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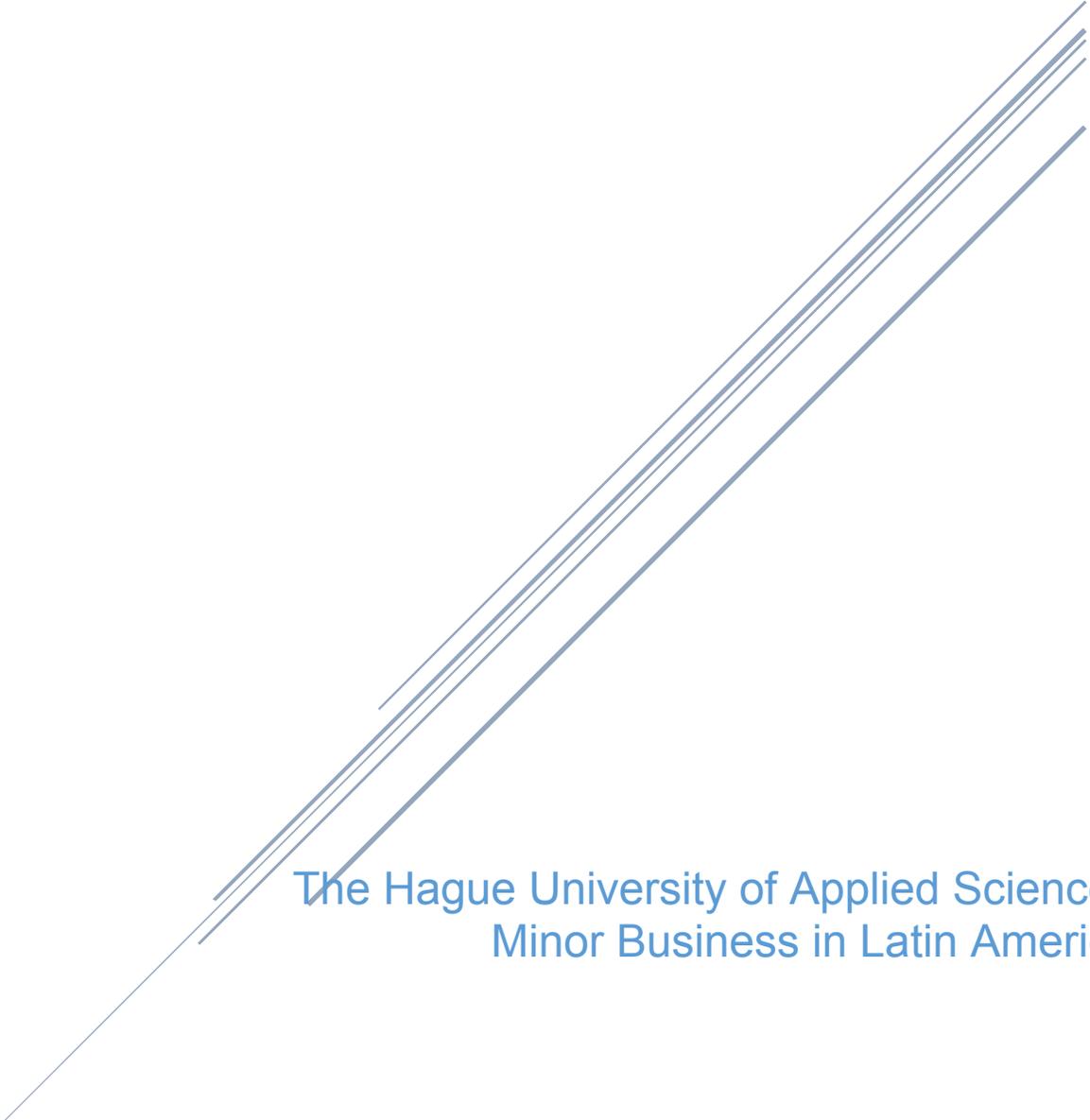
# *Agri-food in Colombia*

*Commissioned by the Netherlands Enterprise Agency*

*>> Sustainable. Agricultural. Innovative.  
International.*

# BILA PROJECT GROUP 4

Agri-food in Colombia



The Hague University of Applied Sciences  
Minor Business in Latin America

## Executive Summary

Different tools have been utilized in order to identify the Colombian challenges in the agri-food sector and its opportunities for Dutch companies. A critical look towards Dutch companies and their core strengths has been matched needs that the sector in Colombia has. These are the key findings.

### *Cultural:*

Colombia has a more hierarchical structure compared to The Netherlands. This means that talking to someone that is higher in rank within a company than you, demands much respect. The Dutch approach of being direct within conducting business and saying what you want is not appreciated. Colombian people want to create a bond with people they conduct business with, preferably conducting business with someone they already know. Companies can hire agents in order to accomplish this. The preferred way of conducting business is slow and steady. A family is often incorporated, and respect is of the utmost importance.

*Economic:* Colombia much growth within the agricultural sector is expected. The new assigned president wants to stimulate this growth, incorporating the ex-FARC guerrillas into this process, as there are new areas ready to be cultivated, and new people that must reintegrate in society could possibly work on the land. The goal is to increase the productivity and total output of the market; There are government grants subsidies to local companies that want to buy new equipment. This is because of the unreliable aspect of used equipment and the need to increase productivity.

### *Other important findings:*

The Colombian business climate has faced many stages of corruption. The country has difficulty with legal transparency for companies, and there is much corruption in the courts. Dispute settlement takes hugely long for companies and can be troublesome. This can hinder conducting business for companies that want legal transparency and limits security.

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## Introduction

This report has been created in order to provide insight within the Colombian market and its opportunities. The perspective of this report is aimed towards Dutch companies that specialize in one or more of the following topics: *Feeding the cities, Dairy or Poultry*.

The insights are drawn from several analytical tools; including Hofstede's cultural insights, a PESTEL analysis, Porter's five forces, a SWOT analysis, a business canvas, and a CAGE analysis. These together provide an in-depth overview of the Colombian market and opportunities for companies to enter, as well as showing the current political climate and predictions for the agri-food sector.

The project has been made by students of The Hague University of Applied Sciences, following the Business in Latin America minor, in cooperation with the RVO in The Netherlands, and Students from La Sabana University in Bogota, Colombia.

If there are any questions relating to this report, feel free to contact any of the group members that were involved in this project, preferably via e-mail.

# National Information

## *Hofstede theory*

Colombia differs from The Netherlands in various ways, analyzing the cultural differences between the two countries can be made by using Hofstede's cultural dimensions model, which uses six different cultural dimensions that are affected by a country's culture. Culture is hereby seen as the beliefs and preferences of the people within a nation, that come from their own experiences and background, which are often built by many years of habits that form a person's perspective on certain situations.

The Hofstede theory applies several dimensions which are based on national cultural research done by Geert Hofstede, Gert Jan Hofstede, and Michael Minkhov. The Hofstede theory explains six dimensions representing national preferences for a country comparing it to another country. The six dimensions will be as followed: *power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence*. The dimensions will be briefly explained and analyzed in order to understand the cultural differences. In this particular case, the research will be based on The Netherlands compared to Colombia in order to understand communication between the countries. Which will lead to a significant business relationship based on respecting cultural values.

### *Power distance*

Firstly, power distance can be explained as a dimension which is defined by the extent to which the less powerful members of a society expect and accept that power is assigned unequally. The result of the Hofstede matrix shows that Colombia scores a remarkably high percentage of 67. The results of The Netherlands are a low percentage of 38 percent. This means that the Colombian society is more used to inequalities among people. In business trade matters The Netherlands should consider the Colombian level of power distance, for example, business leaders or high positioning people should be taken seriously and be treated with respect.

## Individualism

Secondly, the dimension of individualism shows an extreme difference in both countries. The individual dimension describes the degree of interdependence a society maintains among its members. Countries could be very different in approaching this dimension of Hofstede. As shown in the research, Colombia has a meager percentage of 13 percent. Comparing to The Netherlands with a percentage of 80. Analyzing both countries can be concluded that Colombian people are considered to be collectivistic people. The research explains that most of the South American countries are more collectivism orientated such as Guatemala, Ecuador, and Panama. High collectivism countries find being in a group and aligning yourself with the group's opinion very valuable.

Furthermore, relationships play an important role in Colombian society. The preferred way of doing business is via family or friends, which makes connections and networking one of their main tasks to complete. For Dutch businesses, this can be challenging, as the Colombian counterparts they are willing to approach will want to do business via existing relationships. Utilizing people (agents) that are from Colombia or sending people individually to start networking is the best solution to this issue.

## Masculinity

Thirdly, the dimension of masculinity. This dimension is still an issue globally. Masculinity is a fundamental issue which considers that people are either motivated through presentation orientated mentality or creating satisfaction in liking what you do. The difference between masculinity and femininity has to do with the quality of live performances, success and standing out from the crowd. Colombia masculinity scores 64 percent on masculinity, compared to The Netherlands which scores remarkably low with 14 percent. These results indicate that Colombia is leaning towards a more masculine society which means people have a high success oriented and competitive. The Netherlands however, is leaning more towards a feminine society. This means that in The Netherlands, people are generally more motivated to do what they like, rather than what they are good at.

### Uncertainty avoidance

Fourthly, uncertainty avoidance, a dimension that affects situations concerning international trade. Uncertainty avoidance is known as the extent to which people feel threatened by unknown situations and their beliefs in which they try to avoid these situations. The Hofstede theory shows that Colombians have an extremely high percentage of uncertainty avoidance with 80 percent. It means that the Colombian people have an intense sense of emotion regarding unexpected situations. The results also include the impact of religion, which is respected and followed. This aspect makes it hard to change society or deal with changes in the status quo. Comparing this to The Netherlands which has a score of 53 percent, can be examined that both countries have a relatively high score of uncertainty avoidance and both should be able to understand each other's position.

### Long-term orientation

Fifthly, the dimension of long-term orientation. This is how the Colombian and Dutch society maintain some links with its past while dealing with the challenges of the present and future. Colombia scores a meager percentage of 13 percent, which shows that Colombia is classified as normative. People in the Colombian society seem to be focused on the absolute truth and keep holding on national traditions. The Netherlands scores 67 percent on this dimension, which means that The Netherlands is focusing way more on future perspectives and innovations.

### Indulgence

Lastly indulgence, this is an essential factor in society. The dimension of indulgence is the extent to which people try to control their desires and impulses. The dimension of indulgence is essential in trading agreements between the Netherlands and Colombia because of the way that they have been raised. With socialization, people become "human". Relatively strong control is called restraint, which means that people consider leisure time or spending money of days-off as a positive activity. Colombia scores a percentage of 83 percent; the Netherlands shows a score of 68 percent. It can be concluded that both countries find leisure time important in their

lives next to work. Considering doing business, the Netherlands should be aware of the leisure time Colombian people spend next to doing business; this means that when interacting and conducting business with Colombian people, a person might invite you over for dinner or wants to spend time with you after work hours. This is essential for the relationship as it builds trust with the Colombian people and makes them like you, which then can be turned into a (business) relationship that lasts.

