11	France	23	19	1.18	42	22	1.93	31	21	1.48	34	29	1.16	30	21	1.41
12	Canada	16	12	1.39	28	12	2.39	34	14	2.31	41	17	2.34	58	19	3.08
13	Turkey	12	11	1.03	27	14	1.90	17	13	1.34	16	16	0.99	22	17	1.34
14	Poland	30	27	1.11	37	18	2.05	33	21	1.54	29	24	1.20	26	16	1.56
15	United Kingdom	18	14	1.28	27	12	2.17	17	11	1.58	19	15	1.29	28	16	1.76

Source: UN Comtrade Database

Table 4: Top 15 Importing Countries of the World 2010 - 2014

German and US Trade

Germany

The country that exports the most to Germany is the Netherlands with a market share of 92% of the trade value of US$ 89,869,664 in 2014. The percentage has not changed much for the last five years. The second ranked importer since 2013 are the Philippines with a market share of about 5% followed by France with 1.9% (UN Comtrade Database, 2015). Compared to the imports, the production of domestic producers is too small to be captured in official statistical data. Due to currency changes and natural disasters, the export price and value for coconut oil differed every year. One remarkable date is 2011, where the price rose sharply due to an increased demand in Germany at the same time as the Philippines were hit by typhoons and Thailand had to suffer a drought.

	Table 5: Top 15 Exports to Germany 2010 - 2014	2010			2011			2012			2013			2014		
	Partner	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)
1	Netherlands	61.69	52.21	1.18	102.18	50.91	2.01	89.65	61.04	1.47	83.22	74.37	1.12	82.70	56.59	1.46
2	Philippines	-	-	-	0.05	0.02	2.63	0.48	0.17	2.88	5.21	2.06	2.52	4.54	1.72	2.64
3	France	2.57	1.97	1.31	4.12	2.39	1.73	2.00	1.67	1.20	1.43	1.73	0.83	1.75	1.22	1.44
4	Belgium	0.40	0.33	1.20	0.30	0.13	2.35	0.24	0.15	1.60	0.27	0.11	2.36	0.17	0.07	2.32
5	Sweden	0.03	0.00	6.44	0.03	0.00	6.55	0.08	0.03	2.27	0.10	0.06	1.61	0.12	0.06	1.99
6	Sri Lanka	-	-	-	-	-	-	-	-	-	0.04	0.02	1.70	0.13	0.05	2.66
7	Italy	-	-	-	-	-	-	-	-	-	0.20	0.13	1.51	0.04	0.02	1.67
8	India	0.00	0.00	1.17	0.01	0.00	2.10	0.00	0.02	0.15	0.02	0.01	2.11	0.09	0.02	4.76
9	Dominican Rep.	-	-	-	-	-	-	0.01	0.03	0.18	0.05	0.03	1.60	0.03	0.02	1.59
10	Australia	-	-	-	-	-	-	0.03	0.00	6.24	0.07	0.01	6.86	0.09	0.01	6.78
11	United Kingdom	0.20	0.06	3.52	0.00	0.00	4.05	0.01	0.00	4.74	0.02	0.00	5.52	0.05	0.01	5.18
12	Thailand	0.00	0.00	4.73	0.00	0.00	5.04	0.00	0.00	0.86	0.01	0.00	7.68	0.09	0.01	9.30
13	USA	0.01	0.00	4.17	-	-	-	-	-	-	0.03	0.03	1.10	0.02	0.01	3.50
14	Norway	-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.01	7.06
15	Switzerland	-	-	-	-	-	-	-	-	-	-	-	-	0.02	0.01	3.53
	Sum	65.03	54.70	1.19	107.05	53.53	2.00	92.54	63.13	1.47	90.75	78.64	1.15	89.87	59.82	1.50
	Growth rate	-	-	-	64.62%	-2.14%	68.22%	-13.55%	17.92%	-26.50%	-1.94%	24.57%	-21.77%	-0.97%	-23.93%	30.43%

Source: UN Comtrade Database

Table 5: Top 15 Exports to Germany 2010 - 2014

In the past few years, Germany exported foremost to Poland. Out of the total exports valued with US$ 34,689,237, Poland imported 33.2%. Belgium had a constantly rising import value and was ranked second in 2014 with a share of 12%, followed by Denmark (8.7%), the Czech Republic (5.6%) and Lithuania (4.9%). The order of the top 15 players on the market changed within the last five years (UN Comtrade Database, 2015). Since Germany is only exporting what has been imported because the production numbers are too low to be taken into account, price differences occurred for the same reasons as mentioned above (Table 5).

Table 6: Top 15 Germany's Exports 2010 - 2014

		2010			2011			2012			2013			2014		
	Partner	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)
1	Poland	3.44	2.72	1.26	5.19	2.27	2.29	5.35	3.49	1.53	7.12	5.80	1.23	11.53	8.82	1.31
2	Belgium	0.47	0.40	1.16	0.58	0.28	2.07	0.86	0.38	2.29	0.87	0.46	1.88	4.15	2.38	1.75
3	Denmark	0.26	0.24	1.08	0.09	0.03	2.93	0.53	0.36	1.49	0.24	0.10	2.37	3.01	2.36	1.28
4	Czech Repub	0.71	0.70	1.02	1.32	0.59	2.23	1.32	0.82	1.60	1.22	0.92	1.32	1.89	1.37	1.38
5	Lithuania	0.58	0.47	1.22	1.26	0.60	2.09	1.17	0.79	1.47	1.26	1.02	1.24	1.70	1.15	1.48
6	Sweden	0.73	0.56	1.29	0.26	0.07	3.82	0.53	0.20	2.64	0.71	0.44	1.64	1.93	1.14	1.70
7	Hungary	0.02	0.01	1.86	0.22	0.09	2.56	0.12	0.07	1.66	0.27	0.20	1.32	1.58	1.06	1.49
8	Netherlands	0.52	0.46	1.13	5.90	3.13	1.88	3.03	2.11	1.44	0.20	0.17	1.22	1.34	0.90	1.49
9	United Kingd	0.74	0.44	1.67	0.59	0.20	2.93	1.71	0.96	1.78	1.19	0.27	4.32	2.98	0.87	3.41
10	Belarus	0.70	0.52	1.36	1.00	0.40	2.50	1.31	0.80	1.64	0.74	0.63	1.16	0.09	0.54	0.16
11	France	0.39	0.22	1.79	1.73	0.67	2.56	1.37	0.70	1.95	1.88	0.85	2.21	0.89	0.37	2.42
12	Norway	0.55	0.47	1.16	0.35	0.09	3.83	0.39	0.21	1.88	0.40	0.26	1.54	0.64	0.31	2.07
13	Italy	1.27	1.13	1.12	1.99	1.03	1.93	1.50	0.82	1.82	0.46	0.20	2.28	0.82	0.30	2.78
14	Romania	0.14	0.12	1.16	0.28	0.11	2.64	1.29	0.80	1.62	0.01	0.37	0.01	0.44	0.29	1.55
15	Australia	0.00	0.00	1.47	0.02	0.01	3.02	0.02	0.01	2.48	0.02	0.01	3.08	0.92	0.28	3.28
Sum		10.53	8.48	1.32	20.77	9.56	2.62	20.49	12.52	1.82	16.58	11.71	1.79	33.91	22.12	1.84
Growth rate		-	-	-	97.28%	12.76%	98.71%	-1.31%	30.90%	-30.56%	-19.07%	-6.47%	-1.69%	104.46%	88.94%	2.64%

Source: UN Comtrade Database

Table 6: Top 15 Germany's Exports 2010 - 2014

The United States

The US market was six times bigger than the German market with a trade value of US$ 543,163,868. The major exporters to the US in the last years have been the Philippines and Indonesia with a respective market share of 68.9% and 17.4% of the trade value in 2014. Malaysia, Canada and India have almost constantly been in the top five. In 2014, these three countries together amounted 13.3% of the American imports (UN Comtrade Database, 2015).

Table 7: Top 15 US Imports 2010 - 2014

		2010			2011			2012			2013			2014		
	Partner	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)
1	Philippines	187.70	186.33	1.01	350.67	202.12	1.73	294.19	251.28	1.17	274.51	293.29	0.94	374.08	249.24	1.50
2	Indonesia	23.11	21.80	1.06	64.99	38.87	1.67	33.48	23.57	1.42	46.97	50.83	0.92	94.69	77.08	1.23
3	Malaysia	5.85	5.52	1.06	11.99	7.45	1.61	20.80	14.39	1.45	0.47	0.30	1.55	30.39	23.07	1.32
4	Canada	5.73	0.92	6.21	10.66	1.22	8.73	20.17	2.27	8.87	32.64	3.87	8.43	38.91	4.63	8.40
5	India	0.52	0.45	1.17	0.43	0.16	2.66	1.49	0.42	3.55	1.89	0.64	2.94	2.94	0.76	3.86
6	Mexico	0.00	0.01	0.25	0.07	0.01	4.84	0.03	0.07	0.45	0.25	0.04	6.64	1.10	0.16	6.69
7	Sri Lanka	-	-	-	-	-	-	0.00	0.08	0.04	1.62	0.96	1.70	0.05	0.14	0.36
8	Netherlands	0.02	0.02	1.17	0.02	0.06	0.38	0.31	0.11	2.68	0.14	0.06	2.34	0.17	0.06	2.83
9	Fiji	0.03	0.01	3.17	0.11	0.04	3.00	0.09	0.03	3.52	0.03	0.01	2.47	0.01	0.03	0.31
10	South Africa	-	-	-	-	-	-	-	-	-	-	-	-	0.14	0.02	8.56
11	Thailand	0.02	0.00	5.07	0.01	0.00	12.11	0.02	0.00	6.48	0.04	0.01	7.83	0.01	0.01	1.22
12	United Kingdom	-	-	-	-	-	-	0.02	0.00	10.72	-	-	-	0.03	0.01	6.19
13	Jamaica	-	-	-	-	-	-	-	-	-	-	-	-	0.01	0.00	2.60
14	Israel	-	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00	0.00
15	China, Hong Kong SAR	-	-	-	-	-	-	-	-	-	-	-	-	0.02	0.00	7.62
Sum		223.11	215.08	1.04	439.20	249.99	1.76	370.76	292.26	1.27	358.64	350.04	1.02	542.55	355.21	1.53
Growth rate		-	-	-	96.85%	16.23%	69.23%	-15.58%	16.91%	-27.84%	-3.27%	19.77%	-19.69%	51.28%	1.48%	50.00%

Source: UN Comtrade Database

Table 7: Top 15 Exports to US 2010 - 2014

In the USA there has been a steady increase in the net weight imported whereas prices as well depended on currency changes.

The market for exporting coconut oil from the USA is relatively small with a trade value of US$ 34,497,769 in 2014. The biggest share of the trade value had Canada with 60.1%, China with 19.1%, Mexico with 5.5% and Japan with 4% (UN Comtrade Database, 2015).

Table 8: Top 15 US Exports 2010 - 2014																
		2010			2011			2012			2013			2014		
	Partner	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)	Trade Value (mnUS$)	Netweight ('000 tons)	Price (US$/kg)
1	Canada	13.02	9.56	1.36	20.77	12.42	1.67	18.97	11.33	1.67	16.87	12.35	1.37	20.74	13.83	1.50
2	China	0.54	0.24	2.28	1.51	1.42	1.07	4.57	2.87	1.59	3.19	1.82	1.76	6.59	3.70	1.78
3	Other Asia, nes	-	-	-	0.09	0.07	1.25	0.15	0.13	1.12	0.54	0.53	1.01	0.91	0.85	1.08
4	Japan	0.95	0.48	1.99	0.77	0.67	1.15	0.84	0.62	1.36	1.23	0.61	2.01	1.39	0.76	1.82
5	Viet Nam	-	-	-	0.05	0.05	0.99	0.26	0.27	0.99	0.60	0.60	0.99	0.69	0.69	0.99
6	Mexico	1.44	1.23	1.17	0.21	0.14	1.53	0.01	0.06	0.16	0.92	0.46	2.01	1.89	0.57	3.33
7	China, Hong Kong SAR	0.23	0.10	2.19	0.33	0.33	0.99	0.23	0.20	1.13	0.39	0.20	1.98	0.49	0.41	1.20
8	Rep. of Korea	-	-	-	0.07	0.07	0.99	0.00	0.00	10.18	0.03	0.02	1.27	0.34	0.32	1.05
9	Australia	-	-	-	0.08	0.08	1.05	0.07	0.05	1.35	0.02	0.01	3.03	0.03	0.29	0.10
10	United Kingdom	0.10	0.08	1.14	0.35	0.32	1.09	0.29	0.26	1.09	0.11	0.07	1.64	0.36	0.28	1.31
11	Indonesia	0.22	0.09	2.30	0.45	0.45	0.99	0.53	0.53	1.00	0.56	0.28	1.99	0.36	0.14	2.51
12	Saudi Arabia	-	-	-	0.01	0.00	2.62	0.00	0.00	2.33	0.03	0.01	2.44	0.12	0.09	1.34
13	Singapore	0.05	0.04	1.31	0.01	0.00	8.97	0.03	0.01	2.44	0.12	0.05	2.70	0.10	0.08	1.38
14	India	-	-	-	-	-	-	-	-	-	-	-	-	0.14	0.06	2.35
15	Switzerland	0.08	0.05	1.55	0.07	0.07	0.99	0.10	0.06	1.76	0.09	0.04	2.29	0.01	0.05	0.16
Sum		16.62	11.88	1.70	24.76	16.09	1.81	26.04	16.39	2.01	24.64	17.04	1.89	34.15	22.12	1.46
Growth rate		-	-	-	48.97%	35.45%	6.57%	5.18%	1.86%	11.16%	-5.36%	4.00%	-6.00%	38.59%	29.83%	-22.81%
Source: UN Comtrade Database																

Table 8: Top 15 US Exports 2010 - 2014

In 2014, the imported value amounted US$ 543,163,868 whereas the exported value only amounted US$ 34,397,769 (UN Comtrade Database, 2015).

The same fact for exports out of Germany applies for the USA. Since there is no local production, exports are affected by price changes of the imports.

Apparent Consumption

The estimated consumption is equal to the country's total production plus imports minus exports. The two tables below provide the estimated total consumption and estimated consumption per capita from 2010 to 2014 for Germany[2] and from 2010 to 2014 for the United States.

