



COLOPHON

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Cover photo:

• Palm oil plantations in Guaviare, Colombia

Colophon photo:

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About this report

This report has been commissioned by the IUCN National Committee of The Netherlands (IUCN NL). The underlying research was conducted in late 2022, early 2023. Most data is over a five-year period: 2017-2021. Part of the trade data concerns 2022.

The research was conducted by Sarah Drost and Marco T. Garcia of AidEnvironment. Funding sources are The Dutch Ministry of Foreign Affairs, NICFI and the European Climate Foundation. To reference this report: IUCN NL and AidEnvironment (2023) Uncovering the supply chain: Palm oil from Colombia to the EU. Researched by Sarah Drost and Marco T. Garcia of AidEnvironment. The recommendations were written by IUCN NL.



IUCN NL is the Dutch National Committee of the International Union for the Conservation of Nature, the world's largest and most diverse environmental network. Its mission is to safeguard nature as the foundation for all life on earth. Stimulated by its partners in Latin American, African and Asian producing countries, IUCN NL has been advocating for responsible agro-commodities over the past 15 years. Its team of experts advises civil society organisations, governments, business and finance on issues of agro-commodity governance, nature conservation and environmental human rights.

aid environment About AidEnvironment

AidEnvironment is a sustainability research, strategy and implementation organisation working to achieve transformative sector change. The not-for-profit organisation produces actionable insights and implements sustainable solutions to help protect and restore ecosystems and improve livelihoods in agricultural and forest landscapes across Asia, Africa and Latin America.

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ACRONYMS AND TERMS

CSDDD Corporate Sustainability Due Diligence Directive

EU European Union **FFBs** Fresh fruit bunches

FMCG Fast-moving consumer good

HS Harmonised System

ILPCs Indigenous peoples and local communities

IUCN NL International Union for the Conservation of Nature, Netherlands Committee

MMaE Ministry of Mines and Energy

MT Metric tons

OECD The Organization for Economic Cooperation and Development

QGIS Geographic Information System

RDM Real-time Deforestation Monitoring

TBML Trade-based Money Laundering

UML Universal Mill List

UNGPs UN Guiding Principles on Business and Human Rights

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1.INTRODUCTION

This report presents the findings of research on the Colombian palm oil supply chain potentially linked to deforestation and other environmental and social impacts, from Colombian oil palm plantation level until European consumption. This research is relevant in the context of two upcoming EU legislative initiatives: the Deforestation Regulation and the Corporate Sustainability Due Diligence Directive.

Objectives and rationale

The aim of this study is to clarify to what extent deforestation-linked palm oil from Colombia enters the EU market. AidEnvironment has, in collaboration with IUCN NL, mapped the full palm oil supply chain from plantation level in Colombia to European consumption level, by identifying key supply chain actors and their linkages, trade flows, and purchase of Colombian palm oil products in the EU. The research combined the outcomes of this mapping exercise with realtime monitoring of oil palm plantations with heightened deforestation and other social and environmental risks. The data comes from Colombia's major palm oil producing regions, covering almost the entire region east of the Andes (Cordillera oriental). The number of hectares planted per region are[1]: Meta (195,600 ha), Casanare (61.156 ha), Cundinamarca (4848 ha), Vichada (5155 ha), Aruaca (200 ha), and Caqueta (72 ha).

A focus on deforestation and exploitation in the Colombian palm oil supply chain is increasingly relevant. First, as a supplier to the EU, Colombia will be subject to upcoming EU legislative initiatives, notably the EU Deforestation Regulation and the Corporate Sustainability Due Diligence Directive (CSDDD). Secondly, signs indicate that illegal clearances in Colombia are on the rise. Colombia lost more than 174,000 hectares of woodland in 2021 to illegal clearances. It was reportedly "the country's worst year for deforestation since 2018 and the second year in a row that the amount of land lost had increased, putting the country's climate mitigation targets, indigenous communities and countless species of flora and fauna at risk"[2].



Two relevant upcoming EU legislative initiatives

The EU regulation on deforestation free products (Deforestation Regulation) and the Corporate Sustainability Due Diligence Directive (CSDDD), jointly aim to address commodity-linked deforestation and forest degradation, as well as protection of the rights of Indigenous peoples and local communities. Under the scope of the Deforestation Regulation are palm oil, soy, beef, cocoa, coffee, and timber, and their derivatives. The European Commission reports the following as "the largest share of EU-driven deforestation: palm oil (33.95 percent), soy (32.83 percent), wood (8.62 percent), cocoa (7.54 percent), coffee (7.01 percent), and beef (5.01 percent)"[3]. Rubber was added in the final scope[4] of the regulation that was adopted in December 2022[5]. For the CSDDD, commodity companies will need to better manage sustainability-related matters in their operations and value chains regarding to social and human rights, climate change, and the environment. The Deforestation Regulation needs to complement the legislative initiative on corporate sustainability due diligence processes, while the requirements of the CSDDD "go beyond the requirements of the deforestation regulation, they apply in conjunction."[3]

^[1] Fedepalma (2022). La palma de aceite en Colombia. Link to website.

^[2] Financial Times (2022). Colombia's battle against Amazon deforestation ... Link to article.

^[3] European Commission. (2021). Proposal for a regulation of the European Parliament ... Link to document.

^[4] Council of the European Union. (2022). Proposal for a Regulation of the European Parliament and ... Link to document.

Colombian palm oil

Colombia leads the Latin American market of sustainable palm oil[6]. While oil palm production has not been a significant direct driver of deforestation, a complex interplay of cattle production, palm oil production, and illegal crops, indirectly drives deforestation and conversion. In November 2017, Colombia was the first country to sign a national zero-deforestation declaration for the palm oil sector[7]. Moreover, in 2019, an estimated 27 percent (406,000 MT) of all palm oil produced complies with a voluntary certification standard, including Rainforest Alliance, Roundtable on Sustainable Palm Oil (RSPO) and the International Sustainability and Carbon Certification (ISCC)[6]. In 2021, certified palm oil covered 28 percent of the total Colombian production. This is a high percentage compared to Indonesia and Malaysia, the major palm oil producers, that respectively have 19 and 23 percent of their total production certified[8].

Drivers of deforestation

Cattle ranching has been identified as the primary cause of deforestation, while the expansion of oil palm plantations mainly takes place on pastures[9]. This dynamic raises the question whether palm oil production is pushing cattle into untouched areas, which would make it an indirect driver of deforestation. In Colombia, the expansion of palm oil plantations mainly has been associated with the conversion of scrublands, croplands, and savannas[10,11]. These land use changes have significant impacts on biodiverse ecosystems, as they destroy much needed biological connectivity in the landscape and increase the water stress causing environmental conflicts with communities.

In addition to deforestation, environmental degradation and social impacts (e.g., labour exploitation, land grabbing, and displacement) linked to oil palm production are in particular prevalent in Latin America. Social impacts linked to the years of internal conflicts and displacements are specifically relevant in Colombia[12].

Northern Colombian Amazon

In recent years, illegal expansion of oil palm plantations has been documented in the Colombian Amazon, mainly in the northern part[13]. This expansion by unknown actors is observed primarily in southwest Meta and northern Guaviare. Research conducted in 2020 found that cattle ranching and mechanised agriculture of palm oil and other crops, along with illegal roads and illicit coca crops[14] are increasingly spreading in the Amazon state of Guaviare[15]. Criminal armed groups may pay peasants to cut down forest and plant coca[16].

- [6] Solidaridad (2020). Colombia leads the Latin American market of sustainable palm oil. Link to article.
- [7] Solidaridad (2018). Colombian producers sign first national zero-deforestation agreement for palm oil. Link to_article.
- [8] Solidaridad (2021). Colombia further increases sustainable palm oil production in 2020 and ... Link to publication.
- [9] Murillo-Sandoval, P.J. et al. (2023). The post-conflict expansion of coca farming and ... Link to article.
 [10] Ramirez-Contreras, N. E. et al. (2020). The GHG emissions and economic performance of the Colombian ... Link to article.
- [11] Furumo, P. R. and Aide, T.M. (2017). Characterizing commercial oil palm expansion in Latin America... Link to article.
- [12] Kuepper, B. et al. (2021). Latin American Palm Oil Linked to Social Issues, Local Deforestation. Link to report.
- [13] Fedepalma (2021). Palmicultura y deforestación en Colombia: balance positivo e importantes retos ... Link to publication.
- [14] Rojas Hernández, T. (2020). 'En 5 años perdimos 500.000 hectáreas de bosque y recuperadas, cero'. El Tiempo. Link to article.
- [15] Pardo Ibarra, T. (2020. Palm oil, coca and gangs close in on Colombia's Indigenous Nukak Makú. Mongabay. Link to article.
- [16] Semana. (2020). Mafias pagan 5 millones de pesos por hectárea deforestada en el Meta. **Link to article**.

An analysis by FCDS (*La Fundación para la Conservación y el Desarrollo Sostenible*) found that at least 250 ha of oil palm was planted in forested areas in Guaviare. In the absence of effective law enforcement, oil palm plantations have also started to encroach illegally, yet unhindered into the Indigenous territory (*resguardo*) Reserva Natural Nukak[17]. In the Chocó Forest, indiscriminate logging and smallholder cultivation of coca, palm oil, and bananas are causes of primary forest loss[18,19]. Deforestation fragmentation in the forest edges is also linked to large-scale palm oil production.



Colombian deforestation laws and regulation

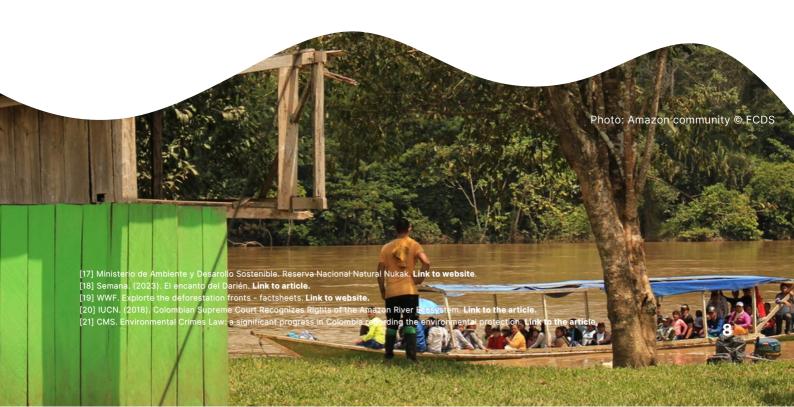
The rights of the Amazon

The Supreme Court of Justice in Colombia, through Judgment T4360-2018, declared the Amazon an 'entity subject of rights', determining that national, regional and municipal authorities must adopt a short, medium and long-term action plan to protect the Colombian Amazon. The ruling was issued in response to the critical situation of the Amazon, which is facing alarming rates of deforestation, as well as the absence of adequate actions and protection measures by the Colombian government. The Inter-generational Pact for the Life of the Colombian Amazon (PIVAC) aims to reduce deforestation and greenhouse gas emissions, while incorporating nature conservation components into municipal territorial planning and effectively enforcing measures within the Amazon basin[20].

Environmental crimes according to the Colombian law

Deforestation is prohibited by Colombian law. In 2021, the president enacted the Criminal Code Law 2111 of 2021. Among the most noteworthy main changes are newly included criminal offenses, such as:

- · wildlife trafficking and the illicit management of exotic species
- deforestation, as well as the promotion and financing of deforestation
- damage to natural resources and ecocide
- financing land grabbing of areas of special ecological importance
- illegal appropriation or financing the appropriation of the country's wastelands[21].



Deforestation risk versus actual deforestation

A key scientific study of Pendrill et al. (2022), that has been used as a basis underlying the scope of commodities defined under the EU Deforestation Regulation, found 126,072 hectares of deforestation risk linked to oil palm production in Colombia between 2005 and 2018. This number places Colombia just after Indonesia and Malaysia in this period (figure 1).

The Pendrill deforestation risk data requires some nuance and explanation. First, deforestation risk (Pendrill data) is not similar to actual deforestation, as 'risk' is dependent on several variables, for instance on how much intact forest is still standing. Because of this, deforestation risk can be very low in areas where all vegetation is already cleared for agribusiness. Second, while the 2022 Pendrill study is recent, it is based on rather outdated data gathered between 2001 and 2018. It could therefore well be that Colombia scores high on the deforestation risk ranking in the Pendrill data because the forest loss particularly occurred in the early period (e.g. from 2001) covered by the Pendrill data. The case studies in this report will show that 10 to 20 years ago, many Colombian forests were already cleared and converted into areas that are now being used as oil palm plantations. So it is hard to say from these data sources whether Colombia continues to have a high risk of palm oil associated deforestation since 31 December 2020: the cut off date of the EU Regulation. This study goes deeper into this question through the six case studies on page 31 through 47 of this report.

Palm oil producing country	Deforestation risk 2001-2018 (ha)	% of total deforestation risk
Indonesia	5,196,348	87%
Malaysia	634,274	6%
Colombia	126,072	4%
Papua New Guinea	66,081	1%
DR Congo	56,248	1%
Other countries (38)	65,458	1%
Total	6,277,933	100%

Figure 1: Top 10 countries with most deforestation risk (ha) associated with palm oil production. Source: Pendrill, F. et al. (2022). Deforestation risk embodied in production and consumption of agricultural and forestry commodities 2005-2018. Link to article.

2. APPROACH AND METHODS

In this study, we have used two approaches:

- 1. Trade data analysis, including the mapping of the physical trade flows by identification of the palm oil supply chain's collection points, mills, traders and refineries; the key exporting and importing companies; and the main buyers and fast-moving consumer good companies (FMCGs) using the palm oil. Where data was available, we have included trade data flows over a period of five years, between 2017 and 2021, and if possible from 2022.
- 2. **A case studies approach**, linking six oil palm plantations in Colombia with (recent) deforestation and other social and environmental impacts to European palm oil operators[22] and traders. AidEnvironment and IUCN NL have developed an appropriate set of criteria for the selection of cases (based on social and environmental violations, locality, legality of land use).

2.1 Trade data analysis

To analyse palm oil trade flows and the main importing and exporting companies, we have used European trade statistics[23] between 2017-2021 and two different sources of shipping data: Panjiva shipping data[24] between February 2017 – February 2021 and Seair shipping data[25] between 1 January 2020 – 31 May 2022 for Harmonised System codes 1511 (palm oil), 151329 (refined palm kernel or babassu oil); and 230660 (palm oil cake)[26]. Prior to analysis, we have cleaned the datasets, e.g. by removing errors and grouping into parent companies. Other than trade data, we have used a variety of existing sources.

2.2 Palm oil mill analysis

To identify the main mills and refineries linked to the key exporters and importers of Colombian palm oil, we have made use of company websites, but above all of publicly available mill lists. Most palm oil traders and consumer goods companies publicly share a list of their palm oil supplying mills worldwide. According to the public mill list of AAK, for example, the company sources palm oil products from several mills in Colombia. The mill list of AAK includes references to their geolocation[27]. We used these lists to develop a clear picture of the exact locations of all palm mills in Colombia's main palm oil producing regions, located mainly east of the Andes, exporting to European importers.