### ***Why is this relevant to the sector?***

After analyzing the six dimensions of Hofstede, the relationship between the Netherlands and Colombia should be more smoothly. Understanding each other's preferences and cultural behavior leads to more respectful conversations. Concluding, in order to do business with Colombia, cultural differences should be identified to make sure misunderstandings will be prevented.

What can prove to be challenging when conducting business in Latin America will be their need for *personalism*, which means that the value to be treated differently than others. In other words, they do not want to feel like a number, but they need more personal attention. Which can be hard if you are in a highly bureaucratic market (Osland et al., 2017). This already gets pushed more and more because of international competition, and the desire of customers globally to feel connected with companies, and the desire for companies to create personalized interactions with customers. One of the significant changes in the 1990's was the privatization of many companies, which resulted in opportunities for investors. To be sure that we will not have problems with the personalism it will be essential to work with locals (local agents, for example) to increase the likeliness of succeeding in Colombia.

The way of doing business is also quite a challenge as mentioned in a lecture of Mr. Meiller (a teacher at THUAS, with several years of experience in business in Latin America). Latin Americans want to know you before they will do business with you, an outsider will have a hard

time to mingle. Because of this, there is a need for an introduction by a local or you need a local as representative over there. Next, to that, there is one other big difference. In South America the chain of command is strict, and respect for people who are higher than yourself is the rule. To get something done, you need to go through the whole channel instead of going straight to the right person (which is usually the case in The Netherlands). Also, people in South America will be less direct than Europeans might be used to, in for example the Netherlands we say what we want to say, without thinking how it sounds as long as it serves the purpose. In South America, it is essential how it sounds and to not be disrespectful. This will result in the fact that they will circle what they want to say and that you will have to take the information from the context.

## PESTEL Analysis

The PESTEL analysis will provide an overview of the general situation in Colombia, based on six different dimensions: *Political, Economic, Social, Technological, Environmental and Legal*. These dimensions will provide a reliable general overview of Colombia as a country, and of the Colombian market. Combined with the cultural dimensions of Hofstede, this will give a general overview of what the country's culture and the economy are, as well as going in on the current political situation and trends within the market.

### *Political*

Colombia is currently in peace with the FARC guerrillas, yet the country is divided about this peace. More than half of the citizens have rejected the peace accord which was signed by FARC and the Colombian government according to *The Economist*. Recently, Colombia assigned a new president named Iván Duque from the Democratic Centre party. He vowed to modify the agreement that in 2016 ended a 52-year war with the FARC guerrilla group. Other things the president wants to accomplish are reforming the pension system, cutting taxes and reforming the court system to make them more efficient. This will not be an issue for our export to Colombia. Most of the danger because of guerrillas are inside the forests. Next, to that, the cities have been deemed safe over the last couple of years. Moreover, Colombia has a problem with corruption and the drug business. Especially in the agriculture sector, the guerrilla movement has a lot of impact. The land administration, for example, moderates a high percentage of corruption risk for businesses. The government protects the property of businesses in Colombia, but during the early 21<sup>st</sup> century, over 800 businesses and farmers collaborated with death squads to expand their lands. Later in 2016, when the peace deal with the guerrilla's FARC was introduced, the government again started to divide a wide-scale land restitution process. The Colombian agriculture sector lost a lot of time in registering the property of companies. In Colombia, it takes seven steps to come to regional agreements, wherein other regions it only takes four steps. Furthermore, in July 2018, one Senate member resigned after being accused of being linked to the AUC which is a paramilitary group. The best way of making

sure that there will not be any harm from corruption is to find a few trustworthy locals who can help out with entering the market. The political situation can have an influence on the agri-food sector in multiple ways.

## *Economic*

### General data about the Colombian financial system

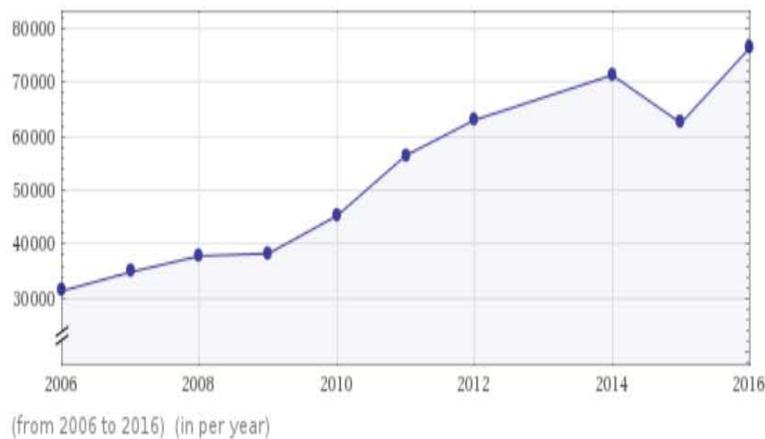
#### Currency and Central Banking numbers according to KPMG

- *Currency*: Colombian Peso
- *Exchange rate*: 1 USD = 3,206 COP (October 31<sup>st</sup>, 2018)
- *Foreign exchange reserves*: US \$43.74 Billion
- *Total Debt (2013)*: external: \$85.83billion, internal public debt: 39.6% of GDP
- *Foreign direct investment (in billions)*: **inbound**: US\$10.2 (2008); US\$17.4 (2013); US\$19.9 (2018 forecast); **outbound**: US\$2.0 (2008); US\$3.7 (2013); US\$3.2 (2018 forecast)
- *Export FOB (in Billions)*: US\$54.6 (2012); US\$54.8 (2013); US\$66.2 (2018 forecast)
- *Sector breakdown*: service: 55.5%; industrial: 37.9%; agriculture: 6.6%
- *Trade balance (billions)*: surplus of US\$5.2 (2012); US\$3.2 (2013); US\$4.8 (2018 forecast)
- *Stock exchanges*: Bolsa de Valores de Colombia, Bolsa Nacional Agropecuaria

Colombia's GDP is increasing, yet this happens at a declining rate. The number of registered businesses is increasing according to Wolfram Alpha. In 2006 there were 30.000 new businesses registered, and it built up to 76.000 in 2016. The total number of businesses is nearly 500.000 as you can see in the next table. This total means that many companies stay around once they are started. This is also proven in the graph.

**76 334 per year** (5.786% of total businesses) (world rank: 12<sup>th</sup>) (2016 estimate)

New businesses registered history:



new businesses registered	<b>76 334 per year</b> (5.786% of total businesses) (world rank: 12 <sup>th</sup> ) (2016 estimate)
total registered businesses	<b>497 778</b> (world rank: 21 <sup>st</sup> ) (2007 estimate)
firms formally registered when operations started	<b>94.3%</b> (world rank: 50 <sup>th</sup> ) (2010 estimate)
firms offering formal training	<b>65.1%</b> (world rank: 7 <sup>th</sup> ) (2010 estimate)
firms using banks to finance investment	<b>35%</b> (world rank: 39 <sup>th</sup> ) (2010 estimate)
firms with female participation in ownership	<b>35.3%</b> (world rank: 60 <sup>th</sup> ) (2010 estimate)
firms with ISO quality certification	<b>20.8%</b> (world rank: 39 <sup>th</sup> ) (2010 estimate)

Figure 2: Table of the number of businesses in Colombia (in total)

According to the CIA, Colombia's economy is heavily dependent on the export of raw materials such as coal and oil. This makes Colombia's economy vulnerable to fluctuations in commodity prices. An example of this is the year 2017, in which Colombia's economy slowed down because of lower oil prices and insurgent attacks on oil lines. There is also a big industry in textiles and services such as telecommunication and tourism. The most significant sector is the service sector, which adds around \$155 billion a year, followed by industry (\$84.27 billion a year), manufacturing, which consists of chemicals, food & beverages, tobacco, machinery and others (33 billion a year). Then there is the agriculture sector, which adds another 18 billion dollars of value to the economy.

**GDP (purchasing power parity):**

\$714 billion (2017 est.)

\$699.7 billion (2016 est.)

\$679 billion (2015 est.)

**note:** data are in 2017 dollars

**country comparison to the world:** [32](#)

**GDP (official exchange rate):**

\$309.2 billion (2017 est.)

**GDP - real growth rate:**

1.8% (2017 est.)

2% (2016 est.)

3.1% (2015 est.)

**country comparison to the world:** [161](#)

*Figure 3 GDP Colombia*

According to the National Federation of Poultry Farmers of Colombia (FENAVI) and the Colombian Pork Producers Association (PorkColombia), who are both concerning the domestic import, the agriculture sector is expected to grow with 2,4 percent in 2018. This is mostly stimulated by poultry, eggs, and swine. The best option for the agriculture export sector to Colombia is to encompass machinery and technologies to grow the domestic production of poultry. This can be considered to be something developing and to governmental offers of Colombia to increase agricultural equipment. The government can offer subsidies on the import of new agricultural equipment; this can benefit the companies that specialize in agricultural equipment a lot. Currently, the United States profits from the subsidies that the Colombian market is offering. The most valuable technological products the United States is exporting are products such as GPS, Air conditioning and other relatively advanced technologies. The business

between the United States and Colombia is working well because the companies in the United States provide higher technological inputs which will last longer, and eventually will be cost saving. Even though Colombian agricultural farmers could appreciate the new technologies in agriculture businesses, most of them being small or medium enterprises will require subsidies to be able to afford them or to buy them. The limitations in their financial capabilities are because of the high prices relative to their buying power. This can be eased by partnering with institutions that could provide agricultural credits together with explaining the importance of high-tech equipment and its cost-saving abilities, as well as its environmental friendliness.

## Agriculture

The agriculture sector earned 7.12% of the GDP and produced for 18.41 billion dollars' worth of products in 2016, according to MarketLine. The principal activities in the Colombian agriculture sector are Cattle rearing, coffee growing, cocoa, sugarcane, bananas, rice, cotton, tobacco, wheat, flowers, dairy, cattle, and poultry. The Cattle rearing has long been an essential factor to the Colombian markets. In Colombia, about 19

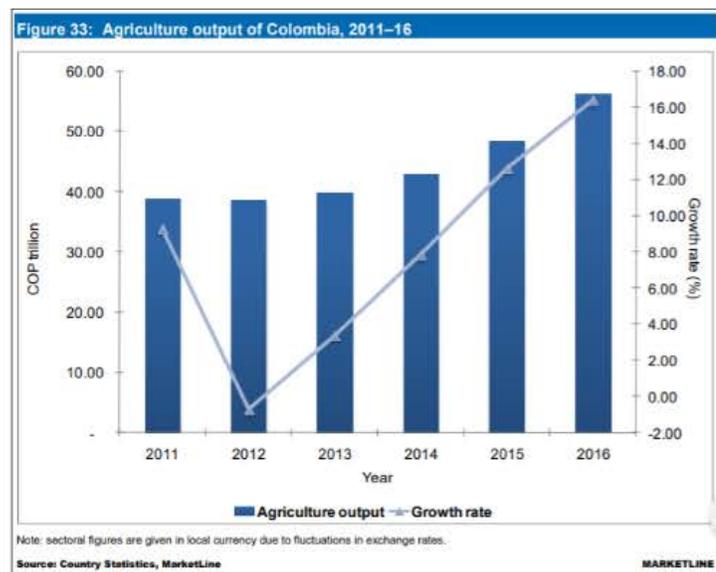


Figure 4 Agriculture Output of Colombia

million hectares land property is being used for cattle production. Concerning the transportation of cattle rearing, the cities Antioquia and Bolivar have improved their breeds to keep the quality of cattle rearing. Cattle are driven by trucks, which is not the ideal way of transport because of the mountains and roads in Colombia. Nowadays, there have been some improvements to build slaughterhouses and meat-packaging productions close to the ranges.