The share of exports in Germany has been higher than in the USA. Generally said there has been a steady increase of consumption except for the last year when re-esports rose strongly and appear to have replaced domestic consumption.

[2] In Germany there has been a census in 2011 to estimate the population. Because this number is more accurate, it is taken for 2010 as well.

Table 9: Estimated Consumption Germany 2010-2014					
	2010	2011	2012	2013	2014
Production (kg)	0	0	0	0	0
Import (kg)	58,402,000	50,774,724	61,275,904	69,866,268	47,229,643
Export (kg)	11,355,900	11,772,305	15,631,870	15,056,726	23,545,821
Est. Consumption (kg)	47,046,100	39,002,419	45,644,034	54,809,542	23,683,822
Population	80,327,900	80,327,900	80,523,700	80,767,500	81,197,500
Est. Con. Per Capita (kg)	0.59	0.49	0.57	0.68	0.29
Source: UN Comtrade Database, destatis.de, census.gov					

Table 9: Estimated consumption Germany 2010-2014

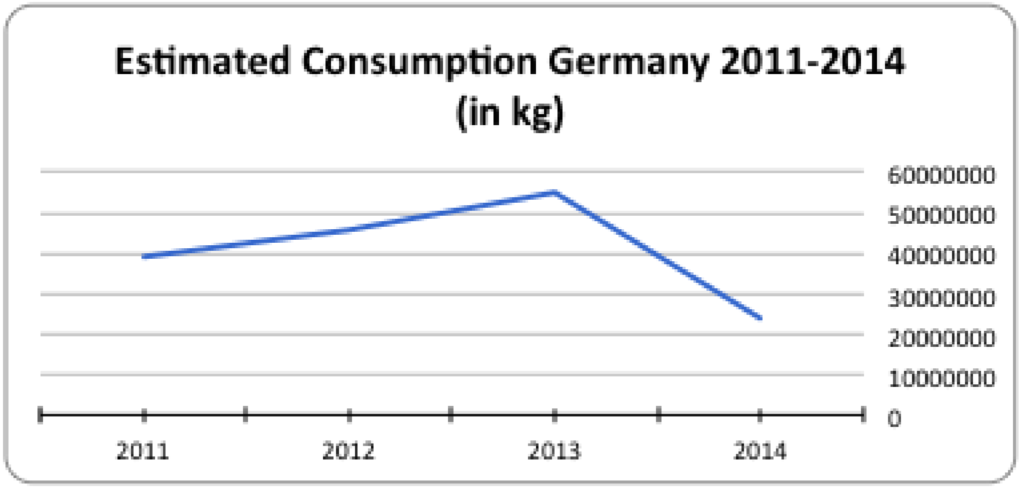


Figure 3: Estimated consumption Germany 2010-2014

Table 10: Estimated Consumption USA 2010-2014					
	2010	2011	2012	2013	2014
Production (kg)	0	0	0	0	0
Import (kg)	232,087,012	242,277,695	290,918,107	314,492,933	293,025,949
Export (kg)	12,158,755	16,761,150	16,781,619	17,726,102	22,462,479
Est. Consumption (kg)	219,928,257	225,516,545	274,136,488	296,766,831	270,563,470
Population	310,537,757	312,799,495	315,073,604	317,292,487	320,087,963
Est. Con. Per Capita (kg)	0.71	0.72	0.87	0.94	0.85
Source: UN Comtrade Database, destatis.de, census.gov					

Table 10: Estimated consumption USA 2010-2014

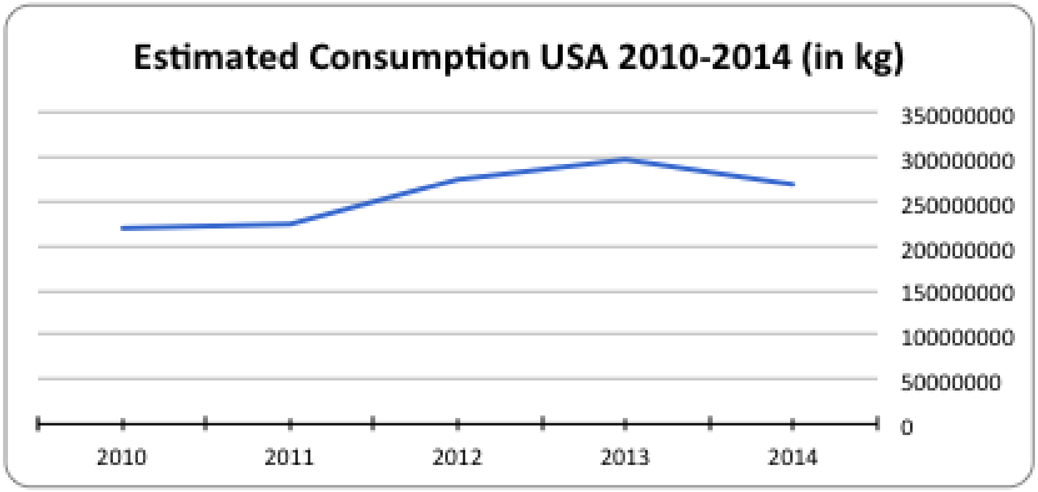


Figure 4: Estimated consumption USA 2010-2014

Outlook

The market prospect is increasingly attractive for both the German and the US market.

Due to influences from outside (natural catastrophes, etc.), a trend for the net weight produced worldwide is hard to indicate. However, in both countries the consumption has been increasing in the last five years except 2014. The trend indicates that it is an attractive market in the future as well.

Exports to Germany have been increasing. Exports to the USA have been even more increasing which indicates a greater growth there. In addition, the USA keeps a higher share of coconut oil compared to Germany which exports more. Still, both countries have an increasing share of exports. This shows that they serve other markets (Germany with EU members, the USA with Canada and mainly Asia).

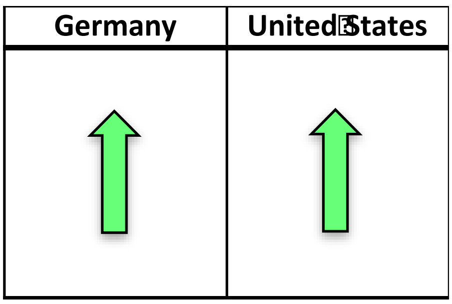


Figure 5: Market Prospect Summary Ch. 2

3 Market Characteristics

Germany

Consumer Preferences

As consumers in Germany become more health conscious, preferences and buying habits have been changing in favor of organic and healthy products. Since coconut oil is rich in healthy saturated fatty acids, coconut oil becomes more and more popular. German consumers use it mainly for cooking, baking or less frequently as a cosmetic product (e.g. hair conditioner or body care). The cosmetic industry uses coconut oil also in cosmetic products (Veroline, 2015).

Market Segments

The German coconut oil market is devided into two categories, the consumer market and the industry. The consumer market groups persons who buy coconut oil ready for us, whereas the industry uses it as an ingredient for other products like diabetic foods or cosmetics (CBI Ministry of Foreign Affairs, 2014). The German market for organic products is the largest in Europe (CBI Ministry of Foreign Affairs, 2012) with a sales volume of 7.9 billion Euros in 2014 (Statista, 2015).

With the help of an online survey published by Dr. Georg, primary research has been conducted to support secondary research with regards to the market segments in Germany. Over 500 responses have been recorded with the following results (see Annex 2):

- Health aware women between 26 and 35 years who want to prevent heart diseases, Alzheimer and diabetes (see Annex 2)
- the vegan and vegetarian population (see Annex 2)
- the food and cosmetics industry

According to Sebastian Baensch (Store Director for Ölmühle Solling), the company sells 45% of its organic coconut oil products to the industry, while 55% is sold to specialized shops or directly to private persons (see Annex 2).

The first segment consists of health-aware women aged between 26 and 35 who have a higher income and education. The vegan and vegetarian segment represents about 11% of the German population, which is about 8.5 million people (Vebu, 2015). This segment seeks organic products that are not animal tested and free of animal ingredients (TheVeganSociety, 2015). It consists of mainly young persons between 13 and 35 years who have a very high internet affinity.

Conditions of Acceptance

The most important factor for organic product buyers is that the product has a trustworthy organic logo (further information in chapter 4 and 8) (bioverlag, 2014).

Customers prefer larger packaging. Around 37% tend to buy 1000ml and 32.5% buy 500ml. Almost 97% of the customers favour glass containers as a packing material. Most of the customers buy coconut oil either in organic supermarkets such as Alnatura or denn's or online (see Annex 2).

For importers it is important that the coconut oil meets the standards and regulations listed in chapter 4. Exporters have to adhere to the conditions for packaging and labeling when it comes to the shipping (see chapter 2)

Competition

Coconut oil supply is impacted by weather conditions and other outside influences such as insect infestations. These incidents increase the price and consequently customers buy substitutes.

Product substitution is an alternative to stabilize prices. Especially in the cosmetic and food industry, palm kernel oil is often used as a substitute for coconut oil because it is cheaper (Oeko-fair, n.d.; Utopia, 2015). However, palm oil is produced in an environmentally unfriendly manner and not as healthy as organic coconut oil so that many customers have stopped buying palm oil or products with the ingredient palm oil (CBI Ministry of Foreign Affairs, 2015a).

Consumers rather use olive oil (66.5%) or canola oil (31.1%) when it comes to a substitute oil (see Annex 2). However, there is a debate whether there are substitutes for organic coconut oil, since no other oil has product attributes such as heat-stability, high levels of lauric acids or long durability (see Annex 2). Leaders on the German organic coconut oil market are Bio Planete with a market share of 56.4%, followed by Rapunzel with 27.9% and Aman Prana with 9.3%. In total, there are nine main active market participants (see Annex 2).

Demand Trends

Producers and retailers agree that coconut oil demand in Germany has increased over the last five years. Considering the imports of virgin coconut oil, Germany shows increasing figures in terms of volume and value (CBI Ministry of Foreign Affairs, 2014). According to German distributors, there are two main reasons for the increasing demand: The vegan trend and the interest in a long and healthy life as already mentioned (see Annex 2). Since the target groups will still exist in three to five years, it can be assumed that the demand in coconut oil will continue to grow.

The United States

Consumer Preferences

In the US, there is a debate as to whether coconut oil is harmful due to the high amount of saturated fats. However, some studies show that it helps to reduce weight in addition to providing other health benefits.

Same as in Germany, coconut oil has many purposes: It is not only used for cooking, but is also put into smoothies and granola bar. Also, coconut oil is used in beauty products but at the same time used pure as a beauty product (Adams, 2014).

Market Segments

While producers agree that their product is safe for sale to consumers as young as ten years old, the target markets where they see sales are older middle to high-class consumers (Chamil, 2015). The market divides into similar segments as it does in the German market: consumers and the industry.

To segment the market, an exemplary supermarket which sells only organic coconut oil has been analyzed. The primary consumers in the US are:

- Women, aged 35-50 year with an annual income above US$ 75,000
- Younger generation aged between 18 and 29 years

The latter represents 20% of the whole US population (United States Census Bureau, 2012). Most customers who try to include organic products in their diets live in larger cities (55%), whereas only 37% of the rural population follows this trend (see Annex 2).

Conditions of Acceptance

To be accepted by consumers in the US, it is important to sell organic coconut oil in stores where the consumers are accustomed to purchase similar products. The top six retailers for organic foods in the United Sates are all major retail chains: Walmart, Costco, Kroger Target, Safeway, and Whole Foods Market. Consumers can also be reached through specialty stores like Trader Joe's. In addition, consumers can be reached directly through relationship-building opportunities like trade shows (see chapter 9 for additional information) (International Trade Center, 2002).

Customers favor the USDA logo and some also look for the Kosher or Halal certification. Vegan, Fair Trade, Non-GMO and Gluten-free are also important. As in Germany, buyers prefer glass over plastic jars because they are more eco-friendly. The favored sizes are nearly the same as in Germany: 160oz (473 ml) and 32oz (946ml) (see Annex 2).

Competition

Like in Germany, the coconut oil supply to the US is impacted by weather conditions and other outside influences such as insect infestations which leads customers to switch to substitutes. Most competition comes from companies located outside of the country (Chamil, 2015; Anonymous, 2015). With the growing demand in the organic food industry and the multiple uses for coconut oil, it is difficult to pinpoint direct competition. Also in the US, olive oil is the substitute product that competes with coconut oil. Coconut oil differs from olive oil in that most of the fats in coconut oil are saturated fats, such as lauric acid (Kelapo, 2015).

Demand Trend

Eight years ago, only a few people were interested in buying coconut oil in the US. This changed significantly over the last years. As in Germany, the reasons are the positive health effects of virgin coconut oil. Today supermarkets offer up to eight to ten different brands (Adams, 2014). Also, the entire US market for organic products has increased significantly over the last year. According to the Organic Trade Association, sales of organic food and non-food products in the United States totals $39.1 billion, which is 11.3% percent more than the previous year. The figure below also shows the increase of the interest in coconut oil.