We have prepared a database with 81 Colombian mills linked to palm oil buyers (traders and FMCGs) and have plotted all mills in a geographic information system (QGIS). The database was shared in an Excel file with IUCN NL and a summary is provided in annex 1. This 'mill list' of AidEnvironment (81 mills) is more elaborate than the Universal Mill List (UML), which as 72 mills, because we also included mills from publicly available mills lists of palm oil traders and consumer goods companies.

- [22] In the EU deforestation regulation, 'operators' are those who place commodities on the EU market for the first time.
- [23] European Commission. European trade statics page. Link to website.
- [24] Panjiva. Global Trade Insights. Link to website.
- [25] Seair. Import Export Data, Global Trade Data of 120 Countries. Link to website.
- [26] These are the HS codes defined by the EU under the scope of the EU Deforestation Regulation. Note that HS code 151321 (Crude palm kernel or babassu oil) was not covered in the available Panjiva data set. Moreover, in the Seair data set, 271,182 MT of palm oil and pam oil products was registered without a label, i.e., could not be assigned to a specific buyer.
- [27] AAK. Public mill list September 2021. Link to list.

Moreover:

- We have categorised the mills into company groups, while the UML has only partly done this.
- We have attached more information to the mills, e.g. on certification status, and on social and environmental impacts and controversies.
- Most relevant, we have attached information on buyers linked to the mills, retrieved from all the latest available palm mill lists from palm oil traders and FMCG companies.

There are also a few limitations to the mill lists:

- The mill lists publicly shared by palm oil buyers are not static, and they change every year (sometimes two to four times a year). We have used mill lists of 2022 when available, and otherwise 2021 lists.
- We cannot identify customers of biofuels and power generation, since they do not publish publicly on palm oil mill lists. Considering the increased focus on the biofuel markets, these are important stakeholders not covered in this study.
- Palm oil companies have no uniform reporting on the mills. Some of them do not mention exact locations, for example, only Colombia.
- Palm oil companies publish mill lists with errors in it, for instance incorrect UML codes or incorrect geolocation coordinates.
- Some mills cannot be identified by UML codes (blank records).

2.3 Case study approach

In the second stage of the study, AidEnvironment and IUCN NL have developed six case studies in close collaboration. AidEnvironment has covered part of this research under its Real-time Deforestation Monitoring project. We have used existing literature and knowledge gathered from difference sources, including information on deforestation, misconduct, land ownership, land conflicts, producers, traders and investors, to link six oil palm plantations in Colombia with recent deforestation and other social and environmental impacts to identified European palm oil operators and traders.

Crucial to the case study approach was to identify and prove the physical flows of palm oil fresh fruit bunches, from the deforestation-linked oil palm plantations to the mills. This study applied a 'radius monitoring approach' [28] to link deforestation-linked oil palm plantations with palm oil mills and companies. Due to its limited shelf life, fresh palm fruits, which are picked every ten to twelve days, need to be transported to the mills within 24 hours after collection. According to some sources, palm fruits should be harvested and sent to the extraction plants within six to twelve hours, which "requires great operational interdependency and thus geographical closeness between the two processes (cultivation and extraction)" [29]. This allows for a radius monitoring approach, since it is estimated by palm oil companies that mills can only source from plantations within a 50 km radius around the mills due to the fruits' perishability (though this may vary depending on available infrastructure, such as road density and quality). This implies that satellite deforestation and fire monitoring in the area immediately surrounding a mill can reveal useful information about (smallholder) plantations within the sourcing area.

Projects related to this report

Real-time Deforestation Monitoring project

AidEnvironment's Real-time Deforestation Monitoring is an accountability system that provides timely and on-the-ground data reporting on companies' implementation of their nodeforestation commitments. Since 2018, AidEnvironment has been monitoring real-time deforestation and fires in relation to palm oil, soy, beef, leather, pulp and paper, and cocoa, and identifies responsible actors so they can be pressured to halt such practices before further clearing occurs. Through remote satellite imagery, supply chain analysis, field research, and millions of datasets, it provides data supporting stakeholders in holding companies accountable to heightened sustainability standards. This data has informed civil society advocacy, media campaigns, and legal action that help create enabling environments for corporate accountability. Past and present partners and clients include the European Climate Foundation (ECF), EU LIFE, ClientEarth, and Rainforest Foundation Norway. ECF partially funded the Colombian palm oil case studies in this report.

Forest for a Just Future

IUCN NL is a partner in Forest for a Just Future[30], funded by the Dutch Ministry of Foreign Affairs. Through this Green Livelihoods Alliance programme[31], we contribute to more sustainable and inclusive management of tropical rainforests by promoting climate mitigation and human rights and preserving the livelihoods of local communities, to tackle the drivers of deforestation and forest degradation. In Colombia, the programme addresses the issue of deforestation, forest degradation, and unsustainable management of forests and wooded landscapes, in a context of climate change, gender inequality and inequity, and threats to the protection of human rights, as well as rights related to territory and local livelihoods[32].

Amazon rights in focus: peoples and forest protection

The Amazon is the most extensive rainforest on earth. But the Colombian Amazon is at risk: the surging demand for commodities such as beef, palm oil, gold, and illicit crops trigger deforestation. Together with partner organisations, IUCN NL aims to protect the rights of Indigenous peoples and local communities in the Colombian Amazon[33]. Deforestation severely affects local communities and Indigenous territories, as they often depend on the resources the forest has provided them for generations. As a result, socio-economic inequality increases and rural communities are exposed to illegal practices, corruption and extortion. One of the main objectives is to create an observatory of environmental conflicts and unveil the dynamics of forest crimes. The programme is funded by The Norwegian Agency for Development Cooperation (NORAD), Norway's International Climate and Forest Initiative (NICFI).



3. TRADE FLOWS FROM COLOMBIA TO THE EU

3.1 Colombia's role in global palm oil production

Colombia ranks as the fourth largest global palm oil producer worldwide, after Indonesia, Malaysia, and Thailand (figure 2). The country produces around 1,838,000 MT[34] of palm oil annually (figure 3), about 2.3 percent of worldwide production. Compared to the world's largest producers Indonesia and Malaysia, which jointly produce around 84 percent of the worldwide production, Colombia's market share and scale are relatively small. However, the oil palm cultivated area in Colombia increased by 75 percent during the last ten years[35].

Moreover, there is an increase in uptake of palm oil for biodiesel industries, linked to Colombian policy that is promoting the use of biodiesel as part of carbon emission reduction goals and aim to reduce dependency on fossil fuel imports[35]. In 2021, the Colombian government increased the biodiesel blend mandate from B10 to B12 in most of the country[36,37], to promote Colombian palm oil-based biodiesel production and use. By 2030, Colombia is projected to produce 2 million MT of palm oil, increasing by around 25 percent compared to current levels, with palm oil-based biodiesel as an important and growing market[38]. The Colombian government tightly controls the Colombian fuel market, mainly through the The Ministry of Mines and Energy that has the authority to establish the biofuels blend mandates[37].

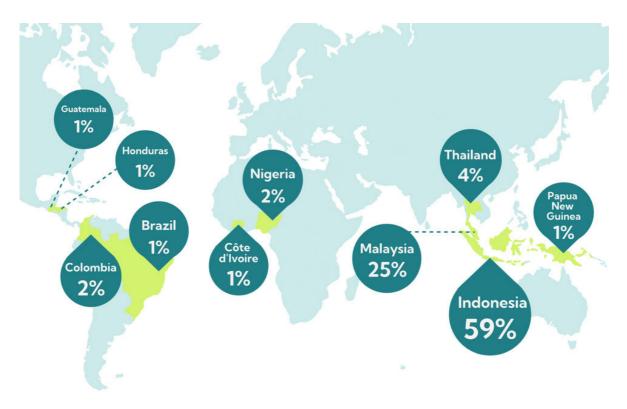


Figure 2: Top 10 global producers of palm oil. Source: AidEnvironment, based on FAS USDA[34].

^[34] USDA. Palm oil explorer. Link to website.

^[35] Chain Reaction Research. (2021). Latin American Palm Oil Linked to Social Issues, Local Deforestation. Link to report.

^[36] Biodiesel can be blended and used in many different concentrations. The most common are B5 (up to 5% biodiesel) and B20 (6% to 20% biodiesel). B100 (pure biodiesel).

^[37] USDA and GAIN. (2021). Biofuels Annual. Link to report.

^[38] OECD-FAO. (2021). Oilseeds and oilseed productions. Chapter in Agricultural Outlook 2022-2031. Link to chapter.

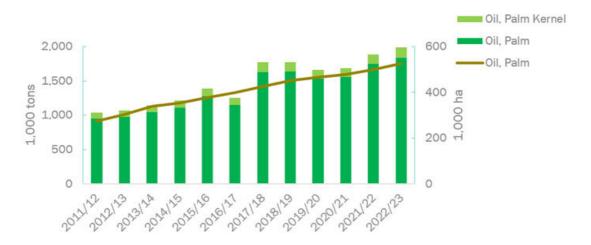


Figure 3: Development of Colombian palm oil production and harvested area. Source: AidEnvironment, based on USDA FAS [34].

In Colombia, most of the palm oil is grown in Meta (30 percent of total palm oil production), Santander (19 percent), Cesar (13 percent), Magdalena (12 percent), Casanare (6 percent), and Bolívar (5 percent) (figure 4).



Figure 4: Major palm oil producing areas in Colombia. Source: FAS USDA [34].

3.2 Colombia's role as a supplier to the EU

The European Union (EU) imported 8 million MT of palm oil and palm oil products from non-EU countries in 2021. Within the category of palm oil-related products, crude palm oil represents the largest share of both imported volumes and values in the EU, accounting for 74 percent (5.9 million MT) of the total imported volumes and 83 percent (EUR 5 billion) of the total imported value (figure 5). Palm oil cake, a residual product resulting from the extraction of palm nuts or kernels and the second largest imported palm oil product by volume, represents 18 percent (1.4 million MT) of imported volumes, but only 4 percent (EUR 248 million) of the total imported value.

Product type	Volume (MT)	%	Value (EUR)	%
Crude palm oil (HS 1511*)	5,962,492	74%	5,259,700,638	83%
Crude palm kernel or babassu oil (HS 151321)	501,728	6%	555,364,589	9%
Palm oil cake (HS 230660)	1,438,637	18%	248,628,441	4%
Refined palm kernel or babassu oil (HS 151329)	189,745	2%	243,405,947	4%
Palm nuts and kernels (HS 120710)	60	0%	417,571	0%
Total	Total 8,092,662		6,307,517,186	100%

Figure 5: Total EU imports of palm oil related products in 2021 by volume and value. Source: EU27 trade statistics[39]. *Harmonised System (HS) codes and linked palm oil products relevant for the EU are derived from annexes to the EU proposal for a regulation on deforestation-free products[40]. Babassu oil is extracted from the nuts of wild babassu palm trees growing in the Amazon region.

In 2021, the EU received 4.1 percent (241,710 MT) of its crude palm oil import volumes from Colombia. In comparison, the EU received respectively 44.6 percent and 25.2 percent of its crude palm oil import volumes in 2021 from Indonesia and Malaysia, followed by Guatemala (8.8 percent), Papua New Guinea (6.6 percent), and Honduras (5.4 percent). Colombia follows as the sixth largest supplying country of crude palm oil to the EU in 2021 (4.1 percent).

Between 2017 and 2020, the share of the EU in palm oil imports from Colombia varied between 6 to 7 percent of the total global palm oil imports, therefore the 2021 imports (4 percent) can be seen as a drop of at least 2 percent.

Next to crude palm oil, the EU also imports crude palm kernel or babassu oil from Colombia, in 2021 this was 8 percent (40,684 MT)[39]. In comparison, crude palm kernel or babassu oil largely originates from Malaysia (54 percent), Papua New Guinea (11 percent), and Honduras (10 percent).



Colombia does not play a significant role as a supplier of the three other relevant palm oil-related products to the EU: palm oil cake, refined palm kernel or babassu oil, and palm nuts and kernels. The first two products mainly originate in Indonesia and Malaysia, with 95 percent of the oil cake being imported from Indonesia and 3 percent from Malaysia. Only the Netherlands and Spain imported palm oil cake from Colombia between 2017 and 2021, but these numbers are negligible compared to Indonesia and Malaysia. In 2021, the Netherlands imported 423 MT and Spain 239 MT of palm oil cake from Colombia.

For refined palm kernel or babassu oil, 53 percent originates from Indonesia and 45 percent from Malaysia. Between 2017 and 2021, only the Netherlands, Belgium, and Germany imported limited numbers of refined palm kernel or babassu oil from Colombia, respectively 968 MT, 60 MT, and 3 MT. Finally, in 2021, the EU imported palm nuts and kernels mostly from Côte d'Ivoire (48 percent), Thailand (8 percent), and Cameroon (5 percent), but compared to the other palm oil products, these numbers are negligible in terms of volume and value, as seen in figure 5 above. In 2021, only the Netherlands imported 0.8 MT of palm nuts from Colombia.

Considering the role of Colombia and its links to the European Union, the remainder of this analysis will focus on crude palm oil (HS 1511) and crude palm kernel or babassu oil (HS 151321). The majority of exports from Colombia to the EU are unrefined raw materials, mainly crude palm oil. This is linked to the fact that it is more expensive to refine the palm oil in Colombia, compared to a European refinery. For instance, in 2000 it was calculated that the cost of refining one MT of crude oil in Rotterdam, the Netherlands was USD 36.9, compared to USD 60.3 in Colombia[41].

3.3 EU recipient countries of Colombian palm oil

In 2020, 52% of Colombia's total production of crude palm oil was destined for the domestic market and 48% for international exports[36]. With production in that year of 1,559,011 MT[42], a total of 748,325 MT was for international export, of which 57% (429,653 MT) was exported to Europe[43], and the remainder (318,672 MT) to the Latin American region, mainly to Brazil and Mexico. Colombian palm oil is mainly exported from the ports of Barranquilla, Santa Marta, and Cartagena[41].

List of top importers of	List of top importers of Colombian palm oil and palm oil products in the EU					
Top-3 EU importers	Volumes (MT)	Volumes	Values (USD)	Value		
The Netherlands	301,508	42%	274,544,077	41%		
Spain	215,712	30%	197,055,654	30%		
Italy	171,290	24%	171,452,480	26%		
Others (Germany, UK, Switzerland, France, Portugal, Sweden, Belgium)	28,486	4%	24,098,626	4%		
Total	716,995	100%	667,150,837	100%		

Figure 6: List of top importers of Colombian palm oil and palm oil products in the EU, based on Seair shipping data between 1 January 2020 and 31 May 2022.