Furthermore, the dairy cattle have not been so useful in the past but has now been increasing and moving to the big cities in Colombia, being transported by boats. In 2001, there were 26 million cattle, 2.3 million sheep and 2.2 million pigs, and the process remains to increase.

Because of the economic stability and the peace in Colombia, trade is doing better, which generally means that there is more money to go around in the economy. This translated into higher demand for products within the agricultural sector. The result of more demand of the consumer leads into a livestock farmers union. The World Bank, NatureBank, Britain's Nature Conservancy, Colombia's Environmental and Childhood Action Fund and the SIPaV Italian Phytopathological society have launched one of the most significant sustainable livestock farming projects in Bogota. This project contains 83 districts in 12 departments located in north-central Colombia. According to Zuluaga (2018), this is the first step in order to bring cows and trees together; it will change perspectives about livestock farming productions should be.

### Agri-food sector

With agri-food, the focus will be on the food and living animals branch or in the technology branch. The food and living animal branch exported for 27.146.000 euros worth of products to Colombia, and this amount is increasing. Back in 2014, it was only 16.744.000, which means that it has doubled throughout three years. The machines branch exported for 116.590 euros worth of products to Colombia in 2017.

### Feeding the cities

Feeding the cities can be understood as a broad concept. In order to conduct proper research, feeding the cities have been narrowed down to Colombia and the Netherlands. Feeding the cities is a way to create food within an urban area, which is necessary with the continually increasing number of people that live in cities. Some agricultural issues can be dealt with on a national level. However, most of the issues need international assistance. The main thing which can be offered by the Dutch is technology to improve productivity (yield). The Netherlands can consider Colombia as a potential country to deal with feeding the cities. According to the mission statement of Netherlands Enterprise agency (2017), feeding the cities contributes to

helping (glass) horticultural entrepreneurs to provide harvest, transport and process their products as efficiently as possible.

More and more people are moving to urban areas. In the year 1950, 749 million people were living in urban areas. In 2014 this increased to 3.9 billion according to the U.N. DESA population division. The highest growth is in Asia, Africa, and Latin America. Currently, Colombia has a growth rate of 0.81% concerning urbanization, with a density of 43.32/km<sup>2</sup>. The total Colombian area is 1.141.748 km<sup>2</sup>, and Colombia has 49.1 million citizens. The most significant part of them lives in urban areas. Colombia has five cities with more than 5 million people and 255 cities with between the 10.000 and 100.000 citizens.

Fig. 2. Arable Land for Person 1950 – 2050, Source Perfetti (2010).

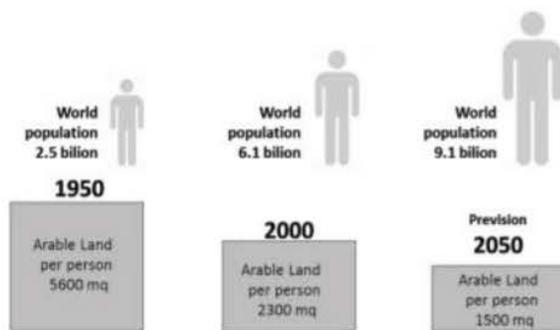


Figure 5 Growth of World Population

As urban areas and income of its residents grow, the demand for food grows as well. To sustain this, need the world's agricultural production will have to increase by 70% to 100% of its current volume by 2050. The area of arable land will not be able to grow by more than 12% (compared to 2011) states science direct (see picture). A way to counter this is an urban farming and to be more efficient with food. 30% To 40% of food production is lost due to failures in the distribution chain according to science direct. These stats are worldwide. The trend of urbanization and significant inefficiencies also applies to Colombia. Bogota has a current population of over 7.6 million people and the second city is Medellín and has 2.4 million inhabitants.

The picture on the left shows a few ways that can be used for inner-city farming. Unused space can be given a new destination with the purpose such as farming like you can see in the bottom pictures. Yet, it is also possible to build structures as shown in the top pictures. Colombia has a problem of reduced productivity. In 2000, agriculture accounted for 14% of the GDP. Currently,



*Figure 6 Examples of Inner-city Farming*

only 5% of the land is cultivated. This is due to the rugged Andean terrain and in part to lack of irrigation. The flatter valleys are mostly used for livestock which limits cultivation. Fertilizer is expensive and often not used sufficiently. Greenhouses will be an excellent solution for this problem this way it is possible to maintain the environment and to use the land efficiently. The right one is an excellent example of vertical farming as previously explained; there will be a shortage of land to produce food. Vertical farming might be one of the solutions for this problem since it uses space way more efficient. There are already examples of vertical farming in Colombia and especially in Bogota. These farms are not efficient and mostly for education. There is a trend of setting up farms within the urban area to teach children how food is produced. The information which is thought is in some cases used for home practice according to city farmers. There are multiple examples of how vertical farming is done, and that it can work. It requires more technology than the traditional way of farming. Which requires a more significant investment. One of the examples are the green sense farms based in Portage, USA. This company uses a closed-loop hydroponic system for growing vegetables under Philips lights according to MVO Nederland. This company can provide 26 pesticide-free harvests per year. Their sales channels are direct, local retailers and local restaurants. One example of companies building these sorts of greenhouses is KUBO group.

### Dairy sector

The dairy sector in Colombia is growing with an approximate volume of 6.6 billion liters per year. Colombians dairy products are known for its excellent quality with higher protein and fat

percentage than imported milk from, e.g. Germany, Switzerland, Canada, USA or New Zealand (Colombia). Therefore, high knowledge and technology are needed to enter the market. Dutch companies have to also adapt to the Colombian dairy sector. In Colombia, an average farm has around 8 to 10 cows. Approximately 66% of all farms in Colombia own between 1 to 25 animals, 24% own 25 to 100 animals, and 8,7% own 101 to 500 animals. Around 1% own between 501 to 1000 animals. In the Netherlands, 75% of all dairy farms work with 1 to 100 animals, and 25% own between 101 to 150 animals. Small-scale farmers who often do not use advanced technology and often live in places where adequate infrastructure is lacking. Dutch companies have to adapt to that situation. The milk price gets regulated by the state; it is crucial for Colombian farmer to produce as cheap as possible to still profit from their production. Dutch companies should adapt to the way of business in Latin America, especially with the focus on the Colombian culture to enter the market. Often small-scale farmers in Colombia do not have advanced English skills, that could be a significant disadvantage if presenting products or negotiating. The Dutch and Colombians are different on many levels, which creates opportunities. Colombia is more significant than the Netherlands in internal demands. As stated before, they could benefit highly from Dutch knowledge in order to produce the production process as cheap as possible. Which is precisely where the Dutch can help out. Dutch technology can help to make the process more efficient and therefore more profitable. Summarized, it is not easy to enter the Colombian dairy market, basic technology and language skills are needed. Moreover, the Netherlands produced 13 ton of milk per Ha in 2009, which was the highest production per Ha in the world. Dutch companies have to adapt to the domestic situation and have to learn how to do business differently. Furthermore, administrative rules, such as setting the milk prices are a challenge.

## Taxes

The corporate tax rate is 25% in Colombia. This rate applies to all Colombian business. Dividends are subject to a 25% withholding tax unless tax on corporate income has been paid. The companies operating in Colombia's free trade zone are subject to 15% of income tax.

## 2. Goederenexport van andere landen naar Colombia

Tabel 2: Voornaamste Colombiaanse importpartners (bedragen x 1.000 euro)

EXPORTERENDE LANDE	WAARDE EXPORT IN 2015	WAARDE EXPORT IN 2016	WAARDE EXPORT IN 2017
Totale waarde Colombiaanse goederenimport	48.700.780	40.507.778	40.785.829
1 Verenigde Staten	14.039.146	10.801.385	10.707.405
2 China	9.038.323	7.799.035	7.749.377
3 Mexico	3.471.134	3.081.817	3.042.311
4 Brazilië	1.877.766	1.913.161	2.023.560
5 Duitsland	2.042.761	1.542.999	1.658.847
6 Japan	1.105.820	1.008.042	1.089.905
7 India	1.080.395	854.681	922.416
8 Spanje	824.555	829.918	856.370
9 Frankrijk	1.728.563	748.829	840.443
10 Zuid-Korea	1.040.874	803.181	700.646
11 Canada	790.234	686.863	700.244
12 Italië	742.073	688.758	668.538
13 Ecuador	705.484	727.173	633.253
14 Chili	703.293	651.516	615.440
15 Peru	844.352	616.459	586.520
16 Vietnam	442.497	425.336	493.044
17 Argentinië	451.793	461.649	488.035
18 Verenigd Koninkrijk	483.009	375.537	409.537
19 Taiwan	471.302	391.086	369.743
20 Zwitserland	390.352	349.712	365.626
21 Colombia	755.255	0	324.486
22 Bolivia	389.566	482.644	312.746
23 Thailand	268.004	263.161	260.996
24 Nederland	323.764	281.281	257.759
25 Rusland	363.799	227.840	252.902

Bron: International Trade Centre (ITC), 2018.

Figure 7 Export Towards Colombia

## Social factors

Colombia has 47.698.524 citizens according to the CIA; the religions are catholic with 79% and protestant with 14%. Their official language is Spanish. The biggest group of the population are children and young adults with a median of 30 years. Which is perfect for us looking at our product and how to position it into the market. We can use this to our advantage. The younger population are more internationally orientated, and they will also see the advantages of more technology to improve efficiency. Colombia has reformed its subsidy policy, one of these subsidies is on electricity, gas, water, and waste. This is done with the purpose of keeping these prices low for poor households. Not a lot of that money reaches the poor and are often used for undermining incentives for efficient resource use and waste minimization. The Latin American business culture is rooted in its European colonial heritage, according to the book emerging business in Latin America. This means that their structure is characterized by a concentration of power, a lot of hierarchical structures and networks of relationships. This is changing since the

1990s with the goal of being more efficient. Since culture comes with the years, there is still a great connection to the old way. People in Latin America value personal relationships since they have been initially crucial in life. Once a relationship is established it shall not be questioned, empathy is the key.