Table 11 : Domestic Consumption USA

Year	Domestic Consumption (1,000 MT)	Growth Rate
1994	491	1.45 %
1995	427	-13.03 %
1996	504	18.03 %
1997	540	7.14 %
1998	443	-17.96 %
1999	416	-6.09 %
2000	446	7.21 %
2001	508	13.90 %
2002	390	-23.23 %
2003	395	1.28 %
2004	364	-7.85 %
2005	506	39.01 %
2006	454	-10.28 %
2007	508	11.89 %
2008	428	-15.75 %
2009	598	39.72 %
2010	486	-18.73 %
2011	515	5.97 %
2012	540	4.85 %
2013	516	-4.44 %
2014	528	2.33 %

Source: Indexmundi, 2015

Table 11: Domestic Consumption USA

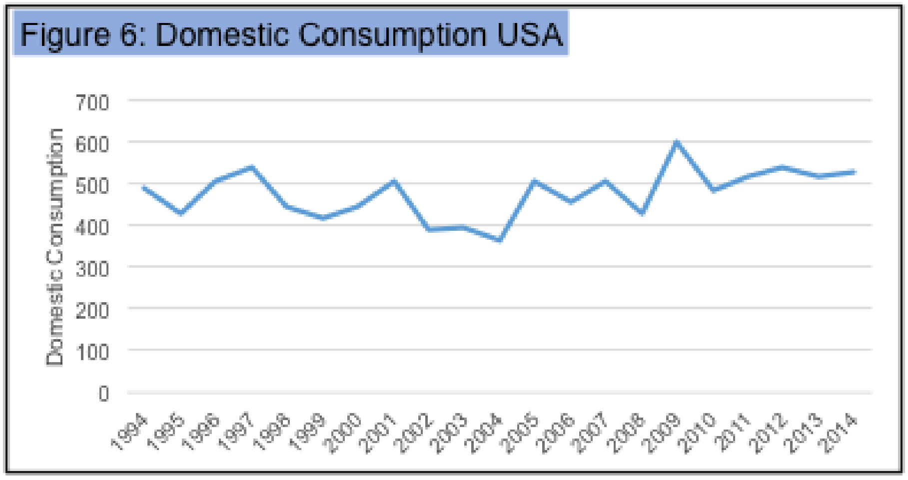


Figure 6: Domestic Consumption USA

Outlook

The market prospect is increasingly attractive for different target groups in Germany and the US. In the German food sector, vegans, vegetarians, and health conscious women are interested in buying virgin coconut oil. In the US, women between 35 and 50 with a higher income and the younger generation form the group of buyers. In both countries the consumption has increased over the last five years due to the growing attention that people pay to a healthy diet. This trend is expected to continue. Due to differences in the position on the product life cycle there are considerably less active market participants in Germany than in the US. The US has had the product out in the market for eight years and is now further developing the market whereas the German market is still trying to get the product to larger groups of consumers.

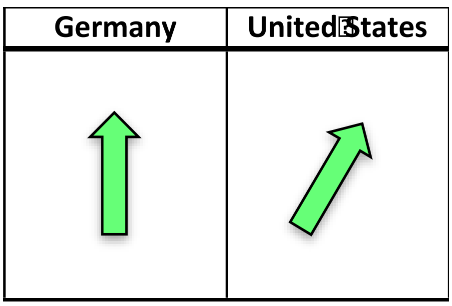


Figure 7: Market Prospect Summary Ch. 3

4 Market Access

All EU members, including Germany, form a customs territory, the European Customs Union, where tariff and other regulations apply (Zoll, 2015).

Tariffs

Germany

According to TARIC, the EU duty rate for third countries[3] is 12.8%. However, for all other countries the EU does not impose any import tariff for both solid and liquid coconut oil (EC.Europa, 2015).

Table 12: EU Import Tariffs	
Country	Tariff
ERGA OMNES (REGA OMNES)	12.80%
Andorra	0%
Albania	0%
Bosnia and Herzegovina	0%
Central America	0%
CARIFORUM (excluding Haiti)	0%
Chile	0%
Cameroon	0%
Colombia	0%
Ecuador	0%
Egypt	0%
Economic Partnership Agreements	0%
Eastern and Southern Africa States	0%
Fiji	0%
Georgia	0%
Israel	0%
Iceland	0%
Jordan	0%
Japan	0%

[3] Areas outside the excise territory of the European Union, and which are not part of the customs territory of the Community, are known as third countries (under excise legislation).

Korea, Republic of (South Korea)	0%
Lebanon	0%
Overseas Countries and territories	0%
Marocco	0%
Moldova, Republic of	0%
Montenegro	0%
Former Yugoslav Republic of Macedonia	0%
Peru	0%
Papua New Guinea	0%
Occupied palestinian Territory	0%
San Marino	0%
GSP	0%
GSP+	0%
GSP General arrangements (SPGL) (excluding Indonesia)	8.90%
Turkey	0%
Ukraina	0%
Kosovo	0%
Serbia	0%
Source: EC. Europa, 2015	

Table 12: EU Import Tariffs

US

According to USITC, countries which have NTR[4] (Normal Trade Relations) with the US do not have to pay any tariffs. Exporters from developing countries do not pay any duty on coconut oil because the GSP[5] on coconut oil is 0 % for the US (USITC, 2015).

Table 13: US Import Tariffs		
Subheading	Tariffs	
	NTR	Non-NTR
151319	0 %	COL2 TextRate 4.4 cents/kg
Source: USITC, 2015		

Table 13: US Import Tariffs

[4] NTR formerly known as the Most Favored Nation (MFN).
[5] "Generalised Scheme of Preferences" (GSP) allows developing country exporters to pay less or no duties on their exports to the EU/US. This gives them vital access to EU/US markets and contributes to their economic growth.

For both countries applies the following: The bound rate[6] for coconut oil with the HS-Code 151319 is 0% in Germany and the US (Tariffdata.WTO, 2015).

The US and Germany apply the GSP scheme to Sri Lanka and the Philippines.

Standards and Regulations

EU legislation dictates many of the regulations for importing coconut oil into Germany. There are legal requirements (more information see table 12) and requirements for organic and Fair Trade product labeling, ISO 22000 requirements and contamination levels. The latter one is a key aspect because coconut oil is highly susceptible to contamination. That is why the ISO push is unique to Germany and consequently, followed by a strong push for cooperating developing countries (CBI Ministry of Foreign Affairs, 2012).

“Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch” (LFGB) is the main regulatory body in the German food industry. It ensures that the requirements (typically synchronized with the EU) are met by companies participating in the import of coconut oil. Biofach also gets involved in the process as the world leader in Fair Trade in the organic food industry by helping to ensure that all food labeled as organic meets all of the relevant requirements.

The Codex Alimentarius is organized by FAO and WHO and stets guidelines standards on international foods in order to regulate safety and quality within international food trade (FAO, 2016). The codex sets essential compositions and quality factors of coconut oil such as the amount of fatty acid compositions or antioxidants (FAO, 2015).

The legal requirements for the EU and US are presented in the following table (CBI Ministry of Foreign Affairs, 2012 and eCFR, 2015).

[6] The Bound tariff rate is the most-favored-nation tariff rate resulting from negotiations under the General Agreement on Tariffs and Trade (GATT) and incorporated as an integral component of a country’s schedule of concessions or commitments to other World Trade Organization members. If a country raises a tariff to a higher level than its bound rate, those adversely affected can seek remedy through the dispute settlement process and may obtain the right to retaliate against an equivalent value of the offending country’s exports or the right to receive compensation, usually in the form of reduced tariffs on other products they export to the offending country. Since the tariff for coconut oil is already 0%, the regulation would not apply.

Table 14: Legal Requirements for EU and US	
Legal Requirements	**Brief description**
Germany / EU	
Maximum level for erucic acid oil and fats Directive 76/621/EEC	EU legislation stipulates a maximum level of erucic acid in oils and fats intended for human consumption (the maximum level is 5% of the total level of fatty acids in the fat component of the product)
Additives, enzymes and flavorings in food Regulation (EC) No 1331/2008 No 1332/2008 No 1333/2008 No 1334/2008	The EU has set a list of permitted additives and enzymes and a number of requirements for flavorings and their use in foodstuffs intended for human consumption
Extraction solvents for food Directive 88/344/ECC	There are EU rules for the marketing and application of extraction solvents used in the production of foodstuffs and food ingredients.
Contaminants in food Regulation (EC) 1881/2006	The EU food safety policy has set maximum levels for certain contaminants in specified products or product groups.
Hygiene of foodstuffs (HACCP) Regulations (EC) 852/2004	The EU legislation on hygiene of foodstuffs (HACCP) is legally binding for food processing plants, and is recommended for farmers (primary production)
Maximum Residue Levels (MRLs) of pesticides in food Regulation (EC) 396/2005 Regulation (EC) 178/2005 Regulation (EC) 149/2008	EU legislation has been laid down to regulate the presence of pesticide residues (MRLs) in food products.
US	
§205.201 Federal Regulations, Part 205 – National Organic Program	Organic production and handling system plan
§205.202 Federal Regulations, Part 205 – National Organic Program	Any field or farm parcel from which harvested crops are intended to be sold, labeled, or represented as “organic,” must meet certain requirements such as no use of forbidden substances
§205.270 Federal Regulations, Part 205 – National Organic Program	Organic handling requirements

Table 14: Legal Requirements for EU and US

Non-Tariff Barriers

According to the economic partnership agreement (EPA), entering the EU is quota-free (EC, n.d.). In the US, only non-NTR (currently, Cuba and North Korea) have to pay a tax rate of US $ 0.44 per kg (USITC, 2015).

As members of the World Trade Organization (WTO), the US and Germany take part in the Sanitary and Phytosanitary (SPS) measures agreement to effectively prevent the entry and spread of plant and animal pests, diseases and food toxins, while at the same time remaining facilitative of trade.

Similar to the LFGB, the Department of Agriculture regulates imports of coconut oil. Any producer who brings food products into the United States must be registered with the Department of Agriculture, in which they can apply for a permit (USDA, 2014).

At the moment, there are not many market participants in Germany. This creates an opportunity for foreign producers to enter the market. However, the Netherlands have a current market share of 92% in Germany (see chapter 2). This might make it difficult for anyone trying to enter the market directly.

There are no payment arrangements or technical barriers to trade coconut oil in the US or Germany.

Outlook

There are 0% bound rates for the US and Germany, therefore no tariffs on organic coconut oil exists. Increasing standards on food safety, health and phytosanitary regulations are going to be the biggest challenge. Technical barriers such as size, shape, performance level, a.s.o. do not really apply to the organic coconut oil market. Becoming certified organic and following all health, safety, and sanitary restrictions is most important when accessing the US or German markets.

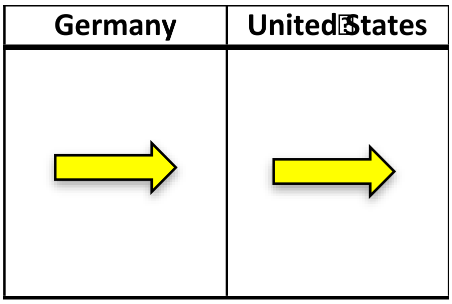


Figure 8: Market Prospect Summary Ch. 4

5 Prices

Prices at Producer Level

Based on the calculations in chapter 2 and research conducted, the following tables show the price development at the producer level for the years 2011 to 2015. Coconut trees bear fruits all year round; consequently, no seasons exist. Therefore, seasonal prices cannot be indicated. However, prices can change due to weather conditions. In this approach, FOB prices serve as a proxy of production prices. As listed in Table 13, for the past four years FOB prices ranged from US$ 829 to US$ 1,459 per metric ton (not considering 2013). 2013 is not included because one can quickly see that this year appears to be an outlier due to shortages caused by weather conditions. Ignoring that year, ranges differ by only 20%, opposed to 80% (+/- 40%) when it is included.

Table 15: Coconut Oil Production (FOB) Prices and Development 2012-2015 (in USD/MT)				
	2012	2013	2014	2015
Philippines	1,111	829	1,270	1,159
Change	-	-25.38%	53.20%	-8.74%
Source: Philippine Coconut Authority				

Table 15: Coconut Oil Production Prices and Development 2010-2014[7]

As mentioned above, the biggest development happened in 2013 when the production price dropped by over 25%, after that it increased by more than 50% in 2014. In general, the World Market price changes from 2010 to 2014 show a slightly increasing trend.

[7] The publications of the Philippine Coconut Authority data have been taken. As the main part of world production comes from the Philippines and Indonesia, this data is an assumption for the overall production price development (Philippine Coconut Authority, 2015). These reports publish the data in US$ on the basis of the recent exchange rate.

Table 16: Coconut Oil Production Prices 2015 (in USD)			
Name	min. FOB Price in US$ (per kg)	max. FOB Price in US$ (per kg)	Origin
Rejeki Sumber	3	4.99	Indonesia
KelapaTek Sdn. Bhd.	7	10	Malaysia
Africa Oil Works	7.5	8	Mozambique
BodyAll Co.,Ltd.	8.5	10	Thailand
Coconut Ingredients Sabah Sdn Bhd	3.5	4	Malaysia
L U C A S	2	9	Indonesia
hotdishes LLC	5	6	India
ORGANO IMPEX PRIVATE LIMITED	10	11	India
KNOWLEDGE N NETWORK	7	7	Malaysia
Alkins Rubber	3.8	4.1	Philippines
NIUTECH RESOURCES LIMITED	2.8	3.9	Papua New Guinea
Average	5.46	7.09	
Source:alibaba.com			

Table 16: Coconut Oil Production Prices 2015

The difference in prices can be explained with the fact that Alibaba takes into account prices of different countries of origin while ignoring the amount of production.

Prices at Wholesale Level

In the value chain below, one can see the CIF price for imported coconut oil from the Philippines and Indonesia which is outlined in more detail in the following table.

Table 17: Coconut Oil CIF Prices and Changes 2011-2015 (in USD/MT)		
Month/Year	Price	Change
Dec 2005	703.48	-
Dec 2006	674.9	-4.06%
Dec 2007	962.88	42.67%
Dec 2008	1190.27	23.62%
Dec 2009	751.98	-36.82%
Dec 2010	1123.58	49.42%
Dec 2011	1588.1	41.34%
Dec 2012	1032.42	-34.99%
Dec 2013	886.86	-14.10%
Dec 2014	1208.84	36.31%
Average 2012-2014	1167.96	-
Source: Worldbank		

Table 17: Coconut Oil CIF Prices and Changes 2011-2015

The Philippines and Indonesia make up about 70% of the production volume. The world import price of coconut oil for the years 2010-2014 averaged US$ 1,159. The average price amounted to US$ 1,208 CIF per metric ton in December 2014. This represents a 35% increase since December 2013, however, one can predict this number to drop in 2015 to align with the more recent data on FOB prices. This estimate is fairly reliable, as expected, because FOB prices are highly correlated with CIF prices. The main change happened in 2011 to 2012, when the CIF price increased by more than 30%.

In general, brokers are charging 0.5 to 2%, or a fixed price per metric ton as a margin on the final product (CBI Ministry of Foreign Affairs, 2012).

Wholesale prices highly depend on production prices and the market conditions in the supplying countries. The average price at wholesale level in 2015 is US$ 12,918 per metric ton in the US and US$ 11,481 in Germany. The price difference at this level between Germany and the US is caused by the different amounts of coconut oil sold by wholesalers (see Annex 2). At the wholesaler level in Germany and the US, the greatest increase in the value chain occurs. It is important to mention that in Germany wholesalers are only involved when they sell to small, private shops. Most of the retailers selling coconut oil are part of a retail chain and are supplied with the product by their mother company. Those have a contact person in the producing country and import coconut oil directly from the producer (see Annex 2).