Based on recent shipping data[44], a combined total of 78% of Colombia's palm oil and palm oil export products[45] was exported to the Netherlands (20%), Brazil (18%), Spain (15%), Mexico (14%), and Italy (12%) between 1 January 2020 and 31 May 2022. Figure 6 specifies exports to the EU (and the UK), where the Netherlands (42% of the total volumes, 41% of the total value), Spain (30% volume, 30% value), and Italy (24%, 26% value) are the major recipient countries of Colombian palm oil and palm oil products in terms of volume[46], followed by Germany, UK, Switzerland, France, Portugal, Sweden, and Belgium (non-EU countries excluded). The three major recipient countries import a combined total of 96% of all volumes from Colombia in the EU.

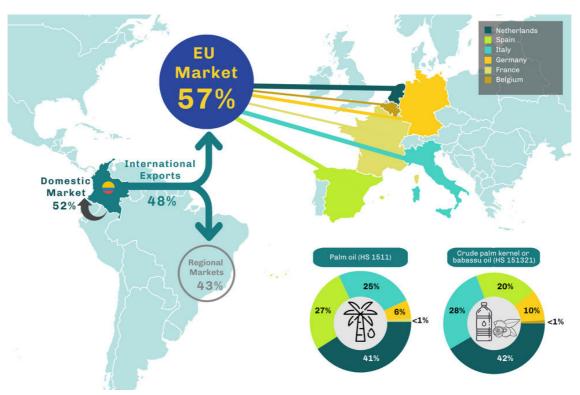


Figure 7: Palm oil trade flows from Colombia to the EU. Source: AidEnvironment, based on EU27 trade statistics (2021) for trade flows from Colombia to the EU for HS codes 1511 (crude palm oil) and HS 151321 (crude palm kernel or babassu oil) and Solidaridad (2020) for domestic and regional trade flows.

3.4 Trends in EU Colombian imports

Plotted over time, EU imported volumes of Colombian palm oil dropped considerably in 2021, but the imported value (EUR) did not follow this trend (figure 8). In 2020, around 28 percent (429,653 MT out of 1,559,011 MT) of Colombia's palm oil production was imported by EU countries. In 2021, this dropped to 14 percent (241,710 MT out of 1,747,000 MT). For EU imports of crude palm kernel or babassu oil from Colombia, there is also a decreasing trend of imported volumes but recovering values (figure 9).

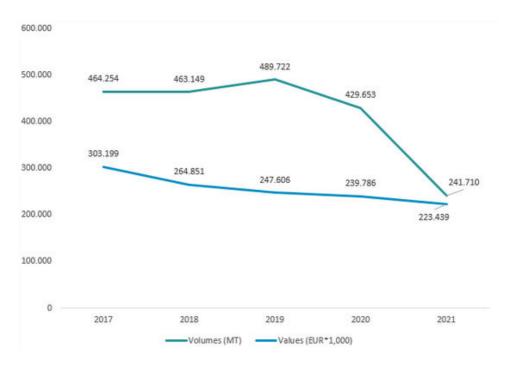


Figure 8: EU palm oil imports (HS 1511) from Colombia, by volume and value, between 2017 and 2021. Source: AidEnvironment, 2022, based on EU27 Trade Statistics.

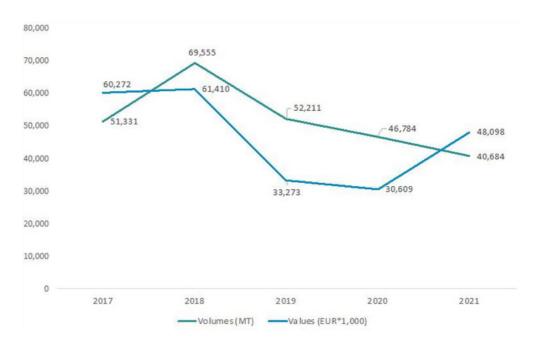


Figure 9: EU imports of crude palm kernel or babassu oil (HS 151321) from Colombia, by volume and value, between 2017 and 2021. Source: AidEnvironment, 2022, based on EU27 Trade Statistics.



The rise in imported value is likely linked to growing global prices for palm oil and palm oil products that is expected to continue. Particularly the global surge for edible oils, linked to current global crises, such as Russia's invasion of Ukraine and the blocking of export routes, increased export levies on soybean oils in Argentina, and drought in Canada, have increased the need for crude palm oil as an alternative source of oils[47]. Globally, Ukraine and Russia are the main sunflower seed producers, while the drought in Canada contributed to reduced supply of canola oil for 2022. China has been looking into alternatives for soybean oil, and palm oil is one of the preferred replacements. Moreover, Indonesia's cooking oil crisis[48] has further pushed up global demand for palm oil, resulting in high palm oil prices.

The drop of EU imported volumes from Colombia is predominantly linked to an export reduction in the Colombian palm oil market, which started in 2020[49]. In addition, the domestic market has increasingly become attractive for Colombian producers. This development is linked to favourable conditions for selling in the national market, for which producers receive a compensation, compared to paying tax fees for producers who sell to the export market. Another reason may be attributed to the EU's restrictive measures banning the use of palm oil as a raw material in biodiesel blends (RED II), which discourages imports. Moreover, the producers may anticipate the upcoming EU Deforestation Regulation.

Other reasons for the drop in EU imports, are more speculative of nature. Our findings, however, suggest that this decline could, apart from Covid-19 pandemic effects[50], be partially linked to a fall of sourcing Colombian palm oil by the company Wilmar. Recent shipping data retrieved from Seair, suggest that Wilmar sourced 50,569 MT of crude palm oil from Colombia in 2020, and only 14,986 MT in 2021: a 70 % contraction compared to 2020. This drop could partially explain some drawback in EU imported palm oil from Colombia, although it must to be taken into consideration that Wilmar also sources palm oil in Colombia through its joint venture with ADM: Olenex.

^[47] Asean briefing. (2022). Indonesia Bans the Export of Palm Oil, Impacting Global Food Prices. Link to article.

^[48] In April 2022, the Indonesian government issued a temporary ban on the exporting of palm oil products, driving up global palm oil prices. The ban sought to stabilise the availability of cooking oil within Indonesia. With palm oil Indonesia's most widely used cooking oil, the regulation followed weeks of concern over shortages of palm oil in shops and markets, which the media termed the "cooking oil crisis."

^[49] Solidaridad. 2021. Barometer on sustainable palm oil production and trade Colombia 2020. Link to report.

^[50] The effect of the pandemic in the Colombian palm oil sector is, however, questionable. According to a Solidaridad study, the sector was able to continue its production and processing activities during the country's lockdowns, despite the restrictions generated by the Covid-19 pandemic.

4. MAPPING SUPPLY CHAIN ACTORS

While analysing the key actors involved in Colombian palm oil exports and imports, the reported trade volumes and values should be considered with care, since a recent study (2023) highlighted a gap between the value of palm oil exports reported by Colombia and the value of imports reported by its trading partners[51]. Part of this gap may be caused by intentional manipulation of the value and quantity of palm oil exports. The authors reported underbilling of 151 million USD (5 % of the total export value) between 2009 and 2020, with the following countries meeting most criteria for fraudulent billing: the United States, the Netherlands, Chile, Japan and Ecuador. These are also part of the destinations receiving the majority of shipments. The 'value gap' found in the Colombian palm oil sector "could have the purpose of distorting the taxable base of the transactions or carrying out illicit financial flows, which could be directly related to the financing of illegal groups or trade-based money laundering"[52]. This was "supported by price abnormalities in the customs declarations prepared by the [palm oil] companies, which suggests that tax authorities may need to take a closer look at the companies consistently reporting abnormal values."[52]

4.1 Suppliers of Colombian palm oil

Between 2017 and 2021, Grupo Biocosta (CO), Acepalma (CO), Cargill (USA), Daabon Group (CO), and Thin Oil Products (USA) were reportedly the five major suppliers of Colombian palm oil to predominantly Europe and Latin America (see figure 10 below).

Palm exporter (Parent)	Colombian plantation companies (Department)	Volumes (MT)	Value (USD)
CI Biocosta - CO (Grupo Biocosta)	Aceites (Magdalena) Extractora el Roble (Magdalena) Extractora Frupalma (Magdalena) Palmaceite (Magdalena) Palmagro (Cesar)	595,518	342,362,211
CI Acepalma - CO	None (trader)*	488,255	291,887,435
CI Cargill de Colombia - CO (Cargill USA)	None (trader)*	199,377	114,322,747
CI Tequendama – CO (Grupo Daabon - CO)	Tequendama (Magdalena) Palmas y Trabajo (Santander) Oleaginosas Del Yuma (Santander)	152,252	93,565,913
CI Top - CO (Thin Oil Products - USA)	Nutrimezclas Y Aceites (Santander) Palmeiras Colombia (Nariño)	101,781	56,829,791

Indutrade Colombia	Indutrade (Cesar)	27,833	17,770,341	
Palmas de Tumaco	Palmas de Tumaco (Nariño)	979	507,380	
CI Oleana (EC)	None, only in Ecuador (trader)*	728	627,762	
CI Global American Exp.	None (trader)*	420	273,000	
Grasas Y Derivados (Gradesa)	Grasa y Derivados (Magdalena)	43	46,070	
Others (3)	-	63	52,385	
Total	-	1,567,250	918,245,036	

Figure 10: Top Colombian palm oil exporters and linked plantation companies between 2017-2021.

Source: AidEnvironment (2022), based on Panjiva shipping data between February 2017 and February 2021 for HS code 1511 (palm oil); company websites; palm oil mill lists 2021 and 2022. Notes: * Selected palm oil exporting company does not seem to possess and operate its own oil palm plantations and mills, but mainly sources from other plantation companies. In the case of Acepalma, which was founded by Fedepalma, its shareholders will likely operate their own oil palm plantations.

Grupo Biocosta was founded in 2007 and headquarters in Santa Marta in Colombia. The group, as indicated in figure 10, consists of five plantation companies: a refinery (BGreen), a logistical company (OLC), and an agricultural and industrial service company (Biosagro)[53]. In November 2020, Palmagro S.A. was accused of violating multiple labour rights[54], specifically in particular the right to freedom of association and the right to collective bargaining of its workers[55].

In 1991, **Acepalma** was founded by Fedepalma, the Colombian Palm Oil Federation, in Bogotá. According to Orbis, a large financial database on 400 million companies globally, Acepalma consists of 60 shareholders (typically including the majority of Colombian oil palm plantation companies) and two subsidiaries: Sociedad Portuaria Regional De Tumaco S. A. En Liquidacion and Solutrans[56]. For 2021, the group's net income was USD 5.30 million. On its website, they report 148 shareholders, all of them being oil palm growers or palm oil mills[57]. Acepalma is RSPO certified for mass balance, segregated and identity preserved and has ISCC (International Sustainability and Carbon Certification). In 2022 H1, the company lists the following palm oil mills as suppliers: Aceites Manuelita (Yaguarito), Aceites Cimarrones, Agropecuaria Santa Maria S.A. (San Martin), Entrepalmas, Alianza Oriental, Hacienda La Cabaña, Palmar De Altamira, Extractora Sicarare, Palmaceite, Extractora El Roble, Aceites, Palmeras De La Costa, Extractora Del Sur De Casanare, and Oleoflores (annex 1)[58].

^[53] Grupo Biocasta. Link to website.

^[54] Quiroz, D., Achterberg, E., Arnould, J. (2021). Sector Analysis: Latin American Palm Oil. Link to report.

^[55] Agencia de Información Laboral. (2020). Palmagro S.A. otra empresa que vulnera los derechos de sindicalización. Link to article.

^[56] Orbis. Link to website.

^[57] Acepalma. About us. Link to website.

^[58] Acepalma. (2020). Mill list first half of 2022. Link to list.

In 2018, Cargill founded **Cargill de Colombia**, marketing grains, agricultural inputs and oils through import and export. Its other business segments in Colombia include animal nutrition (Cargill Nutrición y Salud Animal) and protein business (Cargill Protein Latin America). While Cargill reportedly does not operate oil palm plantation mills or refineries in Colombia[59], the company reports to source from 31 different Colombian palm oil mills in the first quarter of 2022 (see annex 1)[60].

Grupo Daabon is a family-owned company founded in Colombia in 1914 and headquarters in Santa Marta[61]. The company operates agriculture, industry, logistics, and real estate businesses, and has presence in five continents. C.I. Tequendama is the palm oil arm of the company group, which is involved in the production, refinery, and transformation of palm oil. Reported area of cultivation is 4,038 hectares in municipalities Aracataca and El Reten (Magdalena) and Riohacha (Guajira), while it operates a refinery in Mamatoco (Santa Maria). Plantation subsidiary Palma y Trabajo, located in Puerto Wilches (Santander), is involved in milling of palm oil and palm kernel oil, and Oleaginosas Del Yuma (also in Puerto Wilches) grows oil palm on more than 3,000 ha. There is an ongoing investigation in response into an RSPO complaint against Palmas y Trabajo S.A.S, Progreso Palmero S.A.S, and Oleaginosas de Yuma S.A.S, all being subsidiaries of Daabon Group. The complaint on labour conditions was filed by the Union 'Sintrainagro Puerto Wilches' in September 2020, stating non-compliance with labour rights/laws, anti-union practices, and employees not provided sufficient protection equipment[62].

CITOP is the sister company of Thin Oil Products, a company based in the United States. CI TOP consists of two plantation companies: Nutrimezclas Y Aceites S.A.S. and Palmeiras Colombia S.A. Reportedly, the company is a marketer of palm oil and its derivatives, and for the operations they have two ports, one located in Tumaco where 15% of the operation is handled and the other in Cartagena where 84.3% of the operation is handled[63]. CI Top does not publish publicly on its suppliers.

Finally, **Indutrade Colombia**, the sixth company on the list (figure 10), is an international trader of palm oil and palm kernel oil. AAK and ADM refering to Indutrade on their public mill lists indicates that Industrade Colombia may operate a mill (Indutrade) in Cesar (La Paz). In 2021 H2, Indutrade is supplied by the following Colombian mills: Aceites, Alianza Oriental, Extractora El Roble, Palmaceite, Abago, Aceites Cimarrones, Hacienda La Cabaña, Extractora Sicarare, Extractora La Paz, and Palmeras De La Costa[64]. The company is at least supplier to LDC and Unilever[65].

Focusing on Colombian palm oil suppliers to the main recipient countries in the EU, the Netherlands, Spain, and Italy, shows that Cargill de Colombia, Daabon group (Tequendama), Biocosta, and Indutrade supply all three countries (figure 11).

^[59] Cargill. (2021). Palm Oil Sustainability Report 2020. Link to report.

^[60] Cargill. (2022). 2022Q3 Mill List. Link to list.

^[61] Daabon. Link to website.