### *Technological factors*

#### *Emerging technologies*

Within the technological environment of Colombia and the industry as a whole, some new technologies have to be addressed when entering the market. An essential factor to focus on is small-scale social media marketing. Another trend within the technology sector is the increased demand for products that are designed to be contributing to a more sustainable economy. These products are supported by governments worldwide, and technology is driven towards being more sustainable through various treaties. The "Colombia Siembra" program is one of the examples of improving the agri-food sector. The program is in favor of the increase of cultivated area with one million hectares. Since 2014, the Agriculture National Census would like to achieve another 26 million hectares for potential agriculture activities such as local consumption maize, soy, and rubber. The other product from Colombia namely palm oil, tropical fruit and cacao will be the mainstream trade. The opportunities for Dutch organization lay in knowledge and technology transfer in several stages of the production chain, genetic areas, cultivation, post-harvest, automatization, Agro logistics, and sustainability. Also, the poultry, dairy, and cattle sector. According to the Consejo Nacional Lechero (CNL), there are eight different dairy production regions which are the following.

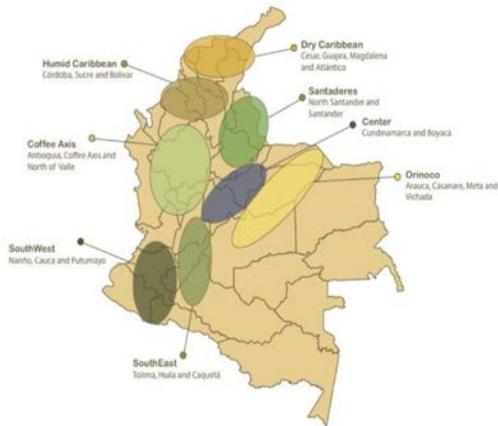


Figure 8 Milk Production Regions Colombia

In the dairy industry, Colombia is a country with much potential in terms of dairy, it has already signed several Free Trade Agreements and has the opportunity to compete with economic giants, however, the lack of technology, the poor road system, and the high production costs are reasons so that the sector is not as competitive as the country would like. The government investment in development and technology has been meager, leaving the country behind in comparison with external competitors. The problem in the country is not focused on production but milk processing. It is estimated that only 50% of the milk produced is processed, so the remaining 50% is sold at meager prices in open markets. So, things, if the country achieves an advance in processing centers and technology, these 7,000 liters of milk produced could be processed to be sold locally or in international market. This problems in processing must be overcome to meet that goal, because milk is considered one of the foods with the highest level of susceptibility due to contamination, due to the way it is collected, transported and handled in the processing plants. Also, these problems hurt the international markets, since the country is not able to accomplish the requirements of this markets, which will end up making the country less competitive. According to the World Society for the Protection of Animals (WSPA), the poultry industry is the fastest growing livestock activity in Colombia. In the global value chain for the egg industry, in the inner transport part, after the chickens have laid their eggs, the transport band takes them to the process of washing. In the egg washing process, the particles of dirt are removed before the inspection. In the inspection process, damages in the eggs are detected, so they are extracted from the lot. After that, eggs are

selected based on their size and their destiny (supermarkets, exportation, distribution centers, etc.). Then, different packages are utilized depending on the market they are going to. When they are already packaged, the eggs are stored waiting to be distributed to their end markets. In the poultry industry, the introduction of new technologies shows an improvement in the production of this type of products. The institutions need the training to apply the knowledge of the new technologies in genetics, the automation of the processes and the capacity of the Colombian businessmen to adopt the changes to larger farms. As a result, the increase of the production efficiently and profitably; this allowed the mass consumption of eggs and chicken that today are one of the primary sources of protein for Colombians. From there, the competitive level rises, and there were the first attempts at vertical integration and the incorporation of technological components in the assembly of the food plants, in order to increase the efficiency of the egg and chicken producers. A few more examples of emerging markets are automatization (use of robots), software to steer the hardware and to analyze big-data to increase efficiency and vaccines.

Also, the Green Growth policy will have a big effect on Colombia. The green growth policy is meant to make the country more environmentally friendly, here are a few of the milestones which are set by the Colombian Government for 2030 according to the GGGI:

- Increase bioeconomic start-ups by 180%
- Forest GDP to reach 2% of total GDP
- Expanding renewable energies up to 15%
- Enlarging fleet of electric vehicles up to 600.000 (currently there are 1695)
- Double recycling rate (8.6%\*2)
- Moreover, to increase water productivity by 25%

A new treaty that affects technology towards supply chain and logistics is that there has been a new goal set by the International Maritime Organization (IMO), that by 2050 all carbon emissions by shipping companies need to be reduced by 50%. This puts a considerable amount of pressure on companies to find ways to make more sustainable, environmentally friendly ways of shipping. This can be done by using cleaner engines or finding other ways of transport.

As most products will be shipped overseas, the goal for emission reduction can cost lots of money for the shipping companies, which then, in turn, could be passed on to the customers which they have. In this case, this could result in higher costs of shipping to Colombia. Colombia lags regarding R&D expenditure, according to MarketLine. The total Colombian expenditure of R&D was 0.24% of the GDP in 2015. Which is lower than neighboring countries such as Mexico which had 0.55% and Argentina which had 0.63%. This is also lower than the OECD standard. This would mean that there is a big window of opportunity for the Dutch companies to help the R&D develop to a higher level.

## *Environmental*

### *Regulations*

The environmental regulations started in 1991; the Colombian National Constitution created several principles that were adopted into regulations. The Constitution created rights for Colombian citizens to enjoy a healthy and safe environment. In 1993, the National Congress created regulations on environment and management of natural resources. Other authorities created more and more regulations and limitations on environmental legal acts. The development of environmental regulations is still a national habitat, such as policies on a regional level. Currently, the legal framework of the environment in Colombia is to protect the environment and its natural resources. Colombia aims to protect the environment in order to improve sanitary conditions and human well-being.

### *Carbon footprint*

Colombia has a low GHG emission per capita and contributes only 0.4% of the global emissions. However, the emissions per unit of GDP are above the OECD average. The main reason for this is the Colombian agriculture which has a share of 35% in comparison to the average OECD 7%. These emissions could even increase to 50% by 2020. The graphs below are from the OECD; they clearly show the distribution of emissions in Colombia.

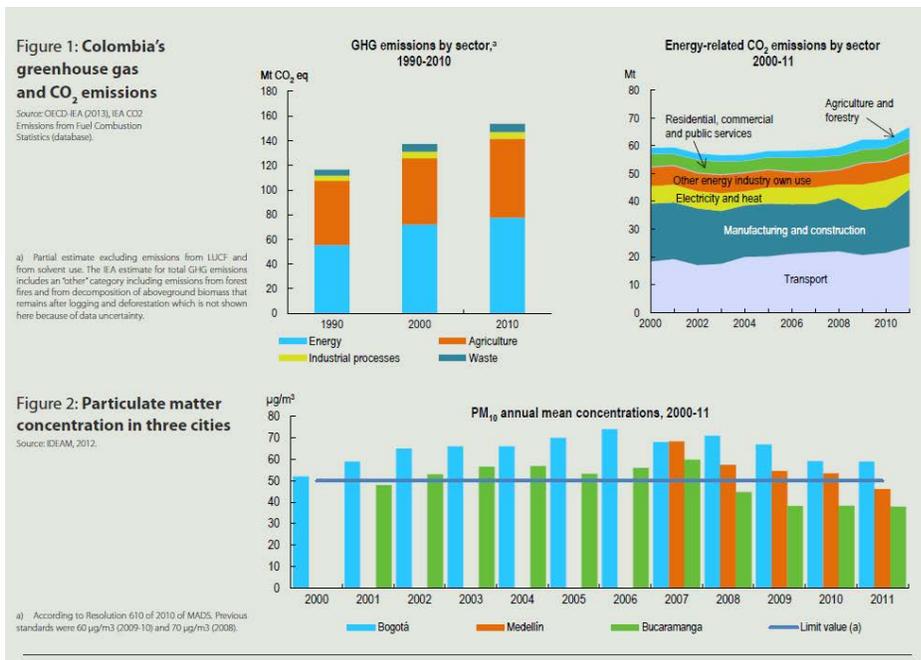


Figure 8 Colombia Greenhouse Gas, CO<sub>2</sub> Emissions and Concentration on Cities

Comparing to the Netherlands, which annual GHG emission is falling steadily, as seen in the table below. Although the target of emission reduction has not been reached either, the Netherlands claimed that they would reduce their GHG emission per capita with 25 percent from the level of 1990. In 2017, the GHG emission on Dutch territory was 13 percent lower than 1990. As a result, the Netherlands is still lower than Colombia. The Netherlands could advise Colombia in the paths towards a less emission per unit or GHG.

Emissions by the Dutch Emission balance

	economy	imports-exports
2008	14.6	4
2010	14.8	2.7
2012	13.7	2.3
2014	13.2	1.2
2016*	13.7	0.6
2017*	13.6	1.8

*Figure 9 Greenhouse Gas Footprint (Metric Tons of CO2 Equivalents per Capita)*

### Sustainability

Colombia is leading in laws against E-waste and Batteries. Their programs require producers/importers to take-back products free of charge for consumers. According to the Economist Intelligence Unit Colombian is ranked number 10 in the Food Sustainability Index of 2016, and ninth in sustainable agriculture sector 2016. Which can be considered as a positive fact to the sustainable agriculture sector. The mission of Colombia is to ensure entire Colombians citizens to have to save access to food in sufficient quantity, variety, and quality. Multiple challenges are facing the mission of Colombia such as armed conflicts or limited access to goods and services. Even though Colombia is trying to increase its awareness of sustainability, the public expenditure on water and sanitation has more than doubled in the past decade. Which also increased access to these services. The public investment is still lower than in other emerging economies. A recent reform of the royalty system is expected to increase resources for infrastructure development according to the OECD. This will lead to a better-distributed revenue across the different regions of Colombia. A part of this money will be invested in more R&D for substantially strengthen innovation. Colombia is developing in

sustainability, mainly by creating their sustainable development goals. Recently, the sustainable development goals for Colombia contain regional development, community, government and politics, and environment and sustainability. These goals should be accomplished in 2050. By the time, more sustainability start-ups and projects come across Colombia, such as the sustainable Compass, which is recently created in a Spanish version. It contains an application to reach a broader audience in Latin America to make more sustainable decisions. Another Colombian project is the Medellin hosts the eco-friendly festival. Plans have been made to create the biggest eco-theme park in South America in Colombia. This proves that Colombia is building a way towards more sustainability also with the primary purpose will be to mainstream green growth. It is very common in Colombia that products are informally recycled. This means that small companies recycle the products for a profit, nearly 14000 people rely on informal recycling for their livelihoods according to the OECD.

### Ecological regulations

Colombia's land area is for 55% covered in forests, which is much higher than the OECD average of 30%. Marine and coastal area make up for around half of Colombia's territory. The tropical storm season is a big issue according to Mr. Meiller, a teacher at the Hague University of applied sciences. He told that many companies stock up before the storm season begins to counter the problems which come with this weather. One example is El Nino which always starts on the coast of Peru and Ecuador according to the KNMI. El Nino lasts for about six months, and its peak is around December, which also explains the name El Nino which means the (Christmas) kid.

### Legal

#### Competition policy

It is by law forbidden to create monopolies except if it is one created by the government, which must use its profits for education and health.