At this point the price rises by over 1000% in the US and by 900% in Germany, as seen from table 18. Although there is another jump from wholesale-level to retail-level prices, the percentage change then is only 90% in the US and 100% in Germany.

Prices at Retail Level

With the help of on-site observations and visiting online shops, retail prices of all major coconut selling stores in Germany and the US were identified.

Table 21 shows the price range of 1.70€ to 3.48€ per 100ml (7.69€ per 100ml for sample sizes smaller than 100ml) sold in Germany. The average price amounts 2.24€ per 100ml (not included the sample sizes).

Table 18: Online-Shops and Retailers Investigated in Germany				
Company	**Price per 100 ml (in €)**	**Price per MT**	**Sale Location**	**Container Size (ml)**
Ölmühle Solling	2.10	21,000	Online-Ger	1000
Ölmühle Solling	2.60	26,000	Online-GER	250
Cosmoveda	1.79	17,900	Online-GER	1000
Cosmoveda	1.82	18,200	Online-GER	550
Dr. Georg	1.94	19,400	Online-GER	20000
Dr. Georg	1.98	19,800	Online-GER	10000
Dr. Georg	2.30	22,980	Online-GER	3000
Dr. Georg	2.50	24,950	Online-GER	1000
Dr. Georg	2.99	29,900	Online-GER	500
Dr. Georg	3.48	34,750	Online-GER	200
Dr. Georg	7.69	76,920	Online-GER	26
100ProBio	1.70	17,000	Online-GER	5000
100ProBio	2.07	20,710	Online-GER	1400
100ProBio	1.90	18,990	Online-GER	1000
100ProBio	2.00	19,980	Online-GER	500
Bio Planète	2.20	21,990	Online-GER	1000
Bio Planète	2.25	22,480	Online-GER	400
Bio Planète	2.50	25,000	Online-GER	200
Bio Planète	6.30	63,000	Online-GER	30
Rapunzel	2.25	22,480	Online-GER	400
Rapunzel	2.50	25,000	Online-GER	200
Alnatura	1.93	19,300	Local-GER	220
Alnatura	1.86	18,600	Local-GER	400
Vitaquell	2.49	24,900	Local-GER	200
Vitaquell	2.24	22,400	Local-GER	400
Morgenland	2.05	20,500	Local-GER	200
Morgenland	2.23	22,300	Local-GER	300
Morgenland	2.02	20,200	Local-GER	450
Kulau GmbH	2.75	27,500	Local-GER	200
Kulau GmbH	2.40	24,000	Local-GER	450
Minimum	1.70	17,000		
Maximum	7.69	76,920		
Average (without samp	2.24	22,436		

Table 18: Online-Shops and Retailers Investigated in Germany

Prices in health food stores are higher than in organic supermarkets. The German consumer requires stability of prices, which forces the retailer to maintain prices at the same level regardless the price variations on the purchasing side. Coconut oil can be stored for up to three years so prices do not change due to shortages (see Annex 2).

In the US, organic coconut oil prices range from US$ 0.84 to US$ 6.83 per 100 ml. The average price amounts US$ 2.77 per 100ml. In the US, both organic and non-organic coconut oil are sold. The non-organic coconut oil is cheaper than all organic coconut oils, costing US$ 0.73 per 100ml. This is due to the certification costs.

Table 19: Online-Shops, Wholesale and Retailers Investigated in the US					
Company	**Price per 100 ml (in US$)**	**Price per MT (in US$)**	**Sale Location**	**Type**	**Container Size (in ml)**
Crisco	$0.84	$7,540.53	Local-US	Organic	798
Spectrum	$1.81	$16,281.47	Local-US	Organic	414
LouAna	$0.73	$6,583.60	Local-US	Non-Organic	887
Island Fresh	$1.56	$14,061.01	Online-US	Organic	1,597
Alpha DME	$6.83	$61,435.91	Online-US	Organic	473
Nutiva	$2.30	$20,714.49	Online-US	Organic	887
Artisana	$3.78	$34,008.49	Online-US	Organic	473
Viva Labs	$2.28	$20,523.02	Online-US	Organic	473
Tropical Conditions	$1.29	$11,651.25	Wholesale	Organic	3,785
Bulk Apothecary	$1.39	$12,483.49	Wholesale	Organic	3,785
Honeyville	$1.74	$15,693.53	Wholesale	Organic	3,785
Tropic's Best	$1.32	$11,845.29	Wholesale	Organic	3,723
Average Retail (US$/MT)	$24,937.85				
Average Wholesale (US$/MT)	$12,918.39				

Table 19: Online-Shops, Wholesale and Retailers Investigated in the US

It should be noted that the container size of the non-organic oil is comparatively large, and the most expensive organic coconut oil had a relatively small container.

Value Chain

The following figure visualizes the value chain of coconut oil for the year 2015.

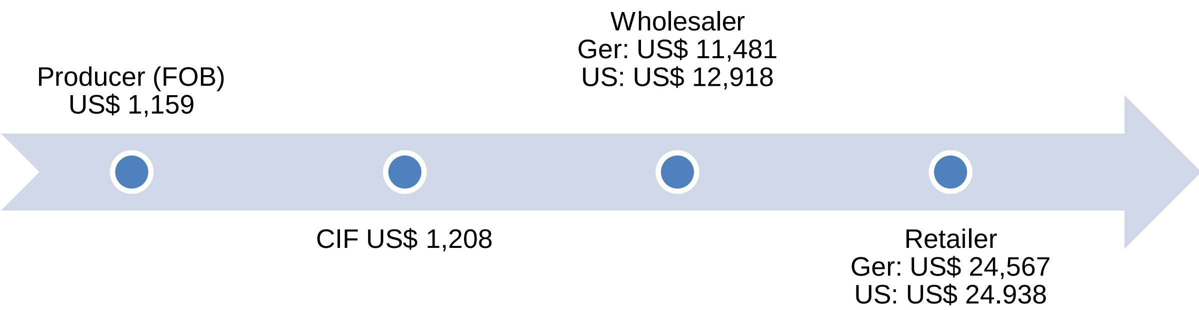


Figure 9: Coconut Oil Value Chain Germany and USA 2015 (by authors)

Due to similar and stable producer prices in Germany and the US it is implied that between 2014 and 2015 the retail prices did not change in particular.

The value chain outlines that the main increase occurs at the wholesaler level at over 1000% US and 900% Germany, with a small increase between FOB and CIF at just over 4%, and an increase between wholesale and retail at about 100% for both countries.

Outlook

Production prices are expected to fluctuate around a stable trend due to weather conditions in producing countries. i.

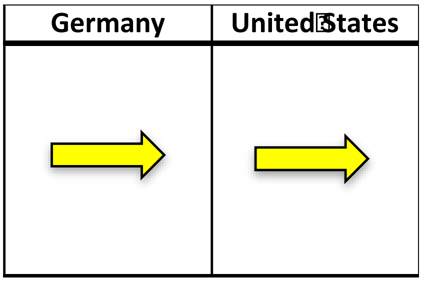


Figure 10: Market Prospect Summary Ch. 5

6 Distribution Channels

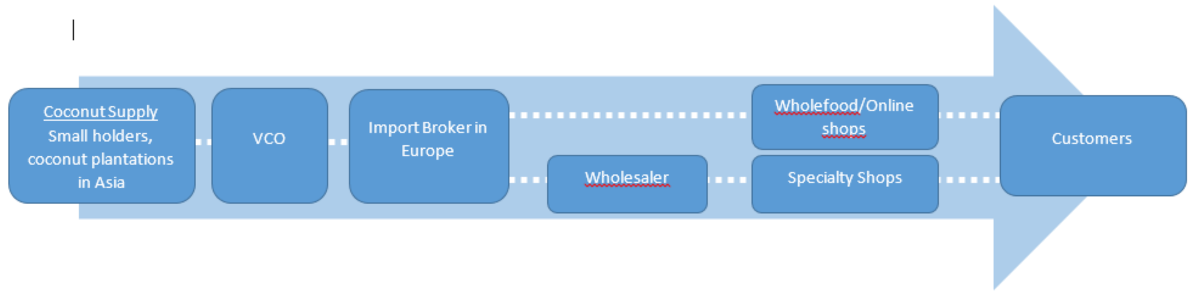


Figure 11: Supply Chain of coconut oil Germany (by authors)

Figure 11 shows the supply chain of coconut oil for Germany. The end product is shipped from the producers in Asia to Europe as coconut oil is not produced or refined in Germany in large amounts.

There are two channel options to import the coconut oil. The first one is to ship it via an export agency to brokers and wholesalers in Germany. In Germany, there are only a few wholesalers in the distribution channel that sell to small specialty shops. If coconut oil is shipped in big containers, it is repacked in Germany and brought to retailers. It can also be transported in already packed customary sizes ready for sale.

The second and more common possibility is that retailers and producers establish contact directly. Mainly big retail chains which import coconut oil by themselves directly from their partners in the producing country use this option. Customers can buy their products in their online shops or in one of their numerous retail stores in many different cities in Germany.

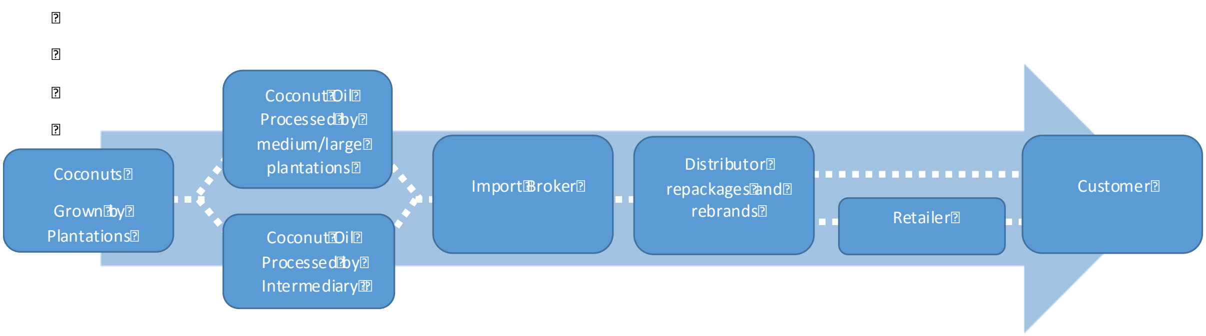


Figure 12: Supply Chain A of coconut oil US (by authors)

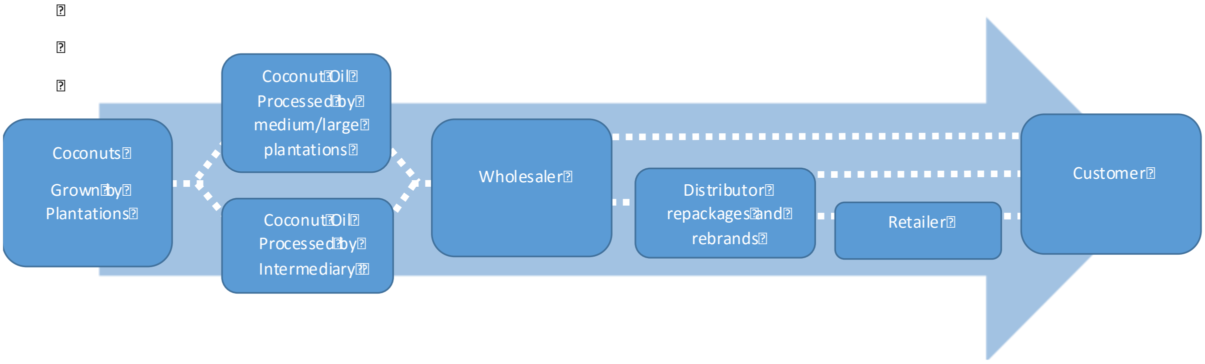


Figure 13: Supply Chain B of coconut oil US (by authors)

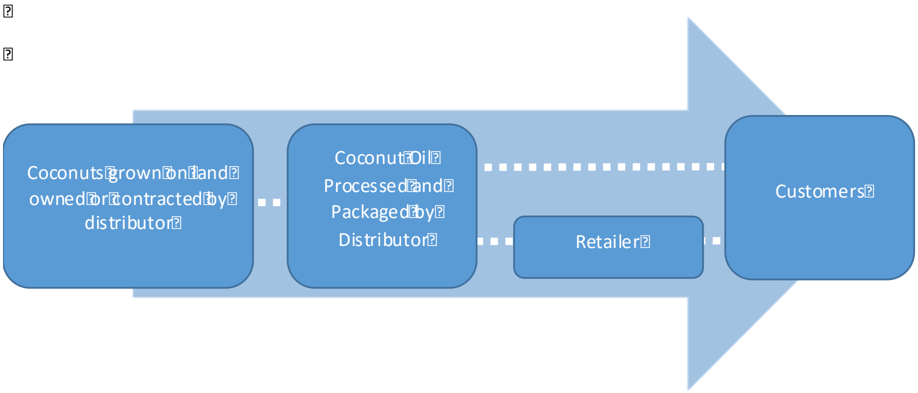


Figure 14: Supply Chain C of coconut oil US (by authors)

Supply chains in the US vary more and can be illustrated in three paths. Path A is similar to the typical supply chain in Germany and is used by companies such as Assured Organics. The import broker, Assured Organics, then sells the coconut oil to the distributors in the US. These distributors repackage and sell it to other retailers or directly to customers (see Annex 2).

Supply Chain B is more complicated as the end customers have three different possibilities to purchase the organic coconut oil: from wholesalers, distributors or retailers. Wholesale companies such as Jedwards International, Inc., import organic virgin coconut oil from Asia. Wholesalers sell their goods to distributors, retailers or directly to customers. Distributors repackage and rebrand the product before selling it to retailers or consumers, primarily online (Jedwards International, Inc., 2014).

Path C represents a supply chain found exclusively in the United States in areas like Hawaii where coconuts are grown. At this time, there are no plantations so coconuts are harvested from privately owned forest land contracted by suppliers such as Taylor's Pure & Natural. These companies process and package the organic coconut oil themselves before selling to customers. Due to the lack of coconuts, it is very rare that there is a large enough supply to work with a retailer (Taylor, 2015).