^[62] RSPO. Palmas y Trabajo S.A.S&Progreso Palmero S.A.S & Oleaginosas de Yuma S.A.S. Link to case.

^[63] RSPO. Members: C.I. TOP S.A. Link to website.

^[64] Indutrade. (2022). Mill list second half 2021. Link to list.

^[65] LDC. (2021). H2 - 2021 Supply Chain Traceability. Link to report.

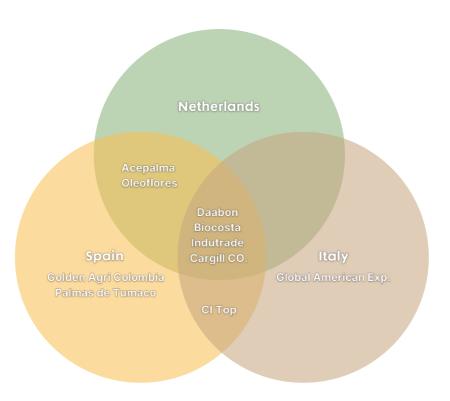


Figure 11: Top Colombian exporters to the three main recipient countries, the Netherlands, Spain, and Italy. Source: AidEnvironment, based on Seair shipping data between 1 January 2020 and 31 May 2022 for HS codes 1511 (palm oil), 151321 (Crude palm kernel or babassu oil) and 230660 (palm oilcake). Note that we only included key exporters that we discussed in the top-10 exporters above.

4.2 Buyers of Colombian palm oil

Assessing recent shipping data from 1 January 2021 through 31 May 2022, shows that key recent global buyers of Colombian palm oil include M. Dias Branco (Brazil), Unigra (Italy), Cargill (USA), Louis Dreyfus Company (LDC) (the Netherlands), Grupo Oleomex (Mexico), Pasternak, Baum & Co (USA), Wilmar (Singapore), Lipidos (Spain), Global Organic (Panama), and Golden Agri Resources (GAR) (Singapore) (figure 11).

Top 10 buyers (Feb 2017 - Feb 2021)	Volumes (MT)	%	Top-10 buyers (Jan 2020- May 2022)	Volumes (MT)	%
Wilmar (SG)	371,952	27%	M Dias Branco (BR)	184,736	22%
Cargill (USA)	236,576	17%	Unigra (IT)	129,718	15%
Pasternak Baum & Co (USA)	197,523	14%	Cargill (USA)	113,423	13%

Golden Agri International (GAR) (SG)	146,544	10%	Louis Dreyfus Company (NL)	75,970	9%
Bunge (BM)	128,074	9%	Oleofinos (Grupo Oleomex) (MX)	75,029	9%
Lípidos Santiga (ES)	108,096	8%	Pasternak Baum & Co (USA)	67,433	8%
Olenex (CH)	77,295	6%	Wilmar (SG)	65,554	8%
Unigrà (IT)	73,575	5%	Lípidos Santiga (ES)	52,818	6%
Global Organic (PA)	40,500	3%	Global Organic (PA)	50,353	6%
Louis Dreyfus Company (NL)	23,322	2%	Golden Agri International (GAR) (SG)	32,507	4%
Total Top 10	1,403,456	100%	Total Top-10	847,542	100%

Figure 12: Top 10 buyers of Colombian palm oil and palm oil products between 2017 and 2022.

Sources: Panjiva shipping data between February 2017 and February 2021 and Seair shipping data between 1

January 2020 and 31 May 2022 for HS codes 1511 (palm oil), 151329 (Refined palm kernel or babassu oil); and 230660 (palm oilcake); company websites. Note: HS code 151321 (Crude palm kernel or babassu oil) is not covered in the available Panjiva dataset. Moreover, in the Seair dataset, 271,182 MT of palm oil and palm oil products were registered without a label, i.e., that could not be assigned to a specific buyer.

M Dias Branco S.A. is a publicly listed, leading Brazilian multinational company in the field of biscuits and pasta in Brazil and has its headquarters in Fortaleza (Ceará). The group has fifteen industrial units in the northeast, southeast, and south regions or Brazil, including seven wheat mills. The company has been supplied with processing equipment and technology by the Russian Bühler group[66], that has acquired the Austrian Haas Group in 2018. Ranking 213th on the Food and Agriculture Benchmark of the World Benchmark Alliance, M Dias Branco is one of the weaker performers on sustainability indicators compared to other agribusinesses[67].



Links with Colombian palm oil mills: While using palm oil in its products, the company does not publicly list its supplier mills. Based on public information, it is therefore not possible to identify palm oil mills linked to this company.

Unigrà, an agri-food company that was founded in 1971 and headquartered in Conselice, Italy, is operating in vegetable oils and fats processing, and manufacturing of raw materials. Apart from Italy, the company also has a food processing unit in Malaysia and an office in Brazil. Unigrà is an RSPO member. The company requires that all its palm oil suppliers are RSPO members and operate in compliance with RSPO Principles and Criteria[68]. In AidEnvironment's mill database, clearly not all mills in Colombia supplying to Unigrà are RSPO members.

Links with Colombian palm oil mills: Unigrà publicly lists to source from 23 Colombian mills (see annex 1). Nine of them are currently not registered as an RSPO member.

Cargill Inc. is the largest privately held corporation in the United States and one of the leading global commodity traders. It is involved in the purchasing, trading, processing and distribution of food, agriculture, financial and industrial products and services. Cargill began operations in Colombia in 1966. Over the years, Cargill's activities have included coffee, cocoa, fertilizers, grains, oilseeds, animal feed and protein. Palm oil will be likely supplied through Cargill de Colombia.

Links with Colombian palm oil mills: While Cargill reportedly does not operate oil palm plantation mills or refineries in Colombia[69], the company sourced from 31 different Colombian palm oil mills in the first quarter of 2022[70]. The report included four more mills from which Cargill sourced in 2021 (see annex 1).

Louis Dreyfus Company (LDC) is one of the leading global commodity traders and processors of grains, oilseeds, rice, sugar, ethanol, coffee, and cotton. The company also provides animal feeds, fertilizers, agricultural chemicals, and other farm supplies. LDC has had a permanent presence in Colombia since 2007, mainly operating in coffee and palm oil.

Links with Colombian palm oil mills: In the AidEnvironment mill list, LDC could be linked to 37 out of 81 mils (annex 1). In reality, this number may be higher, since LDC does not mention Colombia as a country in its palm oil mill list[71], making it more difficult to identify linked Colombian palm oil mills.

The **Oleomex group** was founded in 1978 in Guadalajara in Mexico and consists of at least twelve companies, including Oleofinos, Oleopalma, Oleoflor, Summa, Tecno Global, and Magnocampo. Oleopalma operates four palm oil mills in Mexico in Chiapas (Mapastepec, Aceitera Chiapaneca, Agroipsa Palenque) and Tabasco (Agroipsa Jalapa). The group does not seem to operate palm oil mills in Colombia. Oleopalma's sustainability report indicates that among its customers include Oleofinos and Cargill[72]. Public palm oil mill lists indicate that also Colgate, General Mills, Grupo Bimbo, Hershey, Johnson n Johnson, and Reckitt Benckiser are customers of Oleomex.

^[68] Unigrà. Supply Chain. Link to website.
[69] Cargill. (2021). Palm Oil Sustainability Report 2020. Link to report.
[70] Cargill. 2022 Q3 Mill List. Link to list.



Links with Colombian palm oil mills: Public palm oil mill lists from several FMCG companies (e.g. Colgate, General Mills, Grupo Bimbo, Hershey, Johnson n Johnson, and Reckitt Benckiser) only indicate to source directly from Oleomex palm oil mills located in Mexico. The Oleomex group does not have a public mill list, therefore it is not possible to identify all Colombian palm oil mills from which it sources. This mill list of Colgate[73], however, shows that Olemex's subsidiary Oleofinos acts as a tier-1 supplier to intermediary supplier Pasternak & Baum (tier-2), from at least nine palm oil mills in Colombia: Tequendama, Palmas Oleaginosas del Magdalena, Nutrimezclas Y Aceites, Extractora del Sur de Casanare, Alianza Oriental, Extractora Monterrey, Guaicaramo, Palmeras del Llano, and Oleaginosas San Marcos.

Pasternak, Baum & Co (USA) is a leading palm oil trader with brokers and ships transporting over one million MT of fats and oils, primarily palm oils, per annum. The company is reportedly "extremely active in brokering and shipping from the Americas (Guatemala, Honduras, Colombia, Ecuador, Brazil, Costa Rica, Peru) to northern Europe and the Mediterranean" [74]. Pasternak started operating in the palm oil business over 40 years ago in the Asian market and then grew into the Americas. Next to conventional palm oil, the RSPO member sources MB, SG, and IP palm oil [74]. Several identified customers of Pasternak include Colgate, LDC, and Reckitt Benckiser.



Links with Colombian palm oil mills: The company does not submit any palm oil mill lists, making it impossible to identify all Colombian mills from which it sources. However, on the mill list of Colgate[73], the Mexican company Oleofinos acts as a tier-1 supplier to intermediary supplier Pasternak & Baum (tier-2) from at least nine palm oil mills in Colombia: Tequendama, Palmas Oleaginosas del Magdalena, Nutrimezclas Y Aceites, Extractora del Sur de Casanare, Alianza Oriental, Extractora Monterrey, Guaicaramo, Palmeras del Llano, and Oleaginosas San Marcos.

Wilmar was the number one buyer of Colombian palm oil until December 2020, according to shipping data, retrieved from Panjiva, on the period of 2017 until 2020. However, according to recent data (January 2020 until May 2022) of Seair, Wilmar dropped from rank one to rank seven. In September 2022, AidEnvironment asked Wilmar about the reason for this drop, but only general answers, including competitive pricing, tax conditions, climate-linked cultivation failures, and domestic consumption patterns, were provided. The Seair dataset tell that 271,182 MT of palm oil and palm oil products were registered without any label. As these products cannot be assigned to a specific buyer, they could (partly) represent Wilmar. Moreover, Wilmar continues to source palm oil from Colombia through Olenex SARL, its joint venture with Archer Daniels Midland Company that started in 2012. While Olenex sourced 7,951 MT in 2020, this increased to 9,201 MT in 2021. Olenex stated that the joint venture completely follows Wilmar's sustainability approach and procedures[75]. Despite Wilmar's high profile on no deforestation, no peat, and no exploitation and RSPO policies, recent research reveals this contrasts with the company's actual sustainability performance on the ground and in its whole supply chain[76].



Links with Colombian palm oil mills: There are no public palm oil mill lists of Wilmar referencing Colombian suppliers to the company. However, its joint venture Olenex is linked to 61 of the 81 palm mills identified by AidEnvironment (annex 1).

^[73] Colgate (2020). Colgate Palm Oil 2020H1 Mill List. Link to list.

^[74] RPSO. Member page Pasternak, Baum & Co. Link to list.

^[75] Quiroz, D., Achterberg, E., Arnould, J. (2021). Sector Analysis: Latin American Palm Oil. Link to report.

^[76] Chain Reaction Research. (2022). Wilmar's Refineries and Brands Lag in Implementation of ESG Policies. Link to article.

Lípidos Santiga's (LIPSA), a refiner of palm oil or palm kernel oil, has its main refinery and headquarters in Santa Perpetua de Mogoda, Spain. The company has a refining capacity of 1 million MT per year. The RSPO-certified company mentions on its website to have reached 100% traceability to mill and 51 % traceability to plantation in 2021[77].

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Links with Colombian palm oil mills. We identified 42 Colombian palm oil mills being connected to Lipidos (see annex 1).

Global Organic Inc. is headquartered in Panama. Little information is available about this buyer, but the company is likely part of the Daabon Group, as RSPO data on Daabon's group members reveals[78]. Daabon states to have the following companies in its group: Tequendama Refinery (supplying, processing and commercialization), Caribeans Ecosoap (oleochemicals), Global Organic (traders), and Terlica (storage units). Current shareholders of Global Organic Inc. are Mr. Ezequiel Ruiz Rodriguez and Mrs. Cecilia Jurado Rassow, who currently plays 271 roles in 118 companies[79], many registered in Panama[80].

Links with Colombian palm oil mills. Daabon has published on its supplying mills in the first H1 2022 (annex 1)[81], demonstrating that the group sources from the following mills: Tequendama, Palmas y Trabajo, Palmeras de la Costa, Agroindustrias del Sur del Cesar, Aceites, Palmaceite, Extractora La Gloria, Palmagro, Palmas Oleaginosas de Casacará, Palmicultores del Norte, and Extractora Loma Fresca. It is likely that Global Organic Inc. sources from all of them as well.

Golden Agri International Pte Ltd, subsidiary of Golden Agri-Resources (GAR), a vertically integrated palm oil plantation company, provides petroleum products. The company offers crude palm and cooking oil, margarine, shortening, biodiesel, and oleochemicals, as well as food, shipping, and logistics services. In August 2021, GAR acquired Golden Agri-Resources Colombia S.A.S. with core activities in trading in sugar, crude palm oil and their related products, logistics, and business and management consultancy services[82]. In November 2021, GAR was rated 'high-risk' on a ESG risk rating by Sustainalytics[83].

Links with Colombian palm oil mills. While GAR publishes lists of its Indonesian palm mill suppliers, it does not for its Colombian palm oil suppliers. This difference is likely (partly) due to the fact that petroleum companies do not have to publish data of their palm oil suppliers.

Focusing on Colombian exports to the EU, we can link the top three EU recipients countries (the Netherlands, Spain, and Italy) to the main buyers per country (figure 13 below). This is rather in line with palm oil refineries of Cargill, Bunge, AAK, Olenex (ADM and Wilmar), and Sime Darby, that are based in the Netherlands' port in Rotterdam and source from Colombia[84].

^[77] LIPSA. Our traceability. Link to website.

^[78] RSPO. Member: Daabon Group. Link to website.

^[79] Orbis. Link to website.

^[80] Mercado. Cargos del ejecutivo CECILIA JURADO RASSOW. Link to website.

^[81] Daabon Group.(2022). Mill List first half of 2022. Link to list.

^[82] Golden Agri-Resources. (2021). Asset Acquisitions and Disposals: Announcement Pursuant to... Link to announcement.

^[83] Sustainalytics. Company ESG Risk Ratings: Golden Agri-Resources Ltd. Link to rating page.

^[84] Quiroz, D., Achterberg, E., Arnould, J. (2021). Sector Analysis: Latin American Palm Oil. Link to report.

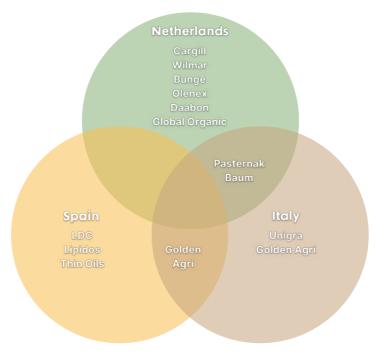


Figure 13: Top EU importers of Colombian palm oil in the Netherlands, Spain, and Italy.