## FDI policy

Colombia is very open to foreign investors; all investors will be treated the same and have the same legal rights, local and foreign. Foreign investment is allowed in every market except for the national security market and the market for disposal of hazardous toxic waste. There are more FTA's on the way which will bring further security to foreign investments according to KPMG. These measures are very interesting for us since starting a brand in Colombia can be seen as a foreign investment. Colombia uses the common external tariff of a CAN (Andean Community of Nations) to all non-members. The trade in Colombia is regulated through the ministry of trade and industry and tourism. The Colombian government does not impose any restrictions on the repayment of loans that have been appropriately registered with the central bank. Also, the payment of royalties and related fees can be made quickly on an agreement with the ministry of trade, industry, and tourism.

Colombia imported for over 257.759.000 euro's worth of goods from the Netherlands last year, according to the RVO (the full list of imports is shown in the table). The most significant product groups are chemicals and machines (153.139 and 116.590 x1000). With agri-food, we will be in the food and living animals branch, or we will be in the technology branch. The import of technologies in Colombia depends on The United States, China, and Mexico. The technologies that are imported by Colombia are for example automatic data processing machines, magnetic or optical readers and machines for transcribing and processing code data. The machines branch exported for 116.590 euros worth of products to Colombia in 2017. According to the government of Colombia (2018), the leading sub-sectors are the Cloud computing services, hardware, and software. Opportunities lay in the technologies of agriculture sector because it offers money and subsidies to farmers in order to improve agriculture technologies.

The food and living animal branch exported for 27.146.000 euros worth of products to Colombia, and this amount is increasing. Back in 2014, it was only 16.744.000, which is nearly half. According to the World Bank (2018), 20 million dollars will be invested by the World Bank in helping farmers in Colombia's Orinoguía region to increase agricultural production. Together with the BioCarbon Fund Initiative for Sustainable Forest Landscapes, a launch of a sustainable integrated landscape program was created. Presented by Colombia's Ministry of Agriculture and Rural Development. Which means, agriculture is a rising sector of development in both parties, technologies and food and living branch.

# Business model canvas

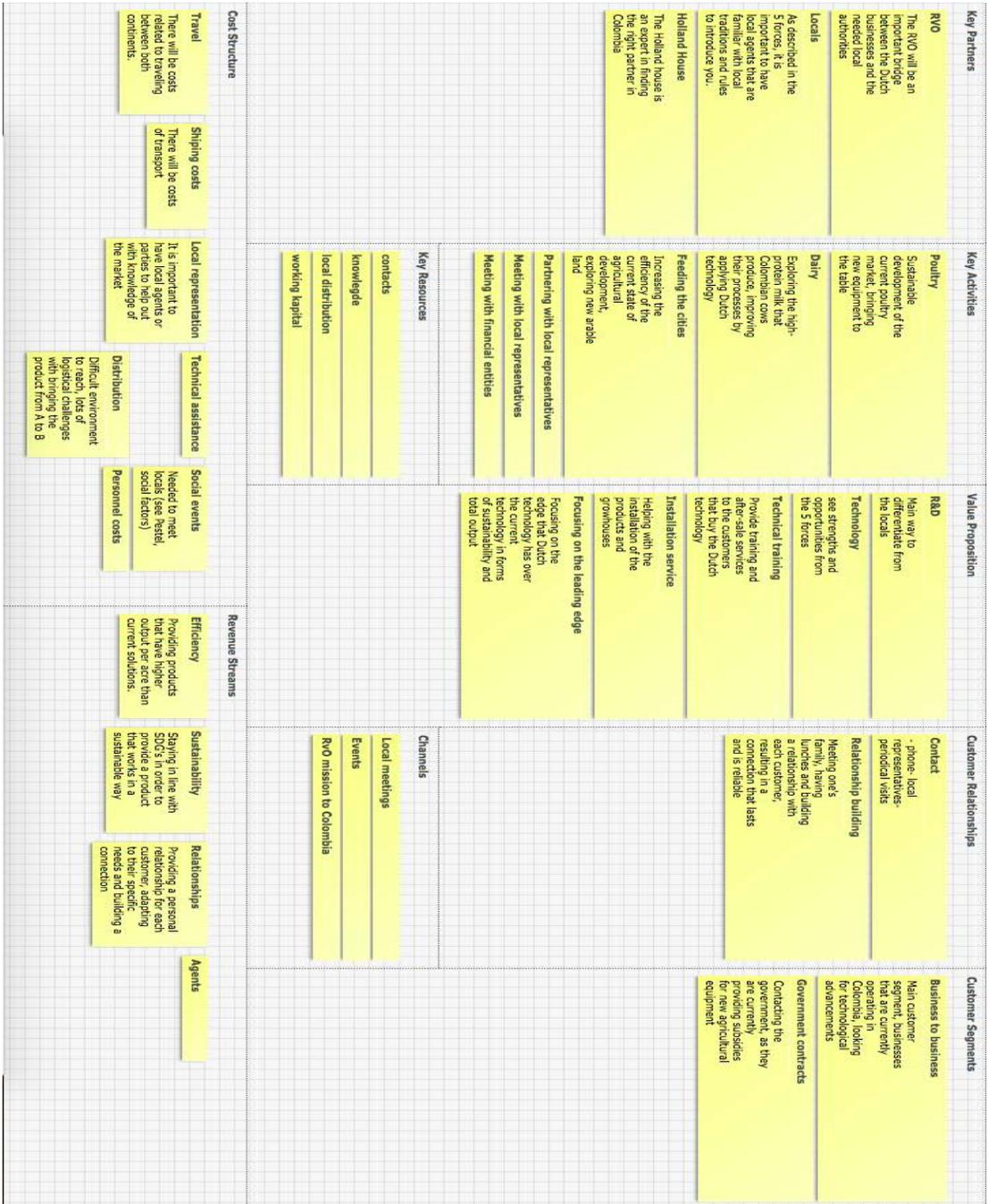


Figure 10 Business Model Canvas

## 5 Forces - Dairy

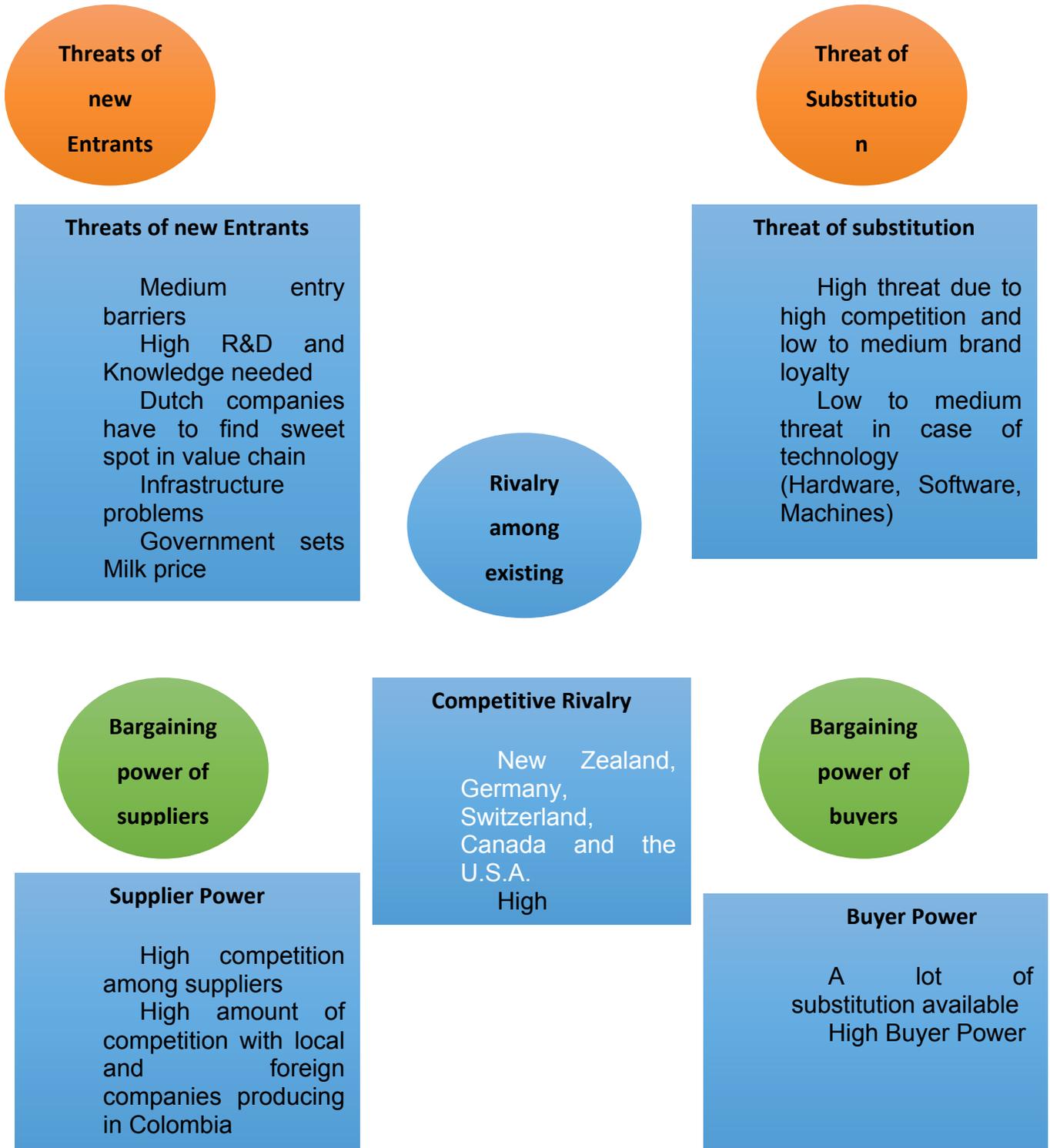


Figure 11 Five Forces on Dairy

## Threat of new entrants

**The Threats of new entrants** are diversified. The dairy sector in Colombia is growing with an approximate volume of 6.6 billion liter per year. Colombian dairy products are known for its excellent quality with higher protein and fat percentage than imported milk from competitors such as New Zealand, Germany, Switzerland, Canada and the U.S.A. (ProColombia). Therefore, high knowledge and technology is needed to enter the market. New Zealand exported NZ\$ 12.4 billion worth of dairy products, which is 95% of all the production. Approximately 18% of New Zealand exports were dairy products. The top products were whole milk powder (37%), cheese (12%), skim milk powder (10%), and butter (9%) (Dcanz).

In Germany the exports of milk with in total 2.759.797 tones, cheese with 1.178.150 tones, yoghurt with 466.953 tones and milk beverages with 248.505 tones increased in 2016, meanwhile the export of milk powder and butter decreased (Milchindustrie). Switzerland mainly exported Cheese with 63 089 tones and an amount of 503 million Euros (SBV). Canada is mainly exporting Skim Milk powder with a total amount of 35140.921 tones and Whey products with 34132.84 tones (CDIC). In 2015 the U.S.A. had a total dairy export of \$5.2 Billion. The U.S.A. is exporting 64% of its Whey protein, 55% of skim milk powder, 6% of cheese and 2,6% of Butterfat. Dutch companies have to find the sweet spot in the value chain. Most of the mentioned countries sell directly to wholesaler or retailer. Milk cow breeding and farming land in a sustainable, technologically advanced way can be a big opportunity for Dutch companies with their advanced technology and high level of R&D.