Coconut oil in Europe is mainly transported in tanks and only rarely in barrels via sea route. It is shipped overseas and transported in temperature-controlled containers in trucks or by train to and from the harbour (GDV, 2015). In the US, coconut oil is often shipped by the additional method referred to as “Bag-in-a-Box,” a package that accommodates 20 kg at a time (Jedwards International, Inc., 2014). Growing in international popularity is the utilization of 1,000 liter totes made of specially sealed and coated corrugated board produced by International Paper (Lightburn, 2015). To fill the tanks, the oil must maintain its liquid form, which requires a pumping temperature of a few degrees above 24 C. This temperature must be maintained during loading, traveling and pumping out because once the oil solidifies it cannot be liquefied again. It must also be kept away from heating coils or water as they have a bad influence on the colour, taste, quality and consistency of the oil (GDV, 2015).

Outlook

The impact of distribution channels moderately affects the successful exportation of coconut oil. In the US, exporters have many possible channels to distribute their product to consumers, which enhances market access. Conversely, the competition in the US may lead consumers to favor established retailers over newcomers. Potential exporters to Germany will likely struggle to find big retailers to distribute their product as most vendors sell it via their own online shop. As demand in Germany increases, coconut oil will likely become available in big supermarkets like Rewe or Edeka, easing distribution channels. Currently, there is an early entry advantage exporting to Germany because of lower competition.

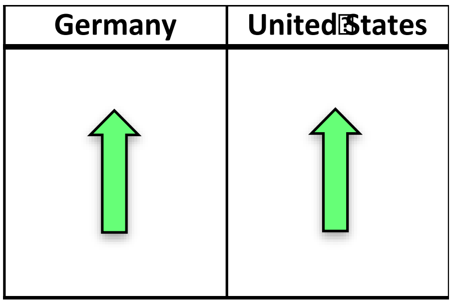


Figure 15: Market Prospect Summary Ch. 6

7 Commercial Practices

Commercial practices are similar between Germany and the United States.

The importer finds potential exporters through trade fairs or research conducted online or directly in the exporting country. E-mails and technical data sheets are used for the analysis and documentation. The first contact is usually made by the importer who contacts the producer via E-mail. The producer has to be aware and ready for the importer to visit the farms and all facilities connected to the production process, to analyze available data and to test samples. As soon as the importer decides for an exporter, both countries utilize similar business practices using formal written contracts.

Payment arrangements typically are: 50% down payment and 50% close balance when loaded on board the vessel (e.g. Indonesia Tanjung Emas Port, Semarang). Typical payment terms used are L/C, D/A, T/T, Western Union, MoneyGram or Paypal (Alibaba, 2015).

Modern ways of communication especially new online platforms such as Alibaba, which facilitate data exchange will make it easy for all participants of the supply chain to connect and avoid unnecessary middlemen.

Germany

Contacts to German buyers should be initiated by formal writings and the communication must be fast, clear and reliable. In order to find future business partners or to obtain further market information it is recommended to visit or even to participate in trade fairs. The most relevant trade fairs for coconut oil are Anuga and Biofach in Germany and Biofach (see chapter 9). The direct consumer of virgin coconut oil can be reached through health, natural and specialized stores (CBI Ministry of Foreign Affairs, 2012).

The United States

The US follows similar business practices but differs the most on regulations (see chapter 4). The most important trade fairs are Expo East and Expo West (see chapter 9).

Outlook

Common business practices are given and therefore relatively easy to adapt to for a new market participant. In the future, processes and communication might be simplified by developing better online platforms. A difficulty but at the same time an especially important aspect is to build up a long time relationship basing on trust.

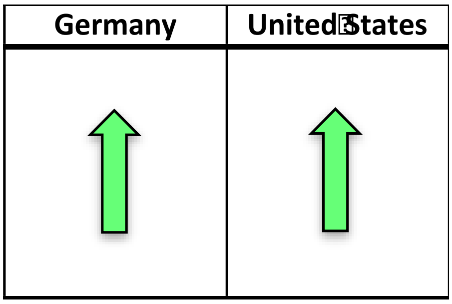


Figure 16: Market Prospects Summary Ch. 7

8 Packaging and Labeling

Packaging

The packaging conditions for shipping are the same for the US and Germany: coconut oil is transported in various types of containers (e.g. tank containers, IBC containers, flexitanks, drums) depending on volumes transported and local availability of such containers. Organic coconut oil should remain physically separated from conventional oils. To ensure the quality preservation, the drums must be cleaned and dried before the oil is loaded. It is also important to fill the drums as full as possible in order to avoid ventilation and light. This will prevent oxidation, thus rancidity which must be avoided as well. To avoid solidification, temperature must be controlled during loading, travel and pumping (Ministry of Foreign Affairs CBI, 2012 and CargoHandbook, 2012).

When buying organic food in the US, consumers expect to buy an all around ecologically friendly product, including the packaging. Therefore, the appropriate packaging for organic coconut oil at retail are glass containers, which guarantee food safety and quality and offer space for product information (Dahr, 2012).

German consumers expect the same ecological characteristics for the packaging and prefer a container size of 500 ml, which is the ideal size for a two to four-person household (see Annex 2).

Labeling

For the shipping a registration label must be attached to the container. It states the name and address of the vendor the oil came from, as well as the content of the container. Other important documents are in a packet shipped with it containing FDA certifications, Duties Fees Receipts, what Lot number (or harvest area) it came from, Spec Sheets and test results (see Annex 2).

In the US, the Fair Packaging and Labeling Act (FPLA or Act) directs the FTC and the FDA to issue regulations requiring that all "consumer commodities" must label the following:

- Net contents
- Identity of commodity
- Name and place of business of the product's manufacturer, packer, or distributor (FTC, 2015).

In addition, the following information must be included in the label for organic products:

- Name and address of the certifying agency (for organic)

- Name and address of the producer
- Nutritional information
- USDA Organic logo

Individual states may require additional notations on the label such as:

- Refrigeration or Frozen
- Sales dates, i.e. “Best if Used By,” “best before,” “best if used before,” “Sell by,” “use by,” and “use before” (Ohio Department of Agriculture, 2001).

As coconut oil needs to be certified as organic at every step of the process, the certifying agency and subsequent contact information may differ at different stages in the supply chain (see Annex 2).

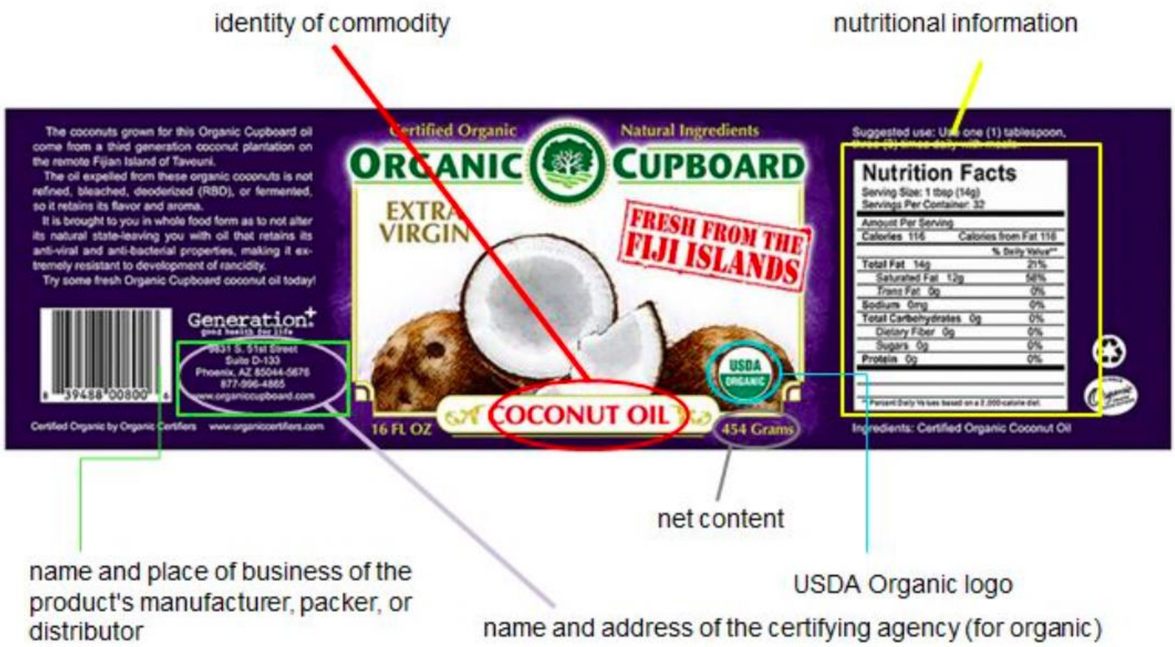


Figure 17: Label Requirements US (FTC, 2015; Lightburn, 2015 and Photobucket, 2015)

The EU and Germany have the same requirements for the labeling of organic coconut oil. These ensure the traceability of individual batches. In fact, since June 1, 2012, the US and EU have an organic equivalency agreement that allows certified organic products produced in the US to be recognized in the EU and vice versa (CCPB, (n.d.)). The language for labeling purposes is English, unless buyers indicate otherwise. Labels must include the following:

- Product name
- Batch code

- whether or not the product is destined for use in food products
- allergenic substances
- Name and address of exporter
- Best-before date
- Net weight
- recommended storage conditions.

Labels of organic coconut oil must contain the name and code of the inspection body and the certification number as well as the EU organic logo (Ministry of Foreign Affairs CBI, 2012).

Labeling is subject to discussion in the EU for several years and regulations have changed recently. Since December 2014 it is required to display nutritional information on products traded and sold within the EU (EUFIC, 2012).

Figure 18: Label Requirements Germany (Kokosoel, n.d. and Ministry of Foreign Affairs CBI, 2012)

Outlook

The packaging requirements for the shipping of coconut oil are similar in Germany and the U.S. as the compliance with specific conditions for the transport are crucial to keep a high quality of the coconut oil. Compared to the US, Germany requires more label information for organic products. In addition, German labeling must meet the EU regulations, which requires for a short time to provide nutritional information until latest December 2016. This shows that there is still a lot of regulatory work to come within the EU in order to find a unitary system for all European countries and there might be more changes in the future (EUFIC; 2012). The issue within the U.S. is that labeling requirements can differ from state to state. In addition, it is possible that stricter labeling rules will be introduced in the future in both countries. Therefore, there is no real consistency of the labeling requirements for both countries, however, the US-EU equivalency agreement makes labeling requirements much easier as certified organic products are mutually accepted in the US and Germany.

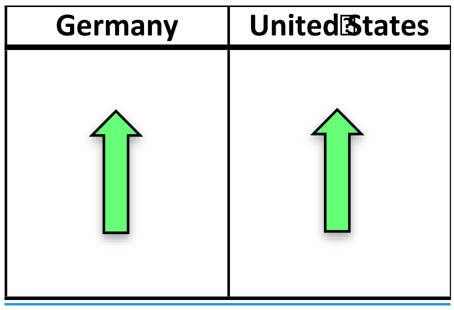


Figure 19: Market Prospects Summary Ch. 8

Sales Promotion

The most common types of sales promotion for coconut oil are trade fairs and exhibitions. Exporters are able to advertise their products and to establish new contacts by participating in the major trade fairs and exhibitions listed below.

Trade Fairs and Exhibitions

Germany

Anuga

KoelnMesse GmbH

Messeplatz 1

50679 Köln

Contact Person: Kerstin Bernhardt (Anuga Organic Sales Manager)

Web: www.anuga.de

Tel: +49 221 8212 369

Fax: +49 221 8213 999

E-mail: anuga@koelnmesse.de

- takes place every two years in Cologne since 1951
- the media shop can be contacted to ask for personalized catalogues

Biofach Germany

Nürnberg Messe GmbH

Messezentrum

90471 Nürnberg

Contact Person: Petra Wolf (Exhibition Director)

Web: www.biofach.de

Tel: +49 911 8696 8996

Fax: +49 911 8606 8645

E-mail: info@biofach.de

- takes place during the first quarter of every year since 1990
- different online and print marketing tools to promote their products.

US

BioFach America

Baltimore Convention Center

One West Pratt Street

Baltimore, Maryland, 21201

Contact Person: Michelle Spann (Sales Manager)

Tel: +1 303 998 9940

E-mail: mspann@newhope.com

Web: www.biofach-america.com/en/

- takes place in September 2016

Natural Products Expo East

Baltimore Convention Center

One West Pratt Street

Baltimore, Maryland, 21201

Contact Person (for states west of Mississippi): Robert Eldridge (Client Service Representative)

Tel: +1 303 988 9528

Contact Person (for states east of Mississippii): Mike Behr (Client Service Representative)

Tel: +1 303 988 9080

E-mail: mike.behr@penton.com

Web: www.expoeast.com

- takes place in September 2016

Natural Products Expo West

Anaheim Convention Center

200 S Anaheim Boulevard

Anaheim, CA, 92805

Contact Person for states west of Mississippi: Robert Eldridge (Client Service Representative)

Tel: +1 303 988 9528

E-mail: robert.eldridge@penton.com

Contact Person for states east of Mississippi: Mike Behr (Client Service Representative)

Tel: +1 303 988 9080

E-mail: mike.behr@benton.com

Web: http://www.expowest.com/

- takes place in March 2016

Trade Magazines

In Germany and the US there are trade magazines which inform about current developments and changes in the organic food market and take a closer look on best practices of market participants.

Germany

Two important magazines in Germany are the BioHandel and the Foodwelt.

BioHandel

Bio Verlag GmbH

Magnolienweg 23

63741 Aschaffenburg

Tel: +49 221 8212 369

E-mail: info@biohandel-online.de

Web: www.biohandel-online.de

Foodwelt

Verlag Neuer Merkur GmbH

Behringstr.10

82152 Planegg

Tel: +49 089 3189 050

Fax: +49 089 3189 0538

E-mail: info@food-welt.de

Web: www.food-welt.de

US

Two important magazines in the US are the WholeFoods Magazine and the Specialty Food Magazine.