Source: AidEnvironment, based on Seair shipping data between 1 January 2020 and 31 May 2022 for HS codes 1511 (palm oil), 151321 (Crude palm kernel or babassu oil) and 230660 (palm oilcake). Note that we only included key importers that we discussed in the top ten buyers mentionedabove.

4.3 Consumers of Colombian palm oil

The Latin American region consumes three quarters of its own palm oil production[85]. Food products account for around 45 percent for the largest share, energy accounts for 20 percent, and other consumer products for 35 percent. Colombia mainly exports to other Latin American countries and Europe (figure 14). Demand for food uses, as well as biodiesel programs in several national markets, is expected to further drive regional consumption. Several countries, including Colombia and Brazil, are promoting the use of biodiesel as part of carbon emission reduction goals and aim to reduce dependency on fossil fuel imports.

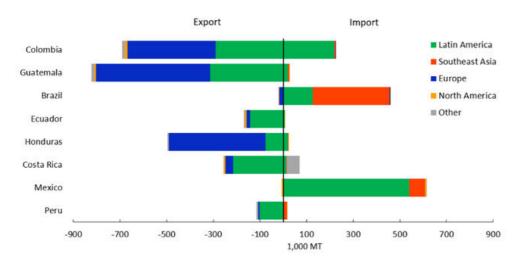


Figure 14: Palm oil trade patterns from Latin American producer countries. Source: Chain Reaction Research based on Trademap.[81]

As described in the section 'Trends in EU Colombian imports' of this report, volumes of Colombian palm oil imported into the EU fell considerably since 2020, primarily because the domestic market has become increasingly attractive for Colombian producers. In the past four years, domestic consumption has increased, while export has decreased. According to a Solidaridad study (2020), sales in the domestic market demonstrate the increase in uptake by the biodiesel industries (28%), oil and fat processing industries (23%), and manufacturers of balanced feed (3%) in particular[86]. In 2021, Fedepalma estimated a growth of respectively 46%, 47%, and 6% for these categories (and 1% other industries)[87]. Only 5 percent of the volumes sold in Colombia have a sustainability certification, as mentioned by Solidaridad.

Also within the EU the majority of imported palm oil is used for biodiesel and energy. While the food and feed sectors and industry were initially the largest users of palm oil in the EU, the demand for palm oil as a feedstock for biodiesel increased between 2008 and 2018. In 2018, the EU used more than 4 million MT of crude palm oil for biofuel production in European biorefineries (see figure 15 below). In the same year, the EU imported an additional 1.2 million MT of palm oil biodiesel. An estimated 65 percent of all imported palm oil was used for energy, of which 53 percent for biodiesel production for cars and trucks and 12 percent to generate electricity and heating[88]. About one-third of the palm oil was used to produce food, animal feed, and other industrial products such as detergents and soaps. The continuous growth in the use of palm for biodiesel production was linked to a weak EU biofuels policy, which has been allowing, the use of palm oil, a key driver of deforestation, as a feedstock for the production of biodiesel and energy since 2019[88].

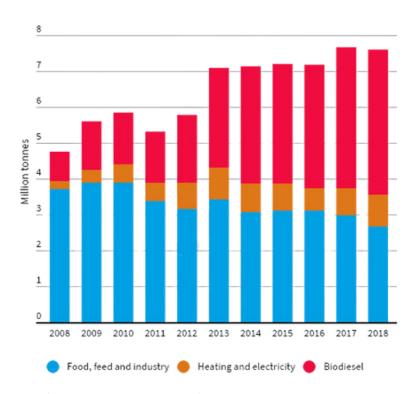


Figure 15: EU palm consumption by end use (2008-2018). Source: Transport & Environment, derived from OILWORLD[88].

^[86] Solidaridad. (2021). Barometer on sustainable palm oil production and trade Colombia 2020. Link to report.

^[87] Fedepalma. (2021). Informe de gestión Fedepalma 2020Informede Gestión Fedepalma 2020. Link to report.

^[88] Transport & environment. (2019). Almost two-thirds of palm oil consumed in the EU is ... Link to article.

Since 2021, the use of palm oil for biofuel production by the EU has been on the decline and is expected to drop further. That year, biofuel use was estimated at 2.63 million MT, in 2022 at 2.31 million MT, and in 2023 at 2.17 million MT. The decrease is attributed to an anticipated fall in demand for biodiesel linked to the EU's renewable energy directive (RED II), which requires a gradual phase out of palm oil-based fuels by 2030. The European Commission expects that, as a result of RED II, the overall demand for palm oil will decline to 4 million MT by 2031, down from 6.5 million MT in 2021[89]. Also the upcoming EU Deforestation Regulation may further discourage imports from deforestation risk countries, such as Colombia.

The master table on palm oil mills linked to buyers (annex 1) gives indications on end-users and consumers of Colombian palm oil. FMCG companies that source and use Colombian palm oil for food products and cosmetics include Colgate, Danone, Ferrero, Friesland Campina, General Mills, Grupo Bimbo, Hershey, Kellogg's, L'Oréal, Mars, Mondelez, and Nestle.



5. COLOMBIAN CASE STUDIES

In this second part of the study, we have developed six company case studies. Apart from satellite monitoring, we have used existing literature and knowledge gathered from different sources (e.g. on deforestation, misconduct, land ownership, land conflicts, producers, traders and investors) to link the cases to deforestation, conversion of native vegetation, and other social and environmental impacts to identified European palm oil operators and traders.

Methodology and case selection

As stated in section one of this report, this study applied a radius monitoring approach, based on the assumption that oil palm plantations within a 50 km radius around the palm oil mill will likely fall within the mill's sourcing area. This was confirmed in the geographic information system (QGIS), which shows that oil palm plantation areas are often concentrated around the mills, as demonstrated in figure 16 below.

Selection criteria

Criteria for the case studies included:

- the presence of deforestation, fires, or other native vegetation conversion;
- · proximity to Colombia's current deforestation frontier;
- · proximity to indigenous territories, national reserves, and to illicit crops production;
- whether the identified palm oil mills were connected to pollution of nearby waterways and rivers;
- controversial land deals, RSPO complaints, and other social issues (e.g. land disputes, displacement, labour rights issues).

The data for these criteria is provided by an analysis on deforestation and fire alerts by AidEnvironment and visual confirmation through satellite imagery.

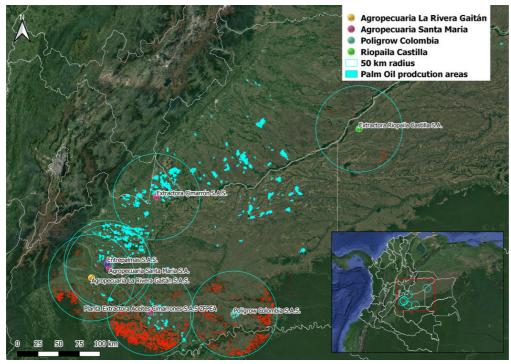


Figure 16: Oil palm plantations areas, company palm oil mills of cases 1 (Poligrow), 2 (Agropecuaria Santamaria), 3 (Agropecuaria La Rivera Gaitán), and 4 (Riopalia Castilla) including the 50 km radius circle around the mill, and proximity to Colombia's current deforestation frontier. Cases 5 (Daabon Group) and 6 (Oleoflores) are in northern departments and not included in this figure.

Based on the selection criteria, six company cases linked to 11 palm oil mills were ultimately selected from the final list of 81 identified palm oil mills in annex 1:

- 1. Poligrow Colombia
- 2. Agropecuaria Santamaria
- 3. Agropecuaria La Rivera Gaitán
- 4. Riopaila Castilla
- 5. Daabon Group
- 6. Oleoflores.

The case studies and their links with European buyers will be elaborated in the following section.

Disclaimer on the case studies

Because we deliberately selected cases with potential deforestation (or close proximity to deforestation) and/or with other environmental and social impacts linked to oil palm expansion, the case studies in this report do not necessarily represent the situation of the entire Colombian palm oil sector. We cannot guarantee the completeness of these case studies or whether situations on the ground have changed for better or worse since sources were consulted. The authors of this report assume no responsibility for any errors found in the sources used. The report is intended solely for informational purposes and should not be construed as providing any endorsements, representations, or warranties of any kind. The information provided is current as of the date of the report's publication and is subject to change without prior notice.





Palm oil producing company Poligrow Colombia S.A.S. was founded in 2008. Operating in the municipality of Mapiripán, in the department of Meta, the multinational Poligrow has a complex and opaque corporate group structure, under Italian-Spanish ownership [90].

In 2023, the company received its first certificate of verification for sustainable palm production in Colombia from the Sustainable Palm Oil Corporation (APS Colombia), the National Federation of Oil Palm Growers (Fedepalma) and Icontec. This certification helps to strengthen sustainability best practices across the value chain.

However, since the planting of its oil palm started in 2010, Poligrow has been linked to some serious social and environmental violations taking place on its estates, with claims varying from forced displacement of Indigenous communities and lack of free, prior and informed consent, to environmental degradation and pollution [91,92,93,94]. This would mean the company in the future potentially does non-comply with the adopted EU Deforestation Regulation and the proposed European Directive on Corporate Sustainability Due Diligence[95].

RSPO investigation

An RSPO complaint against subsidiary Poligrow Italy alleges that the land planted with oil palms by Poligrow "was obtained by intimidation and without the proper consent of the indigenous owners" and that the company "is using paramilitary forces to intimidate the local people and activists" [96]. The Indigenous communities Jiw and Sikuani claim the land is theirs [91].

While no formal complaint was filed against Poligrow Colombia S.A.S., RSPO launched an independent investigation into the allegations of its member. The company remains under continuous control[94]. A recent update is not yet available, however, because surveillants of the certification body conducting independent audits were not able to physically reach the area due to the local volatile situation linked to the presidential elections[96].

On the other hand, the evidence visually confirmed through analysis of satellite images, show that the burning of plots is one of the main causes of environmental degradation. These fires cause drought in extensive gallery vegetation of natural palms (*morichales*), which is a strategic ecosystem of the region for biodiversity and the water stability. These gallery ecoystems regulate the water flow into greater river basins such as Caño Ovejas and Caño Jabón.

^[91] EIA. (2015). Mapiripán: Between Water and Oil Palm. **Link to video.**

^[92] Business & Human Rights Resource Centre. (2015). Colombia: NGOs allege palm company Poligrow has ... Link to article.

^[93] Quiroz, D., Achterberg, E., Arnould, J. (2021). Sector Analysis: Latin American Palm Oil. Link to report.

^[94] World Rainforest Movement. (2020. Colombia: Palm-Producing Company Poligrow Plans to Grab ... Link to article.

^[95] European Commission. (2022). Proposal for a Directive on corporate sustainability due diligence and annex. Link to publication.

^[96] RSPO. Complaint: Poligrow Italy. Link to complaint.

Location of the palm oil mill

The palm oil mill of Poligrow Colombia S.A.S. (Oliomapi, coordinates: 3.013; -72.203) is in close vicinity of the most recent Colombian deforestation frontier, Indigenous territories, and near illicit crop production areas (see map below). Since palm oil cultivation and extraction of fresh palm fruits need to take place near palm oil mills, recent deforestation and fires near palm oil mills put the sourcing area at risk.

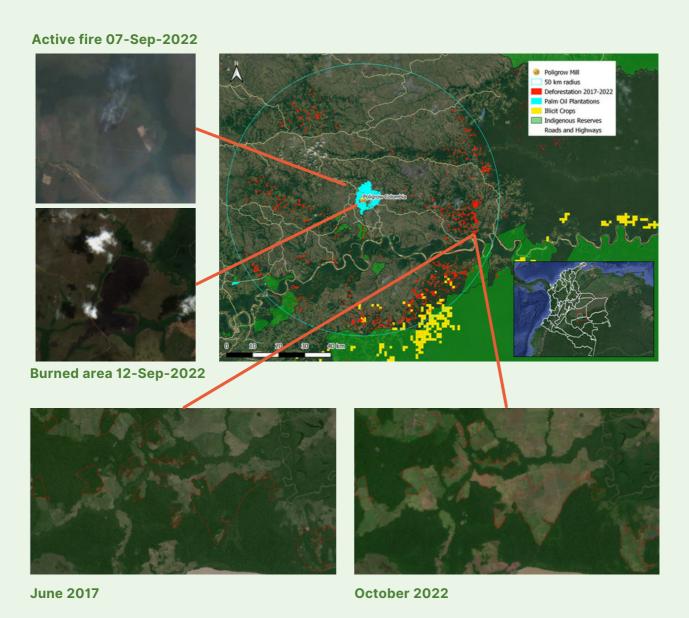


Figure 17: Map on top shows the location of the Poligrow Colombia S.A.S. palm oil mill (Oliomapi) in Mapiripán (Meta, Colombia). It visualises that the palm oil mill is located within a 50 km radius of a deforestation frontier; near Indigenous territories Cachivera del Nare, Guayabero La Fuga y Piratapuya Asentado en la Fuga, Caño Negro, Naexal Lajt, Caño Ovejas, and La Sal; and near illicit crop production areas. Two satellite photos below show conversion of 513 ha of native vegetation between June 2017 and October 2022 within a 50 km radius around the Poligrow palm oil mill. This 513 ha falls outside the current oil palm plantation area (in light blue in the Figure).

Indirect forest loss

While we only identified 10 ha land use change between 2011 and 2021 that is linked to palm oil in the forest galleries close to the palm oil mill, according to data from the IDEAM Forest and Carbon Monitoring System[97], part of the areas that are now in the nearby deforestation frontier will likely become oil palm plantations in the (near) future. This is caused by the pattern of indirect forest loss and conversion close to oil palm areas. These deforested areas will be located within the 50 km sourcing buffer around Poligrow's palm oil mill Oliomapi.

Between 2021 and 2022, there were 6,400 ha of land burned in vicinity of the palm oil production areas[98]. This indicates that areas that were cleared more than a decade ago, are now being prepared for production of palm oil; see figure 17 for examples of fires and burned areas. These burning practices degrade the soil and functionality of gallery forests which are bordering natural savannah ecosystems.

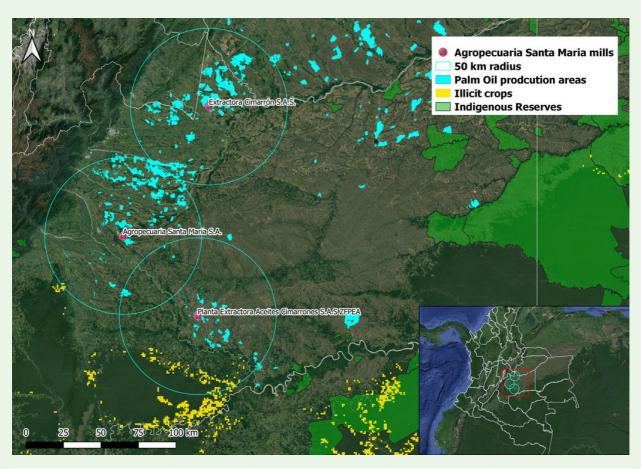
The potentially non-complaint palm oil production that could be linked to land use change, affected rivers and palm groves, and human rights violations, may enter or may have entered the European market.