## Supplier power

**The supplier power** in Colombia in terms of dairy products are high. Companies such as Lácteos Campo Real, Colquesos, DoñaLeche, Asoleche or foreign companies such as Nestle sell and produce their products in Colombia. Dutch companies should think about a cooperation before setting up an own production or invest in the above-mentioned segments.

### Threat of substitution

**The threat of substitution is high.** Once a Dutch company sells their technology (Hardware, Software, Machines) to a dairy farm in Colombia, it is likely that they stay with the supplier because the dairy systems often differentiate from each other and the shifting costs would be high. But concerning dairy products such as e.g. yoghurt or milk or other goods, the threat of substitution is very high. In most of the cases customer do not have high brand loyalty if the substitution costs are low. This means that the end products that are being made should be high-end and preferably cheap in order to maintain a solid position in the market.

### Competitive rivalry

There is a lot of competitive rivalry between New Zealand, Germany, Switzerland, Canada, the U.S.A. and The Netherlands. All those countries have free trading agreements with Colombia.

### Buyer power

**The buyer power** in the Colombian Dairy sector is medium to high. Due to high competition and the diverse number of suppliers, the consumer can choose which product they like, and easily find substitutional products when unsatisfied.

## 5 Forces - Poultry

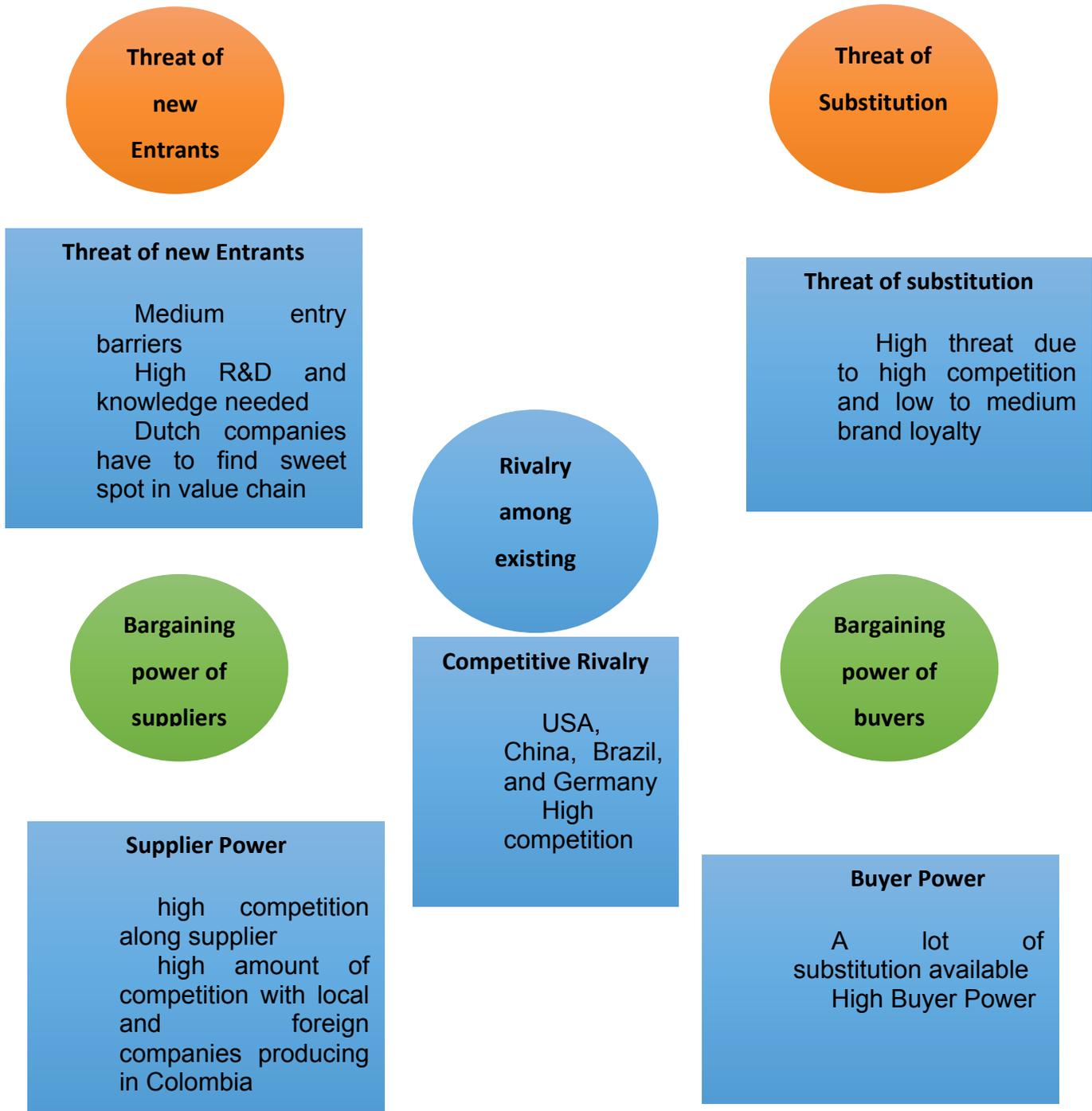


Figure 12 Five Forces on Poultry

### Threat of new entrants

**The Threats of new entrants** are very diversified. The poultry sector is a rising sector in Colombia with a production of 1,47 million tons. Furthermore, the consumption per person raised 31,5 kg to 32kg of poultry (dinero). The U.S.A., China, Brazil and Germany are one of the biggest competitors. All have advanced technology and a high poultry production. In 2017 the export of poultry and eggs out of the U.S.A. was \$4.509 billion (Euromeatnews). China had a total export of \$559 billion in the poultry sector (Godfrey). Brazil export 4,32 million tons of poultry (Agroberichtenbuitenland). Germany exported 75700 tones in 2016 (Deter). All countries have a high standard and technology of production. Dutch companies have to find the sweet spot on the value chain. They could use their R and D knowledge of breeding and farming of poultry to support Colombian companies to increase their production.

### Supplier power

**The supplier power** in Colombia in terms of poultry products are high. Companies such as Pollos El Bucanero or Campollo are huge producers in Colombia. Pollos El Bucanero has around 200 farms and Campollo is a vertically integrated company with incubation, fattening, slaughter and distribution. Dutch companies could profit with their high technology to increase production. They should think about cooperation's because the big local companies are strong.

### Threat of substitution

**The threat of substitution is high.** Once a Dutch company sells their technology (Hardware, Software, Machines) to a poultry farms in Colombia, it is likely that they stay with the supplier because the poultry systems often differ a from each other and the shifting cost would be high. But concerning poultry products such broiler or eggs the threat of substitution is very high. In most of the cases customer do not have high brand loyalty if the substitution costs are low.

It exists a highly **competitive rivalry** between U.S.A., China, Brazil and Germany and the Netherlands. All those countries have free trading agreements with Colombia.

Buying Power

**The buyer power** in the Colombian poultry sector is medium to high. Due to high competition and high amount of supplier the consumer can choose what product they like to buy.

## 5 Forces – Feeding the Cities

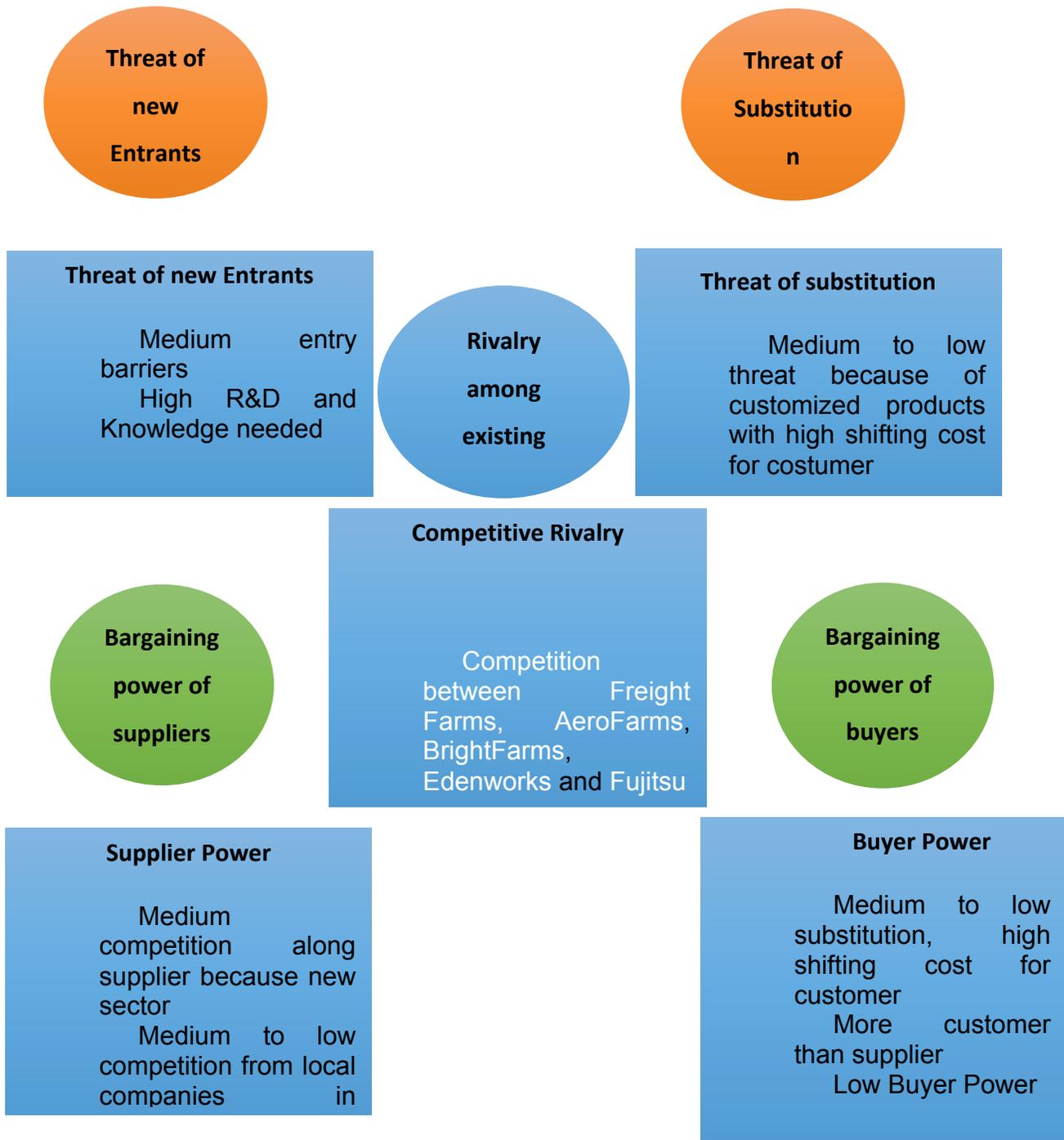


Figure 13 Five Forces on Feeding the Cities

### Threat of new entrants

**The Threats of new entrants** are very diversified. Feeding the cities is an upcoming sector with a lot of potential. Because of the growing urbanization and problems with the rough terrain, it is important to find ways to feed the masses of people living within the cities, preferably without harming the environment. International companies like Freight Farms which offer farming in a shipping container, AeroFarms offer vertical farming concepts, BrightFarms also offer vertical farming, Edenworks offer rooftop farming or Fujitsu offer vertical farming (Hepler). Dutch companies have to find a way to enter the Colombian market offering high technological products and concepts which are customized on Colombian cities. Cooperation's with locals' companies offering knowledge would also be possible. Dutch companies have good chances to set up business because of medium threats of entrants.