WholeFoods Magazine
WFC, Inc.
51 Cragwood Road, Suite 100
South Plainfield, NJ 07080
Phone: +1 908 769 1160
Web: www.wholefoodsmagazine.com

Specialty Food Magazine
Specialty Food Association
136 Madison Ave
New York City
Phone: +1 646 878 0301
Web: www.specialtyfood.com

Outlook

There are several opportunities for traders in both the US and Germany to promote their product and to inform themselves about the market. In both countries big trade fairs have been taking place for several years and will most likely exist in the future and offer an optimal occasion to connect and to inform about the relevant organic coconut oil market. Besides, there are associations that help importers and exporters to connect and magazines and papers issued regularly which give important insights into the market. This information offers the ideal basis for strategical decisions and also is a good possibility to advertise products or services.

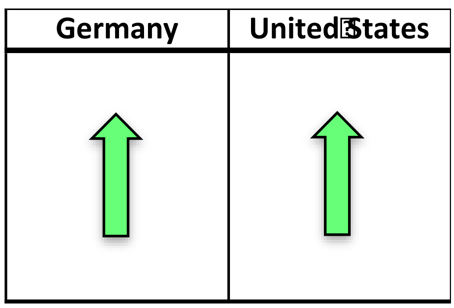


Figure 20: Market Prospects Summary Ch. 9

9 Market Prospects

Germany

Since coconuts do not grow in Germany, almost every company imports coconut oil and just a few produce coconut oil domestically. A few big players control the import into Germany. It is unlikely that any substantial changes in competition will happen in the near future. Due to free trade possibilities in Europe, there is a possibility that other European countries may take up a higher share of imports.

Prices throughout the supply chain have not fluctuated much in the past five years and are predicted to remain stable. Only CIF prices varied a lot in the past but as it has only a relatively small influence in the value chain it does not affect the stability of the overall price. Important for a stable price in the future is that there will be no significant natural disasters. Any natural disaster could potentially negatively affect the harvest of the world's producers of coconut oil; especially natural disasters affecting the Philippines and/or Indonesia. This would lead to a rise in prices.

Consumption has been slowly increasing. As consumers become more and more aware of the health benefits of coconut oil, consumption will most likely increase further. Therefore, domestic firms are likely to enter the market and search for foreign producers in order to meet the demand.

Customers of coconut oil continue to be the food and cosmetics industry, vegans and vegetarians, and health-aware persons. Besides food and cosmetics industry, the health aware young women form the most relevant customer segment.

Any changes to current trade agreements could affect exports to Germany. However, as tariffs already are at 0%, the TTIP for example would not create additional benefits.

Recent attempts to regulate coconut plantations for oil do not apply to the cultivation of coconuts destined for the production of organic coconut oil. The latter are grown on small plantations complying with organic regulations and no forest clearance is used. However, the regulations for palm oil plantations could at some point also affect the coconut cultivation.

The United States

The market for coconut oil in the US is roughly six times bigger than in Germany. Similar to Germany, the amount of domestic production is too low to be included in statistical data. Imports of coconut oil to the US have increased almost constantly over the past five years and stable conditions indicate an ongoing growth potential.

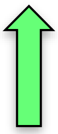
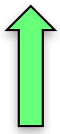
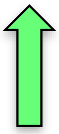
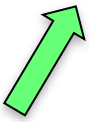
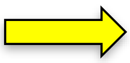
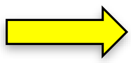
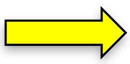
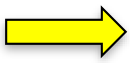
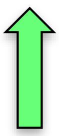
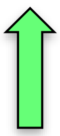
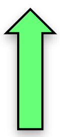
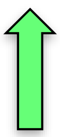
The Philippines and Indonesia have been the leading exporters for the past five years, with a market share of roughly 85%. Potentially, with the current push for organic and environmentally friendly products, there may be opportunities for new entrants, but it will be difficult to throw out the long-standing incumbents because of their year-long experience. Whereas Germany trades a lot with its European neighbour countries, the US re-exports less than 10% of its coconut oil. Consumption is predicted to increase due to the same reason as in Germany, new national competitors are likely to enter the market.

The US has a strong, growing demand for organic products. Not only is the country as a whole beginning to favor organic items more, but the wave is more prevalent in the younger generation. According to a 2014 Gallup poll, as much as 45% of Americans are actively trying to include organic produce in their diet, with that number rising up to 53% in 18 to 29 year olds (Riffkin, 2014). The faster companies can partner with the farmers and get them to produce organic coconut oil, the larger foothold those companies will have in importing organic coconut oil into the United States.

In both countries, trade fairs are expected to remain popular as they are important in establishing new business relations, especially in the field of organic products.

Market participants do not see major technological advances coming that might change the processing of coconuts in the future. However, other tropical regions might enter the market for coconut oil, thus increasing supply.

As the table shows, the market prospects are quite positive for both countries, Germany and the US. In both countries the demand for coconut oil is rising as well as the demand for organic products in general. Regarding the competitive situation, it can be easier for a new market entrant to find access to the German market. On the other hand, in the US the access to distribution channels seems to be easier. However, as a future market participant, one should keep in mind that natural disasters are unpredictable and can have a strong effect on the business. All in all, entering both Germany and the US seems to be a promising business.

Table 20: Market Prospects Synopsis		
Germany	**USA**	**Chapter message**
		**2: Production, Trade, Consumption:** Green Arrow: Situation is expected to become more attractive for potential exporters to the target market due to increasing worldwide production and rising imports
		**3: Market characteristics:** Increasingly attractive due to the increasing health awareness of both populations. The German market might be slightly more attractive as it is still in its infancy and has more growing opportunities.
		**4: Market Access:** Remains the same because there are no recent changes in tariff or non-tariff barriers. The standards are not changing either in the near future.
		**5: Prices:** Remains the same as exporters have to face unpredictable weather conditions but do not pass it on to the retailer level.
		**6. Distribution:** Increasing attractiveness in the US due already well developed distribution channels. Within Germany there is no well-developed infrastructure for the distribution but it might get easier in the future.
		**7: Commercial Practices:** Outlook appears increasingly attractive given the industry standards that streamline the export of organic cotton and the added protection gained by internationally accepted standards and practices put into place by global cotton associations.

↑	↑	**8: Packaging and Labeling:** Attractive as packaging for shipping has not a lot of requirements for labeling.
↑	↑	**9: Trade Promotion:** Increasingly attractive due to the numerous opportunities for traders to promote their product at annual exhibitions and conferences. Moreover, there are many associations, which release annual reports.

Table 20: Market Prospects Synopsis

References

Adams, K. (2014). *Consumers going nuts over coconut oil*. Retrieved November 04, 2015, from USA Today, http://goo.gl/EKYSSV

Alibaba (2015). Coconut Oil. Retrieved November 12, 2015 from http://goo.gl/izn49O

Anuga (2015a). *Ausstellersuche*. Retrieved November 14, 2015, from http://goo.gl/qo6Omr

Bawalan, D. and Chapman, K. (2006). *Virgin Coconut Oil.* Retreived November 24, 2015, from ftp://ftp.fao.org/docrep/fao/009/ag094e/ag094e00.pdf

Biofach (2015). *For Exhibitors.* Retrieved November 17, 2015, from https://www.biofach.de/en/exhibitors/

BioHandel (2015). *Über uns.* Retrieved on November 16, 2015 from http://www.biohandel-online.de/ueber-uns.html

Bioverlag (2015). *Der Kauf von Bio-Produkten ist Vertrauenssache.* Retrieved December 04, 2015 from http://www.bioverlag.de/mediadaten/m3klang/M3klang2014-ArtikelVertrauen.pdf

CargoHandbook (2012). *Coconut Oil*. Retrieved November 19, 2015 from http://www.cargohandbook.com/index.php/Coconut_Oil

CBI Ministry of Foreign Affairs (2012). *Coconut Oil in Germany.* Retrieved October 31, 2015 from https://www.cbi.eu/sites/default/files/study/product-factsheet-coconut-oil-germany-vegetable-oils-oilseeds-2012.pdf

CBI Ministry of Foreign Affairs (2014). *CBI Product Factsheet: Virgin Coconut Oil in the EU and EFTA*. Retrieved October 31, 2015 from https://www.cbi.eu/sites/default/files/study/product-factsheet-virgin-coconut-oil-europe-vegetable-oils-oilseeds-2014.pdf

CBI Ministry of Foreign Affairs (2015a). *CBI Product Factsheet: Coconut Oil in the Netherlands.* Retrieved October 31, 2015 from https://www.cbi.eu/sites/default/files/product-factsheet-netherlands-coconut-oil-2015.pdf

CCPB, (n.d.) Certification. Retrieved December 14,2015 from http://www.ccpb.it/en/blog/2012/05/08/usda-nop/

Central Statistics Office (2014). *NACE Coder.* Retrieved October 28, 2015, from http://www.cso.ie/px/u/NACECoder/NACEItems/searchnace.asp

Cesar Virata & Associates (CVAI), 2006. Sanitary and Phyto-Sanitary Regulations: FDA (2015). *United States Food and Drug Administration, FDA Food Code*. Retrieved November 9th from http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/default.htm

Coghlan, H. (2012). *Coconut Cultivation and Plantation Machinery*. S.l.: Hardpress.

Dhar, Rajiv and Seidel, Kathrin. 2012. *Packaging for Organic Foods*. Page 18-23. November 17, 2015

EC (n.d.). *Economic partnership agreements*. Retrieved November 08, 2015 from http://trade.ec.europa.eu/doclib/docs/2013/april/tradoc_151010.pdf

EC.Europa (2015). *TARIC-Information*. Retrieved November 08, 2015 from http://goo.gl/T1hlcc

eCFR (2015). *Electronic Code of Federal Regulations.* Retrieved November 12, 2015 from http://goo.gl/q0R23A

EUFIC (2012). *Nutrition labelling becomes mandatory in Europe.* Retrieved November 19, 2015 from http://www.eufic.org/article/de/artid/Nutrition-labelling-becomes-mandatory-in-Europe

Expo East (2015). *General Information.* Retrieved November 18, 2015 from http://www.expoeast.com/ee16/public/enter.aspx

Expo West (2015). *General Information.* Retrieved November 18, 2015 from http://www.expowest.com/ew16/public/enter.aspx

Export.gov (2013). *U.S. Free Trade Agreements.* Retrieved November 09, 2015 from http://export.gov/FTA/index.asp

FAO (2015). *Standard for named vegetable oils.* Retrieved February 19, 2015 from
http://www.fao.org/fao-who-codexalimentarius/standards/list-of-standards/en/

FAO (2016). *Codex Alimentarius.* Retrieved February 19, 2015 from http://www.fao.org/fao-who-codexalimentarius/en/

Federal Trade Commision (2015). Labeling & Nutrition Guidance Documents & Regulatory Information. Retrieved November 17, 2015 from https://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/fair-packaging-labeling-act

Fife, Bruce (2006). *Virgin Coconut Oil: Nature's Miracle Medicine*. Colorado Springs, CO: Piccadilly Books, Ltd.

FoodNavigator. Organic food sales grow 11% in 2014 with politically, geographically diverse shoppers. Elizabeth Crawford, 20-Apr-2015. Retrieved November 5, 2015 from http://www.foodnavigator-usa.com/Trends/Organics/Organic-food-sales-up-11-2014-politically-geographic-diverse-shoppers

Foodwelt (2015). *Start.* Retrieved on November 16, 2015 from http://www.food-welt.de

GDV (Gesamtverband der deutschen Versicherungswirtschaft e.V.) (2015). *Coconut Oil.* Retrieved November 07, 2015 from http://www.tis-gdv.de/tis_e/ware/oele/kokosoel/kokosoel.htm

Goodwin, A.C. (2005). *Reevaluation of short-term recognition studies*. Journal of Cognition, 9, 225-229. Retrieved from http://ojs.lib.swin.edu/cognition." Importance to Trade, 8. Retrieved from http://pdf.usaid.gov/pdf_docs/Pnadh587.pdf

Gupta, S.K. (2012). *Technological Innovations in Major World Oil Crops, Volume 1. Breeding.* New York: Springer.

Ho, A. (2011, November 16). *US firm to boost coco oil imports* from Philippines. Retrieved November 9, 2015, from http://business.inquirer.net/30741/us-firm-to-boost-coco-oil-imports-from-philippines

IndexMundi (2015*). Coconut Oil Monthly Price - US Dollars per Metric Ton.* Retrieved November 10, 2015 from http://www.indexmundi.com/commodities/?commodity=coconut-oil&months=60

IndexMundi (2015). *Coconut Oil Production by Country in 1000 MT*. Retrieved October 30, 2015, from http:// www.indexmundi.com/agriculture/?commodity=coconut-oil&graph=production

International Trade Centre (2015). *TradeMap.* Retrieved October 27, 2015, from http://www.trademap.org/Index.aspx

Jedwards International, Inc. (2014). *Bulk Coconut Oil- Virgin Organic.* Retrieved November 10, 2015, from: http://www.bulknaturaloils.com/oils/plant-oils/certified-organic-bulk-natural-oils/coconut-oil/bulk-coconut-oil-virgin-organic

Kelapo (2015). *Why Coconut Oil?* Retrieved November 5, 2015 from https://kelapo.com/coconut-oil-benefits/

Kokosoel. n.d. *Kokosöl.* Retrieved November 19, 2015 from http://goo.gl/seu9RF

Kopfnuss (2014). *Kokoswasser.* Retrieved October 29, 2015, from http://goo.gl/aTYML2

Mahr, K. (2012). *Why the Coconut Craze Isn't Helping Farmers*. Retrieved November 6, 2015, from http://business.time.com/2012/12/05/why-the-coconut-craze-isnt-helping-farmers/

Nährwertrechner.de (n.d.). *Nährwertampel für Kokosfett*. Retrieved December 6, 2015, from http://www.naehrwertrechner.de/naehrwerte-details/Q550000/Kokosfett/

Oeko-fair (n.d.). *Palmöl in Lebensmitteln.* Retrieved December 07, 2015 from http://www.oeko-fair.de/index.php/cat/1497/title/Palmoel_in_Lebensmitteln

Ohio Department of Agriculture: Food Safety Division. 2001. *Labeling Requirements.* Retrieved November 18, 2015 from https://goo.gl/TCVxUa

Organic Products (n.d.). Retrieved November 15, 2015, from http://www.intracen.org/itc/sectors/organic-products/

Pelletier, S. (2015). *Is Coconut Oil Good For Dogs?* Retrieved October 26, 2015, from http://goo.gl/bwUJSU

Philippine Coconut Authority (2015). *Price watch.* Retrieved November 11, 2015, from http://www.pca.da.gov.ph/price.php

Photobucket (2015). *Organic Cupboard - Coconut Oil Label.* Retrieved November 19, 2015 from http://s101.photobucket.com/user/cooperdesignstudio/media/OrganicCupboardCoconutOilLabel.jpg.html

ResearchGate (2014). *Fruit System*. Retrieved October 29, 2015, from http://www.researchgate.net/post/What_will_happen_when_we_partially_replace_6mm_aggregate_with_coconut_shell_pieces_in_flexible_pavement_design

Rieger, M. (2006). *Introduction to Fruit Crops (Crops Science)*. New York: Haworth Press, Inc.