The following palm oil buyers source from the Oliomapi palm oil mill: AAK, ADM, Cargill, Ferrero, Fuji Oils, General Mills, Grupo Bimbo, Johnson n Johnson, Kellogg, KLK Oleo, Nestle, Olenex, Oleon, PepsiCo, Unigra, Unilever, Upfield, and Vandemoortele[99].





European and Southeast Asian palm oil buying companies report to source from three palm oil mills linked to palm oil producer Agropecuaria Santamaria, all based in Meta, Colombia (see map and table below). Acepalma, the second largest palm oil exporter from Colombia to Europe, also sources palm oil and palm oil products from the Agropecuaria Santamaria's mills, with the Netherlands and Spain as major destination countries.



Plantation company	Mill name	Details (coordinates / dept. / uml code)	Certifications?	Buyers (2021-2022)
Planta Extractora Aceites Cimarrones S.A.S ZFPEA	Aceites Cimarrones	3.035; -73.111 / Meta / PO1000003979. Operational since November 2012. Within 50 km distance of deforestation frontier, national parc/reserve, and illicit crop production	Yes, ISCC and RSPO (MB; 6,753 MT CSPO)	AAK, Acepalma, ADM, BASF, Cargill, Colgate, Danone, Friesland Campina, Fuji Oil, General Mills, Grupo Bimbo, Indutrade, Johnson n Johnson, Kellogg, KLK Oleo, Lipidos, Mondelez, Nestle, Nisshin, Olam, Olenex, Oleon, PepsiCo, PZ Cussons, Reckitt Benckiser, Sime Darby, Unigra, Unilever, Upfield, Vandemoortele. In 2020, also Ferrero and Bunge sourced from this mill; Bunge also in 2021.

Agropecuaria Santa Maria S.A.	San Martin	3.516; -73.558 / Meta / PO1000003981. Operational since June 2006. Within 50 km distance of deforestation frontier, indigenous territory, national parc/reserve, and illicit crop production	Yes, ISCC and RSPO (IP; 5,463 MT CSPO)	AAK, Acepalma, ADM, BASF, Bunge, Cargill, Danone, Ferrero, Friesland Campina, Fuji Oil, General Mills, Grupo Bimbo, Johnson n Johnson, Kellogg, KLK Oleo, LDC, Lipidos, Mondelez, Nestle, Nisshin, Olam, Olenex, Oleon, PepsiCo, PZ Cussons, Reckitt Benckiser, Sime Darby, Unilever, Upfield, Vandemoortele
Extractora Cimarrón S.A.S.	Extractora Cimarrón	4.292; -73.044 / Meta / PO1000006349. Within 50 km distance of national parc or reserve	No	ADM, Grupo Bimbo, Johnson n Johnson, KLK Oleo, Mondelez, Olenex, Oleon, Reckitt Benckiser, Unilever

Figure 18: Company group mills of Agropecuaria Santamaria in Colombia. Source: AidEnvironment, based on public mill lists of palm oil traders and FMCGs, RSPO, and FCDS.

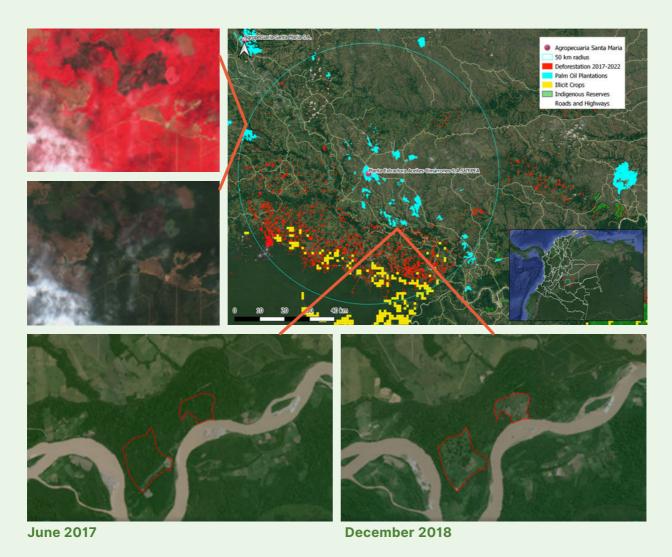


Figure 18: Map on top shows the location of the Planta Extractora Aceites Cimarrones palm oil mill in Puerto Rico (Meta, Colombia). It shows that the palm oil mill is located within a 50 km radius of a deforestation frontier; and near illicit crop production. Two satellite photos below show deforestation of 73 ha of native vegetation between June 2017 and December 2018 within a 50 km radius around the Agropecuaria Santa Maria palm oil mill. Satellite images on the top left show locations of active fire and burned areas.



Agropecuaria Santamaria is an RSPO member[100] and has an NDPE policy[101a], including a commitment to no burning, no deforestation, no loss of high conservation values, a public grievance form, and respecting FPIC of local communities. Despite this solid NDPE policy, we identified 1,466 ha of palm oil-linked indirect deforestation between 2011 and 2021 in a 50-km radius around the mill, based on the information of IDEAM. Between 2021 and 2022 there were 247 hectares of land burned in the vicinity of the palm oil production.

Location of the palm oil mill

The Aceites Cimarrones mill is situated near the most recent Colombian deforestation frontier, a national reserve, and areas of illegal crop production (see figure 18). According to FCDS, the Aceites Cimarrones extraction plant (coordinates: 3.035; -73.111) was "the last plant that was installed in the area, therefore, it is an area that saw the largest growth in recent years". Since the palm oil mill needs to be located near the plantations, due to the limited shelf life of fresh palm oil fruits, areas within the sourcing area of the company are at risk. This may lead to (future) non-compliant palm oil entering the European market.

While there is no hard evidence that the deforestation linked to oil palm expansion in the region can be directly attributed to the company, considering the proximity of the forest loss to the Aceites Cimarrones palm oil mill and the oil palm cultivation areas, part of this nearby clearing may be indirectly attributable to Agropecuaria Santamaria, as explained in the report with the dynamics of palm oil being an indirect driver of deforestation. Reportedly, the Cimarrones plant also sources in the municipalities Puerto Rico and Puerto Concordia. In the latter municipality we found sources of deforestation associated with oil palm.

Additional environmental impacts

An analysis developed by FCDS, shows that the areas in close proximity to the Cimmarrones Plant have experienced an increase in burned forests, which have subsequently been replaced by palm plantations on gallery forests or morichales. These ecosystems are crucial for regulating water in the region. Currently, there are over 2,700 hectares of palm plantations within the conservation and environmental protection area outlined in the Management Plan of the Middle and Lower Ariari River Basin, which was published in 2018 by CORMACARENA [101b]. These plantations are situated near the main tributaries of the Ariari basin, including Caño Pororio, Caño Limón, Caño Tigre, and Caño Yamus. This information suggests that an environmental conflict exists in the area due to conflicting land use practices.



Agropecuaria La Rivera Gaitán S.A.S. is an agro-industrial complex located in the Ariari region in Colombia's Meta department. The company is involved in the cultivation, extraction, production and commercialization of palm oil oils, fats and its derivatives [102].

International buyers, including ADM, Cargill, General Mills, Grupo Bimbo, Kellogg, KLK Oleo, Mondelez, Nestle, Olenex, Oleon, PepsiCo, Unilever, and Vandemoortele, source palm oil (products) from the company's main mill (coordinates: 3.410; -73.750; UML code: PO1000003980)[103]. In addition, AAK, ADM, and General Mills also claim to source from another mill of the company, with the coordinates 4.314361; - 72.083, based in Puerto Gaitán, Meta (no UML code)[104,105,106].

Environmental crimes

The company's founder, Reinel Gaitán Tangarife, was captured in February 2022 for allegedly being 'Colombia's largest deforester', linked to environmental crimes, illegal mining, bribery, and fraud[107]. His son is the head of the list of the Democratic Center for the House of Representatives in Meta.

Location of the palm oil mill

The company's main mill, which has been operational since June 2011, is located within a 50 km radius of a recent deforestation frontier, indigenous territory, national reserve, and illicit crops production (see figure 19 below). Inside this 50-km buffer zone around the mill, there is a significant oil palm planted area of 19,000 ha.

Deforestation and other environmental impact

Based on information of IDEAM, 960 ha of palm-oil related deforestation has been identified in this area from 2011 until 2021. Between 2021 and 2022 644 hectares of land were burned in the vicinity of the palm oil production areas, an indication that more land is being prepared for oil palm plantations. Moreover, the palm oil operations of the company are linked to the invasion of 116 ha of oil palm plantation into private property.

Research of FCDS has also identified that more than 880 ha of palm plantations of Agropecuaria La Rivera are located in areas prioritised for forest and environmental restoration, according to the Management Plan of the Middle and Lower Ariari River Basin, as they are part of the Caño Guacamayas and Caño Urichare river basins. This suggests an environmental conflict based on the use of land.

^[102] Agropecuaria La Rivera Gaitán S.A.S.. Agropalmeras. Link to website.

^[103] AAK. (2021). AAK public mill list september 2021. Link to mill list.

^[104] ADM. (2021). ADM Global 2012 Q1-Q2. **Link to mill list.**

^[105] General Mills. (2022). List of supplying mills - January 2022. Link to mill list.

^[106] Cambio. (2022). Cayó el mayor deforestador de Colombia. Link to article.

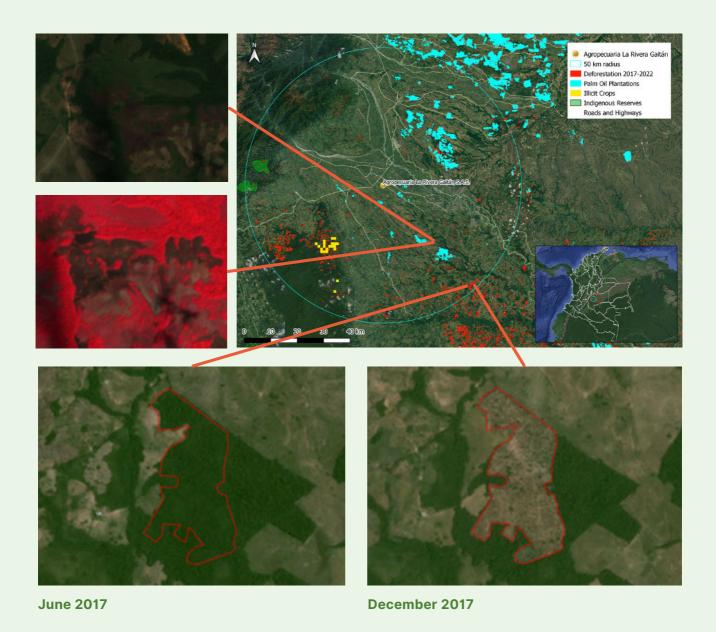


Figure 19: Map on top shows the location of the Agropecuaria La Rivera Gaitan palm oil mill in Granada (Meta, Colombia). It shows that the palm oil mill is located within a 50 km radius of a deforestation frontier; indigenous territories Villa Lucia and Ondas del Cafre; and near illicit crop production. Two satellite photos below show deforestation of 55 ha of native vegetation between June 2017 and October 2022 within a 50 km radius around the Agropecuaria La Rivera Gaitan palm oil mill. The two satellite photos on the top left show locations of active fire and burned areas.



Riopaila consists of 29 companies in Colombia's Vichada department using approximately 50,000 ha of land. On paper, Riopaila Castilla is leasing the land they are using. Nevertheless, based on the website LandMatrix, Riopaila has allegedly created artificial companies that bought the land, to circumvent Colombian law 160 of 1994[107].

The investors of the Riopaila group are the Colombian company Riopaila Castilla, the Spanish companies Agroindustria Ibiza, Inversiones Agrícolas Málaga, and Inversiones Agrícolas Asturias; and Luxembourg holding company Austurias Holding (see figure 21 below).

Land dispossession

According to a report by Business & Human Rights, the group was able to acquire land that had been reportedly dispossessed from peasants in Castilla La Nueva, for prices below market conform prices [108], as part of a widespread practice wherein "certain companies take advantage of the results of the armed conflict to favour their projects and businesses". In response, Riopaila asserted that "the group does not have, nor has it had, ownership of land or operations in the Castilla La Nueva municipality, in the department of Meta" [109].

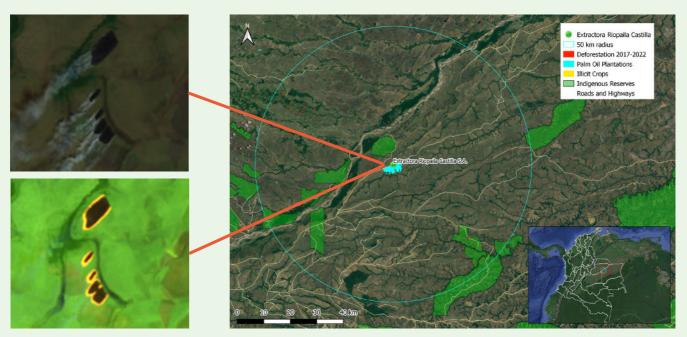


Figure 20: Map on top shows the location of the Extractora Riopaila Castilla palm oil mill in Santa Rosalia (Vichada, Colombia). It shows that the palm oil mill is located within a 50 km radius of indigenous territories El Saladillo, Macucuana, Paraje de San Juanito, El Duya y Paravare, Merey La Verita, Salivas y Piapocos, Saliva Corregimiento de Santa Rosalia, and Nueva Esperanza del Tomotion. The two satellite photos on the top left show the location of active fires near the palm oil mill.

^[107] Land Matrix public database. Link to website.

^[108] Business & Human Rights. (2020) Informe a la Comisión para el Esclarecimiento de la Verdad, la .. Link to executive summary

^[109] Business & Human Rights. (2020). Respuesta del Grupo Riopaila Castilla para Business Human Rights. Link to response.

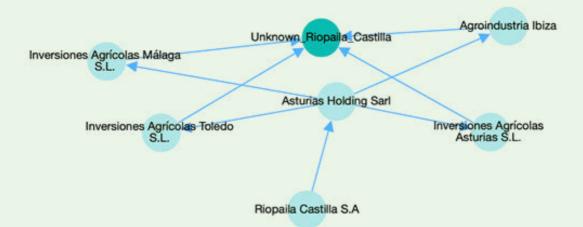


Figure 21: Network of parent companies and tertiary investors/lenders linked to Riopaila Castilla. Source: LandMatrix (2020). Note: The operating company is Riopaila Castilla, "but it constituted 29 societies to acquire 50,000 hectares of land and circumvent Colombian law. For simplicity, those 29 societies are represented as one in Unknown_Riopaila_Castilla"[110].