### Supplier power

**The supplier power** is medium because the sector is new compared to poultry or dairy. In Colombia certain project about feeding the cities such as the Knowledge & Training Centre Colombia for Horticulture from the Netherlands. In Colombia are certain local supplier for feeding the cities but it is not a very strong and wide spread lobby. The UA is an institution working in the branch. Also, the institution for social economics (IPES) has a program aimed at city farming which is called 'Ciudades Cultivado Para el future'. Dutch companies have good changes to offer their products with high technology and efficiency, especially because Netherlands already had different successful projects in Colombia.

### Threat of substitution

**The threat of substitution is low.** Once a Dutch company sells their technology (Hardware, Software, Machines) in Colombia, it is likely that they stay with the supplier because the systems often differ a from each other and the shifting cost would be high.

### Competitive rivalry

There is medium **competitive rivalry** between the companies aiming to feed the cities. The reason for that is because it is a new market, many companies offer different solutions. Also the customers are very differentiated, all need a customized solution. The companies have to adapt to each customer's needs in order to gain market share. This is in line with the cultural aspect of Colombia, where people tend to like personal treatment, which was explained earlier in the PESTEL analysis, and Hofstede's cultural dimensions.

### Buyer power

**The buyer power** in the Colombian feeding the city sector is low to medium. There are not so many companies offering specialized products in the feeding the city sector but more and more upcoming customer.

## SWOT Analysis

After the different sectors have been analyzed using various different tools like the PESTEL, Hofstede's cultural dimensions and Porter's 5 forces model, everything has to be organized in a matter that is simple, efficient and clear. This will be done by applying the SWOT model, which differentiates the *Strengths*, *Weaknesses*, *Opportunities* and *Threats*. This will be done in a combined SWOT, as the sectors poultry, dairy and feeding the cities have a lot of similarities in their core strengths, and the opportunities they will focus on, as well as facing a lot of the same threats and bearing the same weaknesses. This is basically a summary of earlier mentioned information, organized in a general SWOT that affects all the sectors. After the general SWOT aspects affecting sectors on their own are explained.

### *Strengths*

#### Technologically advanced

The Netherlands is home to one of the most efficient agricultural systems in the world. The Wageningen University is considered to be amongst the highest ranked universities globally in agricultural technology. There is even an area around the Wageningen University that is called the Food Valley, referencing to Silicon Valley in America, where Food Valley is the agricultural focused counterpart of Silicon Valley where most of the worlds' technological advancements are made on the field of technology in the IT sector and computers. The high-tech greenhouses in The Netherlands have high yield compared to global standards (a high-tech greenhouse in The Netherlands yields up to 20 tons of potatoes per acre, were the global average is 9 tons per acre). Colombia still practices relatively traditional methods of agriculture, dairy and poultry. Most of the production is still being done by individuals on a small scale. This makes the usage of highly advanced technology difficult, as the barriers to entry are high because of the costs. This makes most of the farmers lack economies of scale, which gives them a disadvantage in the market. When Dutch high-tech companies enter this market, the experience in large scale production and the technologically advanced systems will be one of the edges that makes it differentiate from the other companies.

### Management of space and efficiency

The Netherlands, being ranked 67<sup>th</sup> smallest country in the world, does not have a lot of space to play with. It is a densely populated area ranking 31<sup>st</sup> in the world in population density. However, in agricultural exports the country is ranked the second biggest in the world (total value of exports), only being topped by the United States. This proves the exceptional efficiency at which the Dutch agricultural sector operates, given the amount of land that is able to be worked with.

This is caused by Dutch production being focused on high-end products like chilies, tomatoes, flowers and live plants, of which the Netherlands produce two-thirds of the global total (Investopedia). This proves the ability of the Dutch companies to produce in a very efficient matter, as space is scarce within the Netherlands, but output very high compared to other countries.

### *Weaknesses*

#### Lack of experience in the market

Looking at the Colombian market, there are several challenges for Dutch companies. A notable challenge that came forward in Hofstede's dimensional analysis was that there are large cultural differences between the Dutch population and the Colombian population. These differences can make it difficult for Dutch companies to start operating in Colombia, as they have different ways of interacting with each other and different standards. These issues, such as the tendency of Colombian people to conduct business highly preferable with people they already know, will force the companies to adapt and integrate in Colombia, before being able to conduct business, which will cost a lot of time and effort, as well as resources.

#### *Production focused on high-end agricultural products*

As mentioned earlier, the Dutch agricultural market is focused more towards the production of high-end agricultural products like flowers, chilies, tomatoes and live plants. This means that for

the production of food for the cities, the country lacks specialization. Feeding the cities will require large amounts of foods such as corn, wheat and potatoes, which are not necessarily the (global) specialty of Dutch companies.

## *Opportunities*

### *Subsidies for new agricultural equipment*

This is something that is definitely worth highlighting: The Colombian government is granting subsidies for farmers that want to buy new equipment. As highlighted before in the report, Colombian farmers often lack the financial buying power to finance new equipment. As the Dutch companies can provide high-tech equipment for these people, yet the prices are often too high, these subsidies are exactly what is needed to bridge this issue.

What is important about this subsidy is that the government focuses on new equipment that is simplified (not really high-tech), this is because the profits from operations in Colombia can be underwhelming compared to the high prices of the equipment. The prices in Colombia for these agricultural products are relatively lower than other countries, which hurts the profit margins. This means that the preference for the large growers is often near equipment that is not state-of-the-art as it is cheaper. The subsidies of the government are generally towards new equipment as used equipment can be hard to subsidize and often has performance issues.

### *Civilized war ended, giving new opportunities*

The war that Colombia has had for several years with the FARC guerrillas has ended. This gives opportunities for companies in the agricultural sector as land that was earlier unable to access because it was too dangerous can now be utilized for agricultural purposes. The people that were in the FARC before, are now looking for different things to do, moving to the cities and working for their money. This provides a huge group of people that are looking for work, which then in turn can work in the agricultural sector which is stimulated by the government.

### Immigration from Venezuela growing the demand for food

Colombia is experiencing a lot of immigrating people from Venezuela because of the hyperinflation and other causes. This means that a lot of people are moving towards the big cities in Colombia at an extremely high rate. This results in explosive growth in the population there, which then in turn translates to increased demand for food, in any form or way. This is fortunate as the demand is growing.

### Agriculture is a growing sector in Colombia

According to predictions found in several analytics, the Colombian agriculture sector, including poultry and dairy is healthy and growing. Agriculture has grown 4.9% in 2017 and is set to grow 2.8% in 2018. Poultry farms have been growing even more with 6.4% in 2017, and 7.7% for egg farms. These numbers and the goal of the new president are reasons to expect that the sector is healthy and will be growing for quite some years onwards.

### Threats

#### Corruption in business and court:

Corruption is a big problem in Colombia, having reached an all-time high in 2017, where the country was the 96<sup>th</sup> least corrupted nation in the world. This can give a lot of issues to Dutch companies trying to enter the market, as The Netherlands is ranked number 8 in the world in corruption as of 2017. This means that when a company is accustomed to a certain way of handling legal situations in their home country, whether it being Dutch or Colombian methods, will face surprises. This is also proven in a 2018 study of MarketLine Advantage in their PESTLE analysis of Colombia where I shall quote:

*“The Colombian business climate is plagued with judicial corruption, which makes legal transparency difficult. In addition, the judicial system is lengthy and cumbersome, especially the lower courts, which have been accused of inefficiency and involvement in corrupt practices. Delays of five to seven years in these courts are common. A simple commercial dispute*

*settlement can take more than three years, according to the OECD. Regarding the judicial independence parameter, the country is ranked 111th out of 137 in the 'Global Competitiveness Report 2017-18', while it was ranked 96th out of 137 for irregular payments and bribes. In terms of the efficiency of the legal framework to settle disputes, the country is ranked 122nd."* – MarketLine Advantage

This is something that Dutch businesses should consider when entering the Colombian market. When there is a legal dispute for a Dutch company operating in Colombia, there is a large risk that it cannot be reasonably resolved due to the lack of efficiency in the legal frameworks of Colombia.

#### Global emission changes affecting shipment costs

There has been a change in the regulations of the amount of emissions that transport companies can have on their overseas shipments. The large containerships need to halve their emissions by 2050. This can translate into high R&D costs for the shipping costs which are then in turn passed on to the customers. As a lot of shipments from and to Colombia will be transported overseas, so the increased amount of costs can affect the profit margins in a negative way.

#### Other companies entering Colombia

Colombia is a popular spot for foreign investment opportunities nowadays, seeing a rise of foreign investments of more than 50% from 2010 onwards. This indicates that there a lot of different countries that want to enter the Colombian market. Competition to start conducting business with Colombia is tough.

## Cage framework

The cultural, administrative, geographic, and economic model forms together the CAGE framework. The CAGE framework created a comparison of two countries in order to examine similarities in dimensions and the market environment. It is important to international trade to recognize the shared interests. In this research Colombia and the Netherlands will be examining to identify the level of success in international agricultural trade opportunities.