Samoa: Conference highlights benefits of organic agriculture. (2014, October 1). Retrieved November 14, 2015, from http://www.globalorganictrade.com/news.php?idx=197

Staats, J. (2009). *Kokosöl Unterschiede.* Retrieved October 27, 2015, from http://www.kulau.de/blog/was-ist-ein-hochwertiges-natives-kokosnussoel

Statista (2015). *Umsatz mit Bio-Lebensmitteln in Deutschland in den Jahren 2000 bis 2014 (in Milliarden Euro).* Retrieved November 04, 2015 from http://de.statista.com/statistik/daten/studie/4109/umfrage/bio-lebensmittel-umsatz-zeitreihe/

Tariffdata.WTO (2015). *Integrated Database (IDB) notifications.* Retrieved November 09, 2015 http://tariffdata.wto.org/TariffList.aspx

Taylor, D. (2015). Personal interview conducted on November 11, 2015

TheVeganSociety (2015). *Definition of veganism*. Retrieved November 04, 2015 from https://www.vegansociety.com/try-vegan/definition-veganism

Transport Information Service (2015). *Cargo information about coconut oil.* Retrieved November 07, 2015, from http://www.tis-gdv.de/tis_e/ware/oele/kokosoel/kokosoel.htm

UN Comtrade Database (2015). *Extract data.* Retrieved October 30, 2015, from http://comtrade.un.org/data/[8]

UNCTAD (2012). *Coconut.* Retrieved October 29, 2015, from http://goo.gl/wwmy3v

UN Statistics Division (2015a). *Correspondences for ISIC Rev.4 code 1040.* Retrieved October 28, 2015, from http://goo.gl/FD98tN

UN Statistics Division (2015b). *Detailed structure and explanatory notes SITC Rev.4 code 422.31.* Retrieved October 28, 2015, from http://goo.gl/rw8jNR

United Nations Conference on Trade and Development (2015). *INFOCOMM - COMMODITY PROFILE COCONUT*. Retrieved November 10, 2015, from http://goo.gl/PNEAG5

United States Census Bureau (2013). *2012 NAICS Definition.* Retrieved October 28, 2015, from http://www.census.gov/cgi-bin/sssd/naics/naicsrch

Universal Lexikon (2012). *Anuga.* Retrieved November 17, 2015, from http://universal_lexikon.deacademic.com/

USDA (2014). *Importing Goods.* Retrieved November 10, 2015, from http://www.usda.gov/wps/portal/usda/usdahome?navid=IMPORTING_GOODS

USDA (2015). *Organic Certification*. Retrieved on November 10, 2015 from http://www.ams.usda.gov/services/organic-certification/international-trade

USITC (2015). *2015 U.S. Tariff and Trade Data for a specific product.* Retrieved November 10, 2015 https://dataweb.usitc.gov/scripts/tariff_current.asp

USTR (2015). *Office of the United States Trade Representative, Generalized System of Preferences (GSP)*. Retrieved November 08, 2015 from https://ustr.gov/issue-areas/trade-development/preference-programs/generalized-system-preference-gsp

[8] To retrieve data from Comtrade, different steps have to be done. Therefore, no specific links can be provided here.

Utopia (2015). *Kosmetik ohne Pamöl.* Retrieved December 07, 2015 from https://news.utopia.de/ratgeber/kosmetik-ohne-palmoel/

VEBU (2015). *Anzahl der Vegetarier.* Retrieved November 04, 2015 from https://vebu.de/themen/lifestyle/anzahl-der-vegetarierinnen

Waynesworld (n.d.). *Photo-Illustration of a Germinated Coconut.* Retrieved October, 29, 2015, from http://waynesword.palomar.edu/images/cosprt6b.jpg

WTO (2015). *Understanding the WTO, Fairer Markets for Farmers*. Retrieved November 8th, 2015 from https://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm3_e.htm

Yahia Kazuz, Elhadi (2011). *Postharvest Biology and Technology of Tropical and Subtropical Fruits: Cocona to Mango*. Philadelphia: Woodhead Publishing Limited.

Zoll (2015). *Allgemeines*. Retrieved November 08, 2015 from http://www.zoll.de/DE/Fachthemen/Zoelle/Zolltarif/Allgemeines/allgemeines_node.html

Zielinski, E. (2014). *Top 25 Coconut Oil Uses and FDA Controversy*. Retrieved November 11, 2015, from http://www.betterwayhealth.com/blog/top-25-coconut-oil-uses-fda-controversy/

Annex 1: Selected Potential Importers

Germany

All Organic Trading GmbH
Heisinger Str.45
87437 Kempten
Web: www.aot.de
Contact Person: Franziska Breisinger (responsible for oils and fats)
Tel: +49 831 9609 8663
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Gutenbergring 37
22848 Norderstedt
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Coconut Business GmbH
Fritz-Sauter-Str.10
86637 Wertingen
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Davartis
Nordweststr. 14
35794 Mengerskirchen
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28876 Oyten
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Gourvita GmbH
Adam-Opel-Str.19
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Fax: +49 6074 4844 109
E-mail: service@gourvita.com

Henry Lamotte Oils GmbH
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Tel: +49 421 5239 460
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lifefood Rohkost AG
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95666 Mitterteich
Web: www.lifefood.de
Tel: +49 9633 4006 890
Fax: +49 9633 4006 8919
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Makana Produktion und Vertrieb GmbH

In den Birkenwiesen 15
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Merkur Handel GmbH
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40470 Düsseldorf
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Violey GmbH
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E-mail: ken@assuredorganics.com

Hayes Specialties Corporation
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Nature's Way
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Fax: +1 805 383 4010
E-mail: contact@organicfiji.com

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5609 West Sligh Ave.
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Tel: +1 813 888 9400
Fax: +1 813 881 1512
E-mail: rockeytrading@yahoo.com

Tropical Traditions, Inc.
POB 333
Springville, CA 93265
Web: www.tropicaltraditions.com

Ultimate Superfoods, Inc.
5455 Endeavour Ct.
Moorpark, CA 93021
Web: http://ultimatesuperfoods.com
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E-mail: info@ultimatesuperfoods.com

Other Useful Addresses

Germany

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53179 Bonn
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E-mail: info@ble.de
Bundesministerium für Ernährung und Landwirtschaft (BMELV)
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53123 Bonn, Germany
Web: www.bmel.de
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US

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Tel: +1 310 445 2000
E-mail: ati@american-trading.com

Organic Trade Association
444 North Capital Street NW Hall of States, Suite 445A
P.O. Box 547
Washington D.C., 20001
Web: www.ota.com/
Tel: +1 202 405 8515
E-mail: mmarez@ota.com

World

International Trade Center
Palais des Nations
1211 Geneva 10
Switzerland
Web: www.intracen.org
Tel: +41 22 730 0111
Fax: +41 22 733 4439
E-mail: http://www.intracen.org/contactus/
The ITC dedicates several pages to organic products. The "Organic Link" tool has a vast database of businesses with the possibility to narrow-down the search to coconut oil. The ITC also publishes technical papers relating to organic products, which are useful for both importers and exporters in order to gain key insights into current and future trends, internationally or for particular countries (Organic Products (n.d.)).

Companies Contacted

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Annex 2: Findings from interviews with key market players

Germany

Shipping/warehousing

There are two options to ship the coconut oil to Germany:

- in 300 Liter (or bigger) containers via the searoute to Europe and with the help of a broker to the retail markets
- in retail packaging via the searoute directly to the retail markets

Import

There are two possibilities to import the coconut oil to Germany:

- Hire an export agency that takes care of the importation with the help of a broker
- Buy the coconut oil directly from the producers in the countries of origin

Every vendor selling coconut oil, has its own dealer consequently, there are no big key players but multiple small ones in the German market.

Besides that, there are no specific import dispositions as it is a vegetable product. One must only stick to the fatty acids profile in order to have the allowance to call it coconut oil. The fatty acids profile is regularly controlled in order to assure compliance and quality.

Because of the long storage life of coconut oil (up to three years) and the yearlong coconut supply there are nearly no capacity bottlenecks.

Packaging

In Germany, customers favour both 500ml and 1000 ml.

Prices

Prices vary in the German market only on the supply-side as the German consumer requests price stability. The retailers stick to this wish and do not pass price fluctuations on to the consumers. Reasons for price fluctutations can arise from changes in the production process, higher prices of the raw material (e.g. caused by Typhoons) or from exchange rate risks (trade in US$)

The highest price increase occurs at the European border due to the high tariffs in Germany.

Consumers

Typical coconut oil consumers are:

- people 45+, with a higher interest in a healthy diet to prevent diseases
- Appearance of a younger target group following a vegeterian or vegan diet

- People with a high affinity to the internet → younger generation seeking for a healthy lifestyle
- People with a higher income and education
- Cosmetics industry
- Food industry

Demand Trends

Since 5 years, interest in coconut oil has been raising because of its health benefits. However, it is still not very popular as German grocer and wholesalers are not very innovative, thus it is a niche product. Only wholefood shops have it always in their assortment of goods as their consumers have a different perception and want to be healthy.

Competitors:

In Germany, only European competitors exist as there are only a few brands. There are many vendors in the overall coconut oil market.

United States

Demand Trends

Generally, customers look for organic coconut oil in or from the United States with the USDA Organic Logo and some look for a Kosher or Halal certification. In addition, the labels Vegan, Fair Trade, Non-GMO and Gluten-free are important as well.

Packaging

Glass jars are more appealing to eco-friendly consumers but require more expensive lids to keep the oil from leaking out of them when/if the oil liquefies in shipment. Plastic jars or tubs of coconut oil, even if labeled BPA Free, are easier to seal but many consumers worry about both chemical leaching and the impact of plastic on the planet. The size preference in the U.S. market is 16oz (473ml) and 32oz (946ml). The new rise in entrepreneurial endeavors by a younger generation of bakers and chefs has seen a slight rise in bulk sizes.

Shipping

Many buy premade or pre-imported amounts of coconut oil from a few select importers and package the same coconut oil in different retail packaging. The same coconut oil could be used for a wide variety of brands. Raw coconut oil is shipped via container ship in large sealed 55-gallon drums and tested before and after shipment by both the FDA and third party labs. This insures that the oil is safe and has the high quality the company asked for.

Consumers

The demographic of the natural food industry is typically 30% male to 70% female. However, this is might change as coconut oil becomes more popular. The demographic of purchasing consumers at retail stores and online shops is on average 45% male and 55% female.The age of the average coconut oil consumer is broad. Highest to lowest:

- 25-34: 25.27% (This group purchases more items than any other)
- 35-44: 25.05% (Second in both items and money spent.)
- 45-54: 18.81% (This group although smaller spends more money than any other.)
- 55-64: 16.08%
- 18.24: 7.79%
- 65+: 7.00%

Labeling

The only label is a registration label with name, address of the vendor the oil came from and information on what is inside the container. The other important documents are in a packet shipped with it containing FDA certifications, Duties Fees Receipts, what Lot # (or Harvest area) it came from, Spec Sheets, test results, and everything else is pretty much in this packet.

Future scenarios

Worst scenario that already happened is the occurrence of typhoons. A natural disaster is probably a very realistic scenario. Another would be other tropical regions begin producing coconuts. Around 80% of the coconuts imported into the US come from the Philippines so any supply problems there affect the market in the US. The most likely scenario is the market should see a rise in coconut oil production as farms get back on their feet.

Annex 3: Results of the Consumer Survey

The consumer survey was conducted with the help of Dr. Goerg, a company selling mainly coconut products online. In total, 550 participants took part in the survey during a period of three weeks. The participants are all facebook-followers of Dr. Goerg.

The survey consists of 14 questions including questions about the consumer (age, gender and location) as well as buying-behaviour and usage of coconut oil. The questions were only closed questions.

As the following talbe shows, 92% are female and the main participants are aged between 26 and 35. Mostly, coconut oil consumers are omnivore meaning they eat everything. Furthermore, they prefer glas to plastic containers with 1000ml.