Location of palm oil mill

Their plantation company Extractora Riopaila Castilla SA runs a palm oil mill (coordinates: 5.031; -70.842; UML Code: PO1000010035) that is linked to numerous international buyers, including AAK, ADM, Danone, Fuji Oil, General Mills, Grupo Bimbo, Johnson n Johnson, KLK Oleo, Lipidos, Nestle, Nisshin, Olam, Olenex, Oleon, Unilever, Upfield, and Vandemoortele [111]. This mill is located less than 50 km away from indigenous territories.

Cleared land in the mill area

While no active clearing of native vegetation was identified between 2012 and 2021 in the oil palm area around the Riopaila mill, between 2021 and 2022 there were 16,020 ha of land burned in the vicinity of the palm oil production area (see images above). This is an indication that areas that have been cleared in the past are now being prepared for oil palm production; fires and burned areas are visible on the map above (figure 20). Riopaila has no RSPO membership, nor certified palm oil production.

Apart from palm oil, Riopaila Castilla has also exported 32,931 MT of cane or beet sugar from Colombian departments Valle del Cauca and Risaralda to Europe between 1 January 2020 and 31 December 2022. Export volumes on palm oil could not be identified through Panjiva shipping data.



Grupo Daabon is a family-owned company founded in Colombia in 1914 with its headquarters in Santa Marta, according the the company's website. They operate in the sectors of agriculture, industry, logistics, and real estate in five continents. C.I. Tequendama (headquartered in Magdalena) is the palm oil arm of the company group, involved in the production, refinery, and transformation of palm oil.



Figure 22: Map on top shows the location of Daabon Group palm oil mill in Puerto Wilches (Santander, Colombia). It shows that the palm oil mill is located within a 50 km radius of deforested areas and near illicit crop production. Two satellite photos below show deforestation of 10 ha of native vegetation between June 2018 and December 2018 within a 50 km radius around the Daabon Group palm oil mill. Satellite images on the top left show locations of active fire and burned areas.

From 2017 through 2021, Colombian company Daabon Group was one of the five major suppliers of Colombian palm oil (152,252 MT of HS code 1511) to predominantly Europe and Latin America, through its subsidiary C.I. Tequendama, according to Panjiva shipping data.

Cultivation of oil palm

Reported area of cultivation is 4,038 ha in the municipalities Aracataca and El Reten (Magdalena) and Riohacha (Guajira), while the company operates a refinery in Mamatoco (Santa Maria). Plantation subsidiary Palma y Trabajo, located in Puerto Wilches (Santander), is involved in the milling of palm oil and palm kernel oil, and Oleaginosas Del Yuma (also in Puerto Wilches) is growing oil palm in more than 3,000 ha.

Other companies that are part of Daabon Group are Caribeans Ecosoap (oleochemicals), Global Organic (traders), and Terlica (storage units, among others [112]. Global Organic, with its headquarters in Panama, is one of the top ten largest recent global buyers of Colombian palm oil.

Location of the palm oil mill

Daabon's plantation company Palmas y Trabajo S.A.S operates the Palmatra mill in Santander department (coordinates: 7.238; -73.799; UML code: PO1000006312). The certified mill (RSPO, Organic, and Fairtrade) produced 9,432 MT of Identity Preserved (IP) CSPO in 2021. International buyers of the mill include AAK, ADM, Daabon, Ferrero, General Mills, Grupo Bimbo, Kellogg, Mondelez, Nestle, PepsiCo, Unilever, Upfield, and Vandemoortele[113].

Around the palm oil mill, between 2012 and 2021, a total of 91 ha of native vegetation were cleared. Again, while this cannot be directly linked to the Palmatra mill, palm oil production is an indirect driver of deforestation in Colombia.

RSPO complaint

Moreover, there is ongoing investigation to an RSPO complaint against Palmas y Trabajo S.A.S, Progreso Palmero S.A.S, and Oleaginosas de Yuma S.A.S, all being subsidiaries of the Daabon Group, filed by Union 'Sintrainagro Puerto Wilches' in September 2020 [114]. It concerns a complaint on labour conditions.

The complainant stating that these Daabon subsidiaries have been complying with labour rights and/or laws; anti-union practices; and that employees were not provided sufficient protection equipment. Such complaints may prove challenging under the European Directive on Corporate Sustainability Due Diligence.

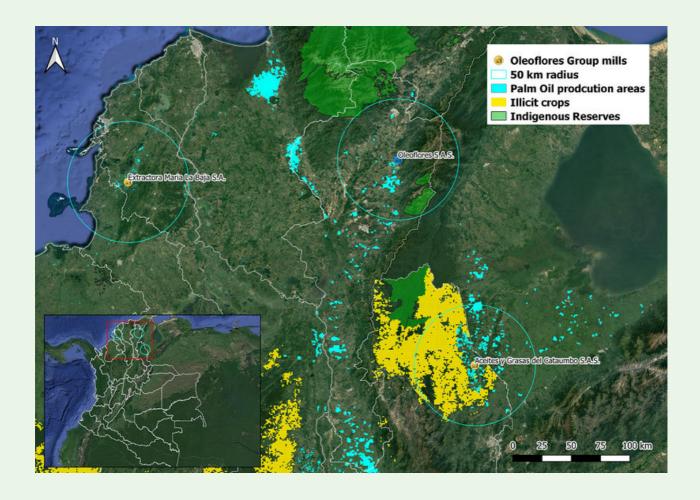
Export products

More recent shipping data of Seair (1 January 2020 until 31 December 2022) reveals that C.I. Tequendama exported 103,716 MT of palm oil products (crude palm oil, crude palm kernel oil, oilcake, and refined palm oil) to European countries, the majority to the Netherlands (68%), Germany (10%), and the United Kingdom (9%). Of these total palm oil products exports, 85 percent (88,061 MT) was crude palm oil.



Grupo Oleoflores is a Colombian family-owned company that produces oil palm seeds, palm oil (products), and biodiesel, and operates nurseries, (private, independent and smallholders) oil palm plantations, palm oil mills, refineries, and a margarine plant. The company reports to manage approximately 55,000 ha of oil palm plantations in central and north Colombia, with a processing capacity of 420,000 MT of FFB/year, and refinery capacity of 72,000 MT of CPO/year [115].

According to Panjiva shipping data, Oleoflores is one of the top Colombian exporters to Europe, with the Netherlands and Spain as its main destination countries. International buyers of the company's three palm oil mills, Aceites y Grasas del Catatumbo (Department Norte de Santader), Extractora Maria La Baja (Bolívar), and Oleflores (Cesar), are listed in the figure 23 below.



	Plantation company	Mill name	Details (coordinates / dept. / uml code)	Certifications?	Buyers (2021-2022)
	Aceites y Grasas del Catatumbo S.A.S.	Aceites y Grasas del Catatumbo	8.502;72.640/ Norte de Santander / PO1000007953 Within 50 km distance of national park or reserve.	Yes, ISCC and RSPO (IP;MB, 5,671 MT CSPO)	ADM, Fuji Oil, General Mills, Grupo Bimbo, Kellogg, KLK Oleo, Mondelez, Nestle, Olenex, Oleon, PepsiCo, Unilever, Upfield, Vandemoortele
Ex	xtractora María La Baja S.A.	Extractora María La Baja	9.923; -75.328 / Bolívar / PO1000007502 Within 50 km distance of national park or reserve.	No	AAK, ADM, Danone, Fuji Oil, General Mills, Grupo Bimbo, Johnson n Johnson, Kellogg, KLK Oleo, LDC, Lipidos, Mondelez, Nestle, Nisshin, Olam, Olenex, Oleon, PepsiCo, PZ Cussons, Reckitt Benckiser, Sime Darby, Unilever, Upfield, Vandemoortele
	Oleoflores S.A.S.	Oleoflores	10.097; -73.235 / Cesar / P01000003324 Within 50 km distance of national parc or reserve.	Yes, ISCC and RSPO (MB, 8,085 MT CSPO)	AAK, Acepalma, ADM, Avon, BASF, Bunge, Cargill, Colgate, Danone, Fuji Oil, General Mills, Grupo Bimbo, Johnson n Johnson, KLK Oleo, LDC, Lipidos, L'Oreal, Mars, Mondelez, Nestle, Nisshin, Olam, Olenex, Oleon, PepsiCo, PZ Cussons, Reckitt Benckiser, Unigra, Unilever, Upfield, Vandemoortele

Figure 23: Company group mills of Oleoflores in Colombia. Source: AidEnvironment, based on public mill lists of palm oil traders and FMCGs and RSPO.

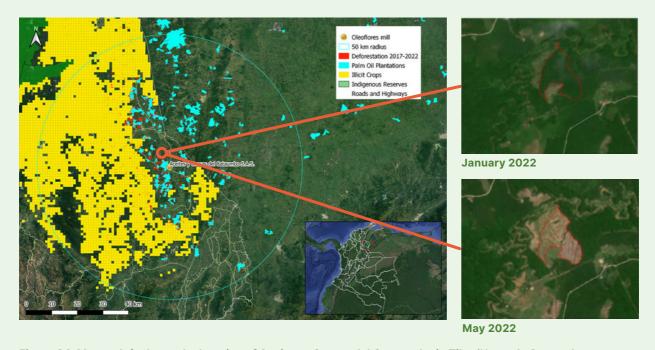


Figure 24: Map on left shows the location of Aceites y Grasas del Catatumbo in Tibu (Norte de Santander, Colombia). It shows that the palm oil mill is located within a 50 km radius of illicit crop production. Two satellite photoson the right show deforestation of 15 ha of native vegetation between January and May 2022 within a 50 km radius around the Aceites y Grasas del Catatumbo palm oil mill.

Conflict of interests

The group is owned by Carlos Roberto Murgas Guerrero, former Colombian minister of agriculture, and his son Carlos José Murgas Dávila is vice-president of the company. According to a recent study, it is "undeniable that the company has governmental ties" and "a potential influence peddling and/or conflict of interests" [116]. This argument is validated by the fact that the company's CEO has served as a minister of agriculture under different presidential administrations as well as by other findings. For instance, Grupo Oleoflores was one of the investors in the political campaign for the presidency of Álvaro Uribe Vélez in 2002 [117]. The company was also part of generous government subsidy schemes (e.g. Agro Ingreso Seguro - AIS) and tax exemptions that have been linked with corruption associated with the payment of political favours to legal and illegal actors [116,118,119].

Human and environmental rights

LandMatrix has documented dubious land deals of Murgas Guerrero[120]. Hacienda Las Flores and Bioagroindustrial de Colombia (both owned by Murgas Guerrero) have purchased small properties in the municipality if Tibú in the Santander department. In this process, the companies allegedly took advantage of people's situation in violence-affected region and may have exerted pressure on smallholders forcing them to sell their land[121], reportedly without community consent[122].

In addition to the social impacts, peasants and local communities have reported reduced access to water sources since the oil palm plantations of Oleoflores and other companies expanded, consuming an increasing amount of water for irrigation[119].

Location of the palm oil mill

Between 2012 and 2021, 498 ha of native vegetation linked to the palm oil area was cleared. The maps above show that Oleoflores' Aceites y Grasas del Catatumbo palm oil mill is located very close to a large area of illicit crop production. There is a significant risk that part of this area, currently being cleared and/or used for illicit crop production, will be converted into oil palm plantations in the near future. The area is located within the 50-km sourcing buffer of the palm oil mill.

In some cases, oil palm cultivation takes place near to illicit crops. This could be explained by the fact that palm oil has been promoted by the Colombian state as a product of substitution of illicit crops, trying to replace illegal activities with palm oil production. This approach has shown challenges related to proper environmental management, phytosanitary difficulties, pressure exerted by some actors on land tenure, and the labour conditions.

Export countries

While Oleoflores exported mainly to non-European countries the Dominican Republic, the USA, and Mexico, the company exported a total of 8,953 MT of palm oil products (crude oil and crude kernel oil) to Spain (89%) and the Netherlands (11%) between 1 January 2020 and 31 December 2022, according to shipping data retrieved from Seair.

^[116] Quiroz, D., Achterberg, E., Arnould, J. (2021), Sector Analysis: Latin American Palm Oil. Link to report.

^[117] Agencia de Informacion Laboral. (2020). Relaciones comerciales Colombia – Holanda en la agroindustria ... Link to document.

^[118] Potter, L. (2020). Colombia's oil palm development in times of war and 'peace': Myths, enablers and ... Link to article.

^[119] Rutas del conflicto. Carlos Roberto Murgas Guerrero: Más de 40 años dominando la palma de aceite. Link to article.

^[120] LandMatrix. Bioagroindustrial de Colombia Ltda. Link to website.

^[121] LandMatrix. Documento de análisis para uso interno No. 012. **Link to document.**

^[122] LandMatrix. Deal #801: How did the community react? Link to website.

6. CONCLUSIONS AND REFLECTIONS

This study aims to clarify to what extent Colombian palm oil linked to deforestation or other negative environmental and social impacts enters the EU market. This is particularly relevant in the context of compliance with the upcoming EU Deforestation Regulation and the CSDD Directive. There are signs of possible noncompliance of actors in the palm oil value chain in relation to these new EU policies.

6.1 Conclusions on palm oil trade

The trade part of this study mapped the full palm oil supply chain, from plantation level in Colombia to European consumption level, by identifying key supply chain actors and their linkages, trade flows, and purchase of Colombian palm oil products in the EU.

Oil palm cultivated area has increased 75% in the past ten years and Colombia aims to become a large producer of biodiesel. In section 3.1 on general trade flows, the study found Colombia ranking the 4th largest global producer of palm oil worldwide. Annually, Colombia produces around 1,838,000 metric tons of palm oil, about 2.3% of worldwide production.

To the EU, Colombia mainly exports crude palm oil and crude palm kernel oil. Section 3.2 states the EU countries have imported 8 million MT of palm oil and palm oil products from non-EU countries in 2021. Within the category of palm oil-related products crude palm oil represents the largest share of imported volumes in the EU, accounting for 74 percent (5.9 million MT). Of the total 5.9 million MT, the EU imported 241,710 MT (4.1%) of its crude palm oil import volumes from Colombia in 2021. 40,684 MT (8%) of the EUs imported crude palm kernel or babassu oil came from Colombia. In terms of type of palm oil products, Colombia does not play a significant role as supplier to the EU of three other relevant palm oil-related products under the EU Deforestation Regulation: palm oil cake, refined palm kernel oil, and palm nuts and kernels.

In 2020, 52% of Colombia's total production of crude palm oil was destined for the domestic market and 48% for international exports, as demonstrated in section 3.3. In 2020, around 28 percent (429,653 MT out of 1,559,011 MT) of Colombia's palm oil production was imported by the EU. In 2021, this dropped to 14 percent (241,710 MT out of 1,747,000 MT). Of the 2021 imports of Colombian palm oil and palm oil products to the EU, 42% was destined for the Netherlands, 30% to Spain and 24% to Italy.