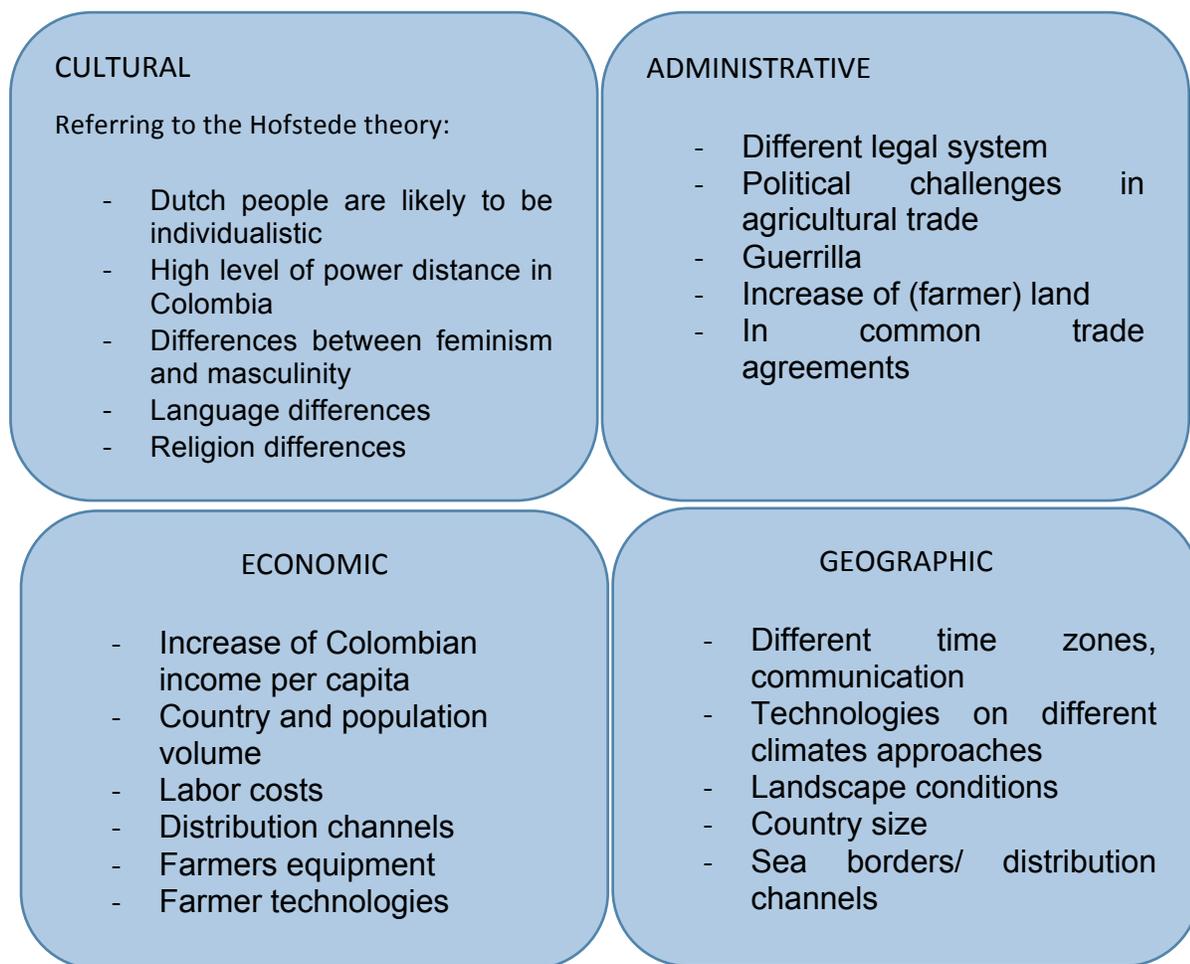


Figure 14 Cage Framework

## Future Predictions

Future predictions for Dutch companies in the Colombian market will shift or expand in the upcoming years. One of the future predictions is the increase of population, sustainability could be the solution to this future prediction. Therefore, being sustainable in the necessary quantity of food in urban areas will become harder. The importance of feeding the city will increase intensely because food is surviving number one. The issues are caused by the following trends: the trend of urbanization and the flow of refugees from Venezuela. The Dutch companies could interact in more sustainability in the agriculture sector by providing the smart use of places, land and new technologies.

Moreover, the defeat of the guerrilla's people. This could lead in new opportunities and threats because there are a lot of unemployed ex-guerrillas at the moment which can cause trouble if not handled correctly. The Government of Colombia restructured the land in Colombia and because of that more Colombia has an arrear in development in the agriculture sector. Therefore, the unemployed ex-guerrillas can have the opportunity to work the lands. Dutch companies can create opportunities in the agriculture sector in development of the land. The Netherlands have a good structure of land and try to make the land as much as useful as it is. Imagine the Netherlands and Colombia could make the land of Colombia more useful, the supply of the agriculture sector will increase extremely.

Furthermore, we believe that climate change will make it more difficult to maintain the traditional way of producing food in Colombia. Colombia has an annual average of more than 28 degree, which can vary in different districts and regions. The climate change will focus on up-warming in Colombia. In order to handle the up-warming in Colombia, Colombia created the Integrated National Adaptation Project (INAP). This project was designed for supporting Colombia's effort to define and implement prevention measures to climate change. Dutch companies can see the project as an opportunity to interact with Colombia concerning climate change. The Dutch companies can see opportunities in for example water resources and land management. The knowledge of Dutch companies can be used together with the knowledge of Colombian companies and create preventions of up-warming climate change.

## Conclusion

Generally, this report highlights a few key topics affecting businesses that want to enter Colombia. These key topics all come down to whether it would be lucrative for businesses to enter Colombia, and which factors could affect this decision in a positive or negative matter. It is clear that there is a large cultural difference between Dutch business culture and Colombian business culture. This can be derived from the PESTEL analysis and especially from Hofstede's cultural dimensions. It has been stated that in order to successfully conduct business with Colombian parties, one must be extremely respectful and preferably utilize someone local (like an agent) that can help infiltrating the market, as Colombians prefer doing business with people they already know, or people they know via someone they already know.

The Colombian economic climate for agricultural businesses has seen some outstanding developments, especially over the last few years after the peace agreement with the FARC guerrilla's. This has opened up opportunities for companies to start working on arable land that was previously unavailable. The government is stimulating these projects, focusing on having the ex-FARC find jobs anywhere, including the agricultural sector. The work population that has become available through this peace agreement is favorable for businesses. However, there are also negative factors affecting the decision-making process. The main issue being corruption, as Colombia is still ranked one of the most corrupt countries in the world, reaching a new high in 2017. This makes conducting business troublesome, as the legal system is not working in a proper matter.

Furthermore, the growing population and the rising immigration numbers from neighboring country Venezuela make up for an increased demand for agricultural products, and solutions to feed the cities. This translates into another big opportunity, as the entire agricultural sector is set to grow even more over the upcoming years. Entering the market following steps provided in the report, following the SDG's will maximize the chance for a long, profitable future.

## Recommendations

We recommend finding a local agent or representative when doing business in Colombia. There is a big cultural difference between the Netherlands and Colombia, as shown in the PESTEL and Hofstede analysis. It is important for people from Colombia to know who they are doing business with, they lean extremely towards conducting business via people they already know, taking things slow and building trust. It is extremely important to treat Colombian people with respect and patience, as their business culture differs from traditional Dutch practices.

You will have to build a relationship, otherwise they will not do business with you. Also, it is important to find trustworthy business partners since corruption is still a big problem in Colombia. Both these problems can be solved by using agents, the Holland house is an expert in finding the right partner/agent in Colombia. We would also recommend using the RVO as a bridge to make connections with the needed local authorities.

Emphasizing the sustainable and productive aspect that Dutch companies tend to have due to their technological advantage compared to traditional Colombian practices will be the key to success in Colombia. Finding the right product to offer so that subsidies from the government can be utilized to bridge the gap between the buying power of Colombian people relative to the Dutch prices.

## Works cited

- *IEEE Xplore Full-Text PDF:*  
ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6827242&isnumber=6846387  
<https://www.economist.com/the-americas/2016/12/10/colombias-peace-deal-has-taken-effect-but-the-country-remains-divided?zid&ah=80dcf288b8561b012f603b9fd9577f0e>.
- “Colombia's Peace Deal Has Taken Effect, but the Country Remains Divided.” *The Economist*, The Economist Newspaper, 10 Dec. 2016, [www.economist.com/the-americas/2016/12/10/colombias-peace-deal-has-taken-effect-but-the-country-remains-divided?zid=309&ah=80dcf288b8561b012f603b9fd9577f0e](http://www.economist.com/the-americas/2016/12/10/colombias-peace-deal-has-taken-effect-but-the-country-remains-divided?zid=309&ah=80dcf288b8561b012f603b9fd9577f0e).
- “Colombia - Information and Communication Technology (ICT)Colombia - Information Technology.” *Colombia - Information and Communication Technology (ICT)*, [www.export.gov/article?id=Colombia-Information-and-Communication-Technology-ICT](http://www.export.gov/article?id=Colombia-Information-and-Communication-Technology-ICT).
- Colombia - Agricultural SectorColombia – Agricultural Sector.” *Colombia - Agricultural Sector*, [www.export.gov/article?id=Colombia-agricultural-sector](http://www.export.gov/article?id=Colombia-agricultural-sector).
- Climate-Smart Farming in Colombia's Last Agricultural Frontier.” *World Bank*, [www.worldbank.org/en/news/feature/2018/03/16/el-enfoque-de-la-agricultura-climaticamente-inteligente-la-ultima-frontera-agropecuaria-de-colombia](http://www.worldbank.org/en/news/feature/2018/03/16/el-enfoque-de-la-agricultura-climaticamente-inteligente-la-ultima-frontera-agropecuaria-de-colombia).
- Gomez, Luis Fernando Macias. “International Comparative Legal Guides.” *Environment & Climate Change Law 2018 | Colombia | ICLG*, Global Legal Group, [iclg.com/practice-areas/environment-and-climate-change-laws-and-regulations/colombia](http://iclg.com/practice-areas/environment-and-climate-change-laws-and-regulations/colombia).
- “The World Factbook: COLOMBIA.” *Central Intelligence Agency*, Central Intelligence Agency, 23 Oct. 2018, [www.cia.gov/library/publications/resources/the-world-factbook/geos/co.html](http://www.cia.gov/library/publications/resources/the-world-factbook/geos/co.html).
- “Sub National.” *World Bank*, [www.doingbusiness.org/data/exploreconomies/colombia/sub/barranquilla](http://www.doingbusiness.org/data/exploreconomies/colombia/sub/barranquilla).

- Download Trade Data | UN Comtrade: International Trade Statistics." *United Nations*, United Nations, [comtrade.un.org/data/](http://comtrade.un.org/data/).
- "El Niño." *KNMI - El Niño*, 2018, [www.knmi.nl/kennis-en-datacentrum/uitleg/el-nino-21037ceb-3f08-4654-b08e-2ebfd5bdc2e3](http://www.knmi.nl/kennis-en-datacentrum/uitleg/el-nino-21037ceb-3f08-4654-b08e-2ebfd5bdc2e3).
- "Colombian Corruption: How 7 Scandals Have Rocked a Nation and Eroded Faith in Justice." *LinkedIn: Log In or Sign Up*, [www.linkedin.com/pulse/colombian-corruption-how-7-scandals-have-rocked-nation-mark-kennedy](http://www.linkedin.com/pulse/colombian-corruption-how-7-scandals-have-rocked-nation-mark-kennedy).
- "GGGI Provides Member Countries with the Tools to Help Build Institutional Capacity and Develop Green Growth Policy, Strengthen Peer Learning and Knowledge Sharing, and Engage Private Investors and Public Donors." *GGGI - Global Green Growth Institute*, [gggi.org/colombia-presents-a-2030-green-growth-roadmap/](http://gggi.org/colombia-presents-a-2030-green-growth-roadmap/).
- Danovich, Tove. "How Will We Feed the Megacities of the Future?" *TakePart*, 3 May 2016, [www.takepart.com/article/2016/05/03/cities-growing-food](http://www.takepart.com/article/2016/05/03/cities-growing-food)
- "Feeding the Cities Through Urban Agriculture The Community Esteem Value." *Agriculture and Agricultural Science Procedia*, Elsevier, 23 Feb. 2016, [www.sciencedirect.com/science/article/pii/S2210784316300171](http://www.sciencedirect.com/science/article/pii/S2210784316300171).
- "Feeding the Cities Through Urban