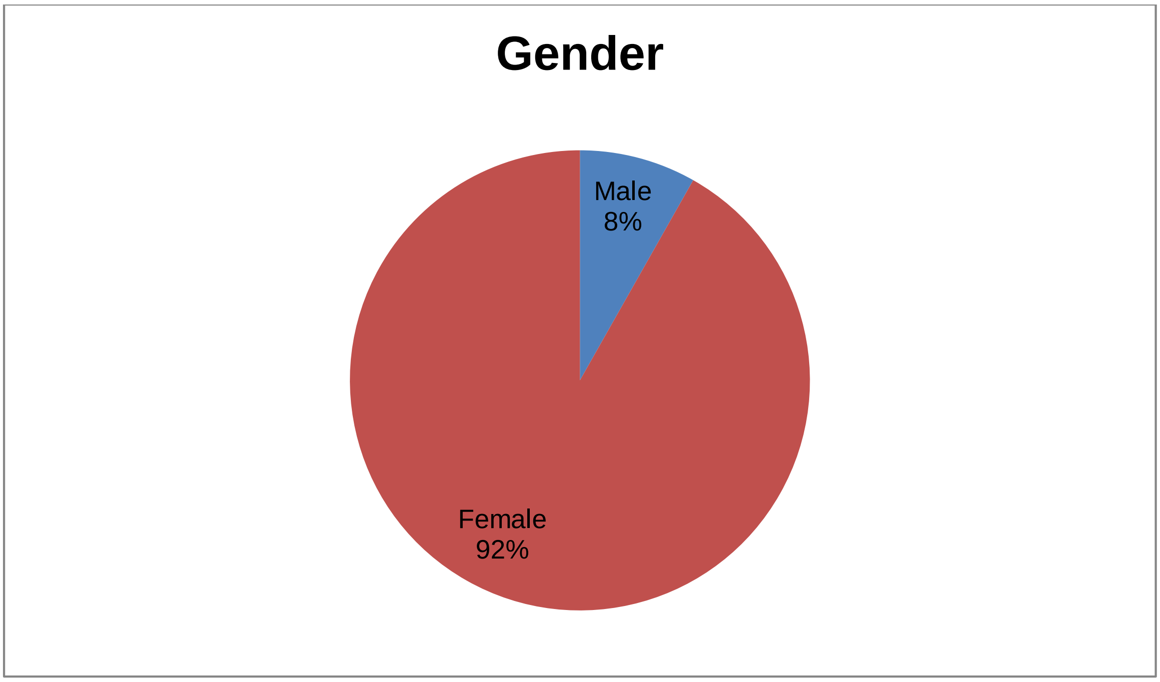

Figure 21: Consumer Survey - Gender

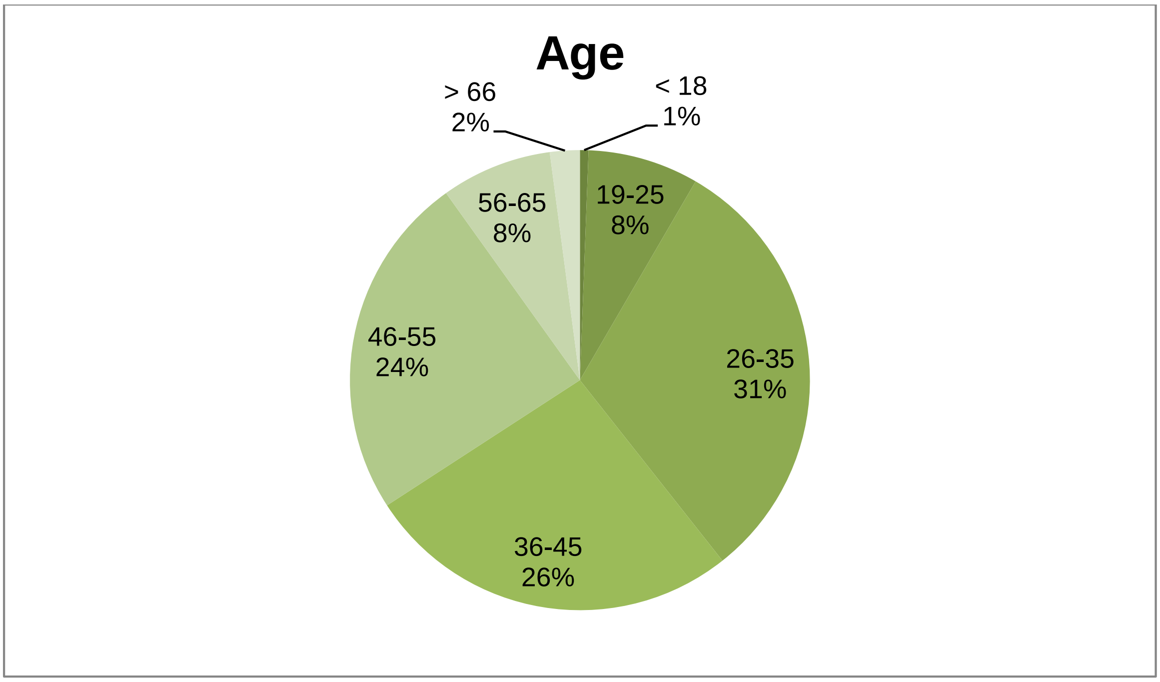

Figure 22: Consumer Survey - Age

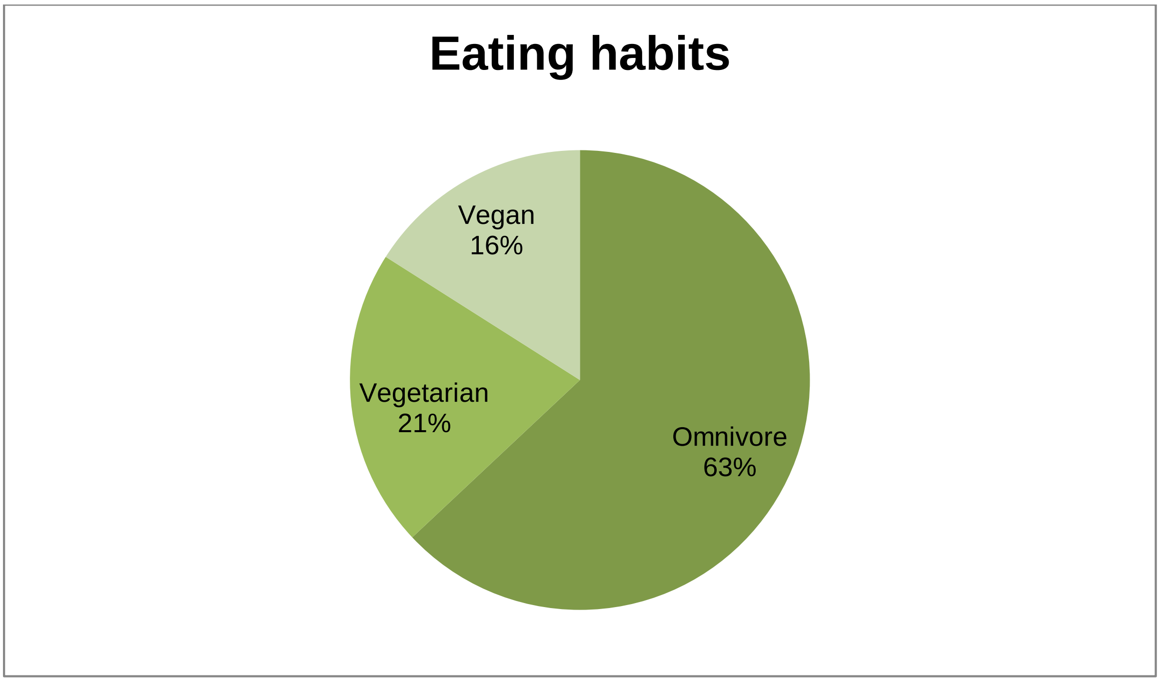

Figure 23: Consumer Survey - Eating Habits

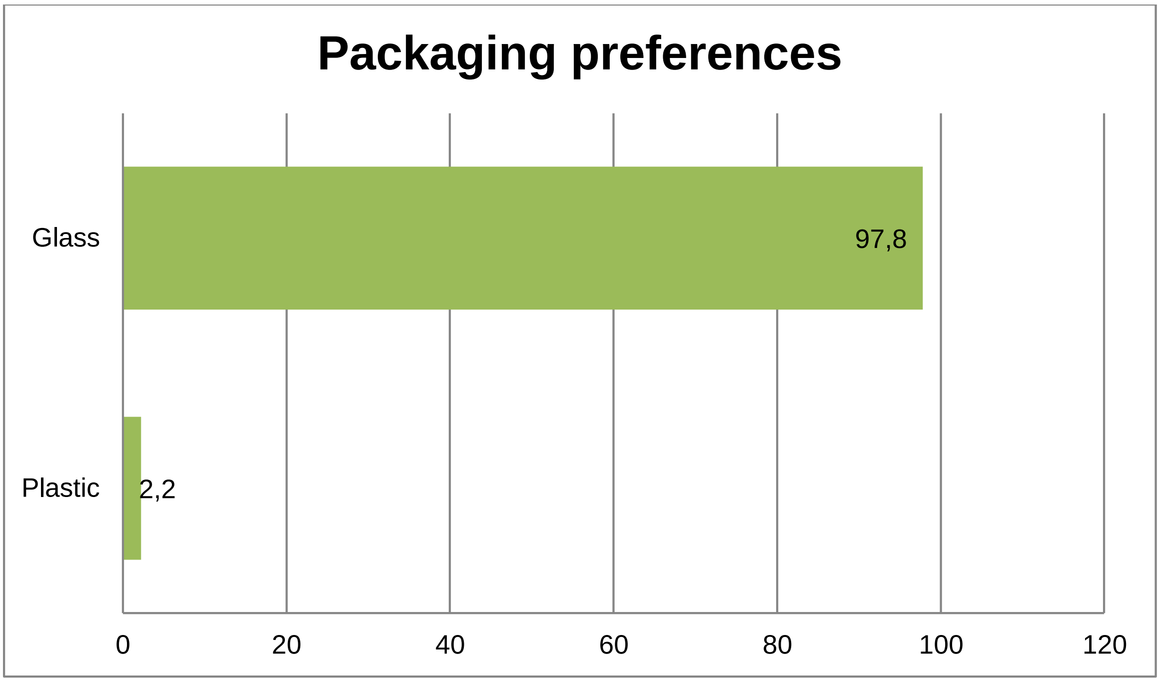

Figure 24: Consumer Survey - Packaging Preferences

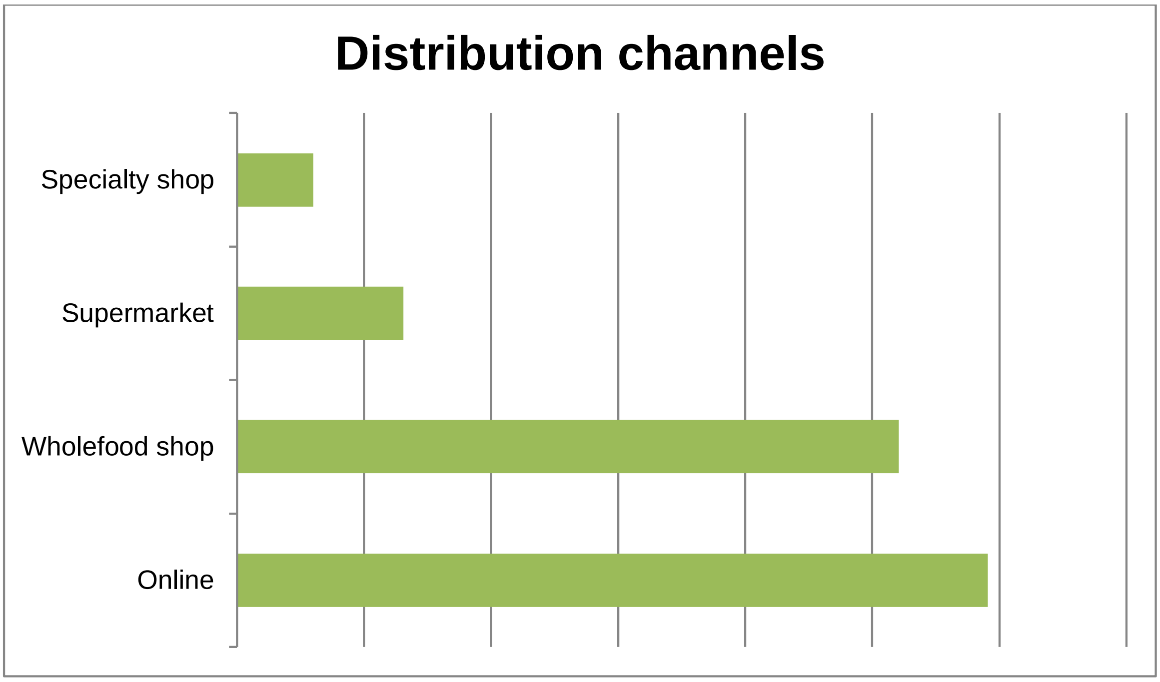

Figure 25: Consumer Survey - Distribution Channels

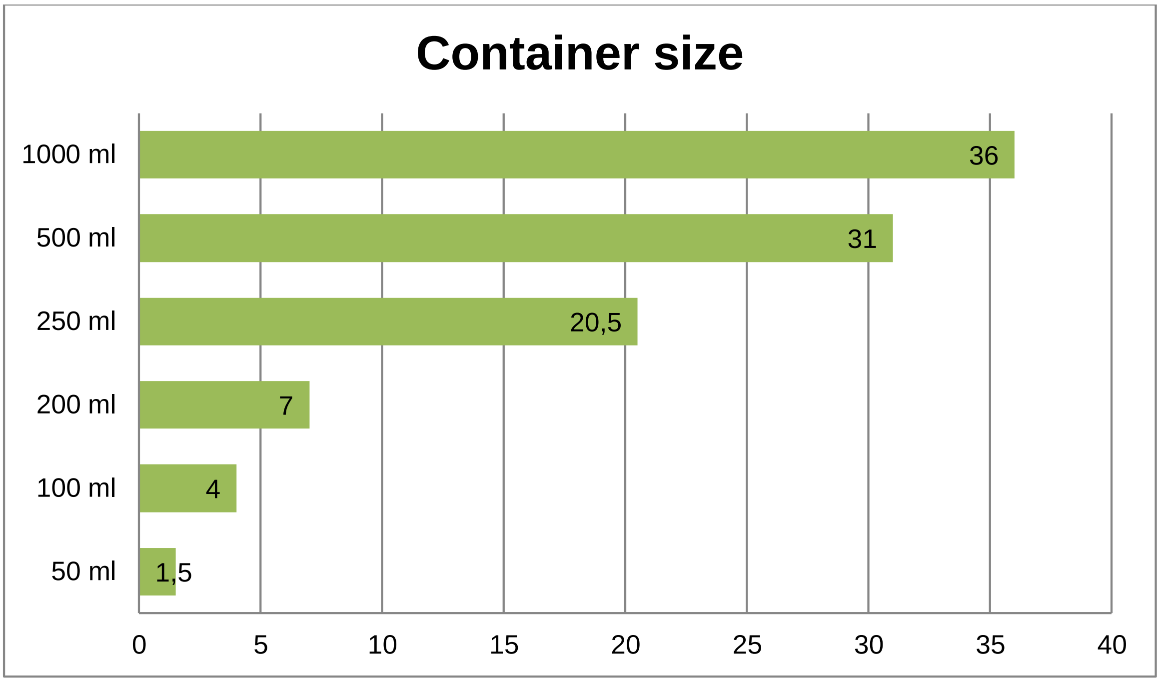

Figure 26: Consumer Survey - Container Size