A related key finding in section 3.4, on the consumption side was that EU imported volumes of Colombian palm oil dropped considerably since 2020. The main reason seems to be that exporting to the EU has become less attractive for Colombian palm oil producers, since the government is promoting palm oil production for the domestic market.

Favourable Colombian government policies promote the increased use of palm oil for biodiesel blends. Moreover, **anticipated EU import restrictions**, for instance the phasing out until 2030 of palm oil for use in biodiesel production under the RED II (Renewable Energy Directive)[123] and the upcoming EU Deforestation Regulation, may discourage EU imports of palm oil from Colombia. By contrast, recent EU imported economic values of Colombian palm oil did not follow the drop in imported volumes, but remained relatively stable, or even increased, linked to the mounting global prices for palm oil and palm oil products that will likely continue to rise.

6.2 Conclusions on supply chain actors

As shown in chapter 4, from 2017 through 2021, Grupo Biocosta (CO), Acepalma (CO), Cargill (USA), Daabon Group (CO), and Thin Oil Products (USA) were reportedly the **five major suppliers** of Colombian palm oil to predominantly Europe and Latin America. The main recipient EU countries of Colombian palm oil are the Netherlands, Spain, and Italy. Cargill de Colombia, Daabon group (Tequendama), Biocosta, and Indutrade supply to all three of them.

When focusing solely on Colombian exports to the EU to the top-3 recipient countries, the most important buyers for the Netherlands were Cargill, Wilmar, Bunge, Olenex, Daabon, Global Organic and Pasternak, Baum & Co. Similarly, Unigra, Golden Agri and Pasternak, Baum & Co were the main buyers for Italy, while LDC, Lipidos, Thin Oils, and Golden Agri were the main buyers for Spain. Although several buyers, such as Cargill and Unigra, publish a mill list, which enhances transparency in the value chain, others do not publish such lists, making it challenging to identify the mills with which they are associated in Colombia. For example, customers of biofuels and power generation, do not publish palm oil mill lists. Considering the increased focus on the biofuel markets, these are important stakeholders not covered in this study. Based on our research, it can be concluded that increased transparency in the value chain is essential, and mill lists play a vital role in achieving this goal.

The master table on palm oil mills linked to buyers (annex 1) provides indications on end-users and consumers of Colombian palm oil. FMCG companies that source and use Colombian palm oil for food products and cosmetics include Colgate, Danone, Ferrero, Friesland Campina, General Mills, Grupo Bimbo, Hershey, Kellogg's, L'Oréal, Mars, Mondelez, Nestle and others.

6.3 Conclusions on case studies

This report has analysed six cases selected based on several criteria, including the possible presence of deforestation or fires and other native vegetation conversion, as well as the proximity to the deforestation frontier, Indigenous territories or national reserves, and/or to illicit crops production. Other criteria were whether the identified palm oil mills were connected to pollution of nearby waterways and rivers, controversial land deals, RSPO complaints, and other social issues.

Impact on environmental human rights

The six case studies show that palm oil flows entering the EU market are linked to palm oil mills situated near areas where clear indications of savanna burning, environmental damage to watersheds, and displacement of Indigenous groups or peasants through forced or unfair land deals exist.

There are signs of direct small-scale forest clearances for palm oil cultivation. The case studies in particular confirm that palm oil expansion has an indirect role in pushing the deforestation frontier, with many current pastures expected to be overtaken by oil palm plantations in the near future. Recent fires in the borders of palm areas and heavy forest loss and conversion around 20 to 25 years ago on areas that are now oil palm plantations, as shown by the deforestation alert system, suggest that oil palm plantations are contributing to the further expansion of the deforestation frontier, along with cattle farming, illicit crops, and other crops such as banana in southwest Meta and northern Guaviare.

The case studies conducted on the transition zone between the Amazon and the Orinoquia have primarily impacted natural savannah ecosystems and, to a lesser extent, forest ecosystems. This finding aligns with a 2017 study [124], based on 2014 MODIS satellite maps, that reported only 9 percent (12,474 ha) of oil palm expansion in Colombia is replacing forest at the country level. However, palm plantations located in savannah areas affect river basins and drainage, disrupting functional connectivity by impeding the flow of water and the continuity of gallery or riparian forests. These impacts severely affect the quantity and quality of water and other resources available to local communities and biodiversity that depend on them. Of particular concern is the impact on the Caño Pororio in the southern region of Meta, where palm plantations have disrupted its natural course. This situation indicates that the plantation model employed in the area does not consider the protection zones of rivers and streams.

Conflict dynamics

Other relevant finding from the case studies is that in some cases oil palm expansion in Colombia is in the near proximity to conflict dynamics, increasing the risk that palm oil production is contributing to severe negative social impacts, including human rights and labour violations, displacement, land disputes, and extortion, abuse, and murder of Indigenous peoples and local communities by armed groups. Nevertheless, we can not conclude with certainty that palm oil plantations in general are the main cause of these conflict dynamics. The fact that palm cultivation is in some cases in proximity to illicit crops, could possibly be explained by the Colombian government promoting palm oil as a product substituting illicit crops. This approach by the government has shown challenges related to proper environmental management, phytosanitary difficulties, pressure exerted by some actors on land tenure, and labour conditions.

We can conclude that having mills in areas with conflict dynamics demands heightened scrutiny from auditors to prevent environmental or human rights violations. However, due to their location in regions beset by security concerns, these mills are sometimes inaccessible to auditors and other independent (civil society) parties tasked with verifying and improving compliance. This, in turn, results in persistent risks of non-compliant palm oil entering the value chain with respect to EU regulations.



Connection between palm oil, illicit crops and conflict

According to a study published in 2022[125], the Colombian National Planning Department found in their Armed Conflict Incidence Index that Colombian municipalities where palm oil grows, register twice as many conflicts[126]. Other studies demonstrated that areas of oil palm plantation expansion have geographically coincided with areas with paramilitary presence. Human rights violations in palm oil supply chains linked to Europe may soon become legally noncompliant under the EU CSDD Directive, in addition to being illegal under Colombian law.

Other existing literature and field research conducted by, for example, International Crisis Group on Colombian palm oil areas[127], show a link between oil palm and conflict dynamics.

According to these sources, palm oil-linked conflict has multiple dimensions:

- 1.massive displacement of communities has been taking place to make land available for the cultivation of palm oil;
- 2. different (armed) illegal groups have been using extortion of palm oil producers to finance their activities; and
- 3. palm oil producers has been using paramilitary forces to intimidate local people and activists.



7 RECOMMENDATIONS

Many commodities that are under the scope of the EU Deforestation Regulation are cultivated in high risk landscapes. The case studies in this report show this is also happening in Colombia. Ecosystem conversion, affecting water sources, illegal clearing of land, (mostly) indirect deforestation by pushing further the forest frontier, are the main environmental risks seen. In addition, there are clear direct associations with human rights violations.

To truly make a positive impact on the ground and prevent environmental degradation and human rights abuses associated with palm oil production in Colombia, we recommend policy makers in Colombia and the EU to allocate resources to environmental and human rights measures in high-risk areas and expand the Deforestation Regulation to other ecosystems. Additionally, we recommend to increase supply chain transparency, identify suitable and unsuitable areas for production. Finally, we encourage palm oil companies to invest in transparency and cooperate with local Indigenous groups and civil society organisations. Please see our specific recommendations below.

Palm oil may, in the future, truly make a local positive impact in Colombia, but only with full transparency, landscape investments, a common environmental human rights vision and close collaboration among actors.

7.1 Recommendations to policy makers in the EU

- 1. It is paramount for the EU and its member states to allocate resources towards environmental and human rights measures in high-risk productive landscapes, rather than relying solely on traceability requirements or avoiding these areas of concern. This to achieve a genuine effect on the ground through the implementation of the EU Deforestation Regulation. Given that similar legislative efforts are also underway in the UK and US, there may be opportunities for resource-sharing and collaboration in addressing risks in these high-risk landscapes.
- 2. In the event of persistent non-compliance, it is imperative to take measures to prevent traders and EU buyers from being linked to sites that are associated with environmental degradation and human rights abuses. This because some landscapes and sites are just not suitable for palm cultivation or expansion as this would further push the deforestation frontier, environmental degradation and harm (environmental) rights of Indigenous peoples and local communities.

- **3.** It is imperative for the EU to maintain its support for and collaboration with civil society organisations, as well as enhance the capacity of local authorities. This is important to bolster the traceability and landscape governance of palm oil, as they jointly play a pivotal role in the Colombian palm oil sector in preventing deforestation and illegality.
- **4. Expand the scope of the EU Deforestation Regulation to encompass additional ecosystems beyond forests.** While the direct impact of palm oil production is currently primarily on natural savannas and waterways in Colombia, the clearance of these areas is exacerbating the encroachment of cattle into forest ecosystems, which may ultimately pave the way for palm oil expansion. Excluding the encroachment of other ecosystems, such as Other Wooded Lands (including savannas), in the regulation, would benefit forests as well.
- 5. Ensure that the European Directive on Corporate Sustainability Due Diligence adheres, at a minimum, to the OECD Guidelines and the UN Guiding Principles on Business and Human Rights (UNGPs), with an specific focus on environmental due diligence. As the report shows, there is a strong need to regulate environmental human rights due diligence in relation to the Colombian palm oil supply chain, in addition to EU deforestation legislation. This should be followed by ensuring that national mandatory human rights due diligence legislation in EU importing countries, including the Netherlands, Spain, and Italy, is likewise in alignment with the OECD Guidelines and UNGPs. This should include environmental due diligence and sufficient scope to cover all companies in the palm oil value chain regardless of size and turnover.

7.2 Recommendations to private sector actors in the EU

- 1. Businesses in the palm oil sector, including financial companies, should identify and report on deforestation and ecosystem conversion risks and human rights risks and do all they can to prevent them. To address this challenge, companies must improve due diligence policies, engage external independent auditors, and disclose data regarding the actors involved in their value chain (including plantations, mills, traders, and financiers).
- 2. More research needs to be done on the gap between the value of palm oil exports reported and the value of imports reported by Colombia's trading partners, because of important money laundering risks. This research can contribute to avoiding distorting the taxable base of the transactions, and the occurrence of illicit financial flows.
- 3. Businesses should invest, together with governmental institutions, in workable solutions and the scaling up of robust transparency and traceability mechanisms for palm oil and cattle in Colombia, as well as landscape wide governance measures to avoid the deforestation frontier and human rights violations move further on. This should take place in cooperation with communities, local expert civil society organisations, local governments and/or RSPO.
- **4. Many EU buyers are still in business with non-RSPO certified mills. We therefore recommend to continue or start requiring RSPO.** This combined with the improved application of RSPO standards, including ensuring that non-compliance is effectively enforced. In addition, support the role RSPO has to play for both traceability and transparency, and a broad set of sustainability values in the EU and global physical supply chain of palm oil.

- 5. European palm oil buying companies should especially be aware of and act upon the fact that they source from palm oil mills in close proximity (less than 25-50 km) to Colombia's main deforestation frontier and Indigenous territories, such as Oliomapi (Poligrow), Agropecuaria La Rivera (Agropecuaria La Rivera Gaitán), and Aceites Cimarrones (Agropecuaria Santamaria). This increases direct and indirect risks of deforestation.
- 6. Having mills in areas with security issues, for example close to land conflicts and illicit crop production, requires much more attention from (RSPO and EU compliance) auditors to ensure no environmental or human rights violations take place. In case of incompliance followed by inability of auditors to reach the area, there should be consequences for the mills by traders supplying to the EU.

7.3 Recommendations to policy makers in Colombia

- 1. Colombian government should act on new EU regulations and be able to translate them to the local context, in an inclusive and clear way with communities, civil society organisations and palm associations, in order to inform and prepare producers and consumers at the national level. Also because similar legislative developments are also underway in the UK and US.
- 2. Implement more stringent monitoring legislation and practices at national level in Colombia throughout the different stages of the palm oil supply chain to ensure complete traceability of the products and land deals. As the report shows that in 2020, 52% of the palm oil has been consumed in the domestic Colombian market, this is important to ensure that there is less tax evasion, human rights regulations and environmental standards are met and upheld both for the domestic market and the international market.
- 3. Consolidate all efforts to establish an open and user-friendly platform accessible to the public in order to improve traceability mechanisms in the sector from palm oil plantation to mill to buyers.



- **4.** Collaborate and engage with Indigenous Peoples and local community organisations through inclusive, transparent and participatory dialogues. As they can provide significant support in improving landscape governance, understanding palm oil traceability, and in establishing monitoring systems in specific contexts. This can help in implementing EU regulation within all actors of the supply chain.
- **5.Advance the national process of zoning for palm oil production in order to determine the ecological and environmental human rights suitability of different areas.** This step will allow for greater balance in areas that may be suitable for agricultural activities and is expected to protect the Amazonian ecosystems, including natural forest and non-forest vegetation cover, with appropriate management and land use.

7.4 Recommendations to private sector actors in Colombia

- 1. Comply transparently with environmental regulations and human rights norms established by the Colombian government and by international environmental standards, while implementing good practices following environmental regulations. This includes no environmental degradation, no planting near or in buffer zones of water sources, no burning, and not changing savannas for other forms of land use.
- 2. Provide and share supply chain data in a practical and accessible way to complement existing research on traceability and to strengthen comprehensive monitoring systems. Currently, there is a lack of consistent and clear data on the stage of palm fruit production before it reaches the palm processing plants. To ensure that production does not come from areas where deforestation, environmental degradation or human rights violations have occurred, there must be a strong traceability monitoring system, including local market transactions.
- 3. Colombian palm oil consumer companies should especially be aware of and act upon the fact that they source from palm oil mills in close proximity (less than 25-50 km) to Colombia's main deforestation frontier and Indigenous territories, such as Oliomapi (Poligrow), Agropecuaria La Rivera (Agropecuaria La Rivera Gaitán), and Aceites Cimarrones (Agropecuaria Santamaria). This increases the risk deforestation directly and indirectly, as well as other environmental and social issues.
- **4. Promote critical thinking among producers, government, civil society and consumers groups of palm oil-derived products in Colombia.** This can be achieved by establishing transparent dialogue and collaboration of private sector with government agencies, associations, and civil society organisations to identify areas for improvement in practices and management within the supply chain. This to increasingly find better practices for landscape governance that respects environmental rights of local communities and to establish which areas are not suitable for palm oil production.
- 5. We recommend that the local palm oil producers have good forest and water management practices, which include actions for recovering and restoring the affected natural areas. These practices should be according to or beyond RSPO requirements, because riparian vegetation serves a water and soil conservation function and helps the connectivity of ecosystems. Impacts, deterioration and environmental loss due to the presence of palm crops planted along the river banks should be addressed.

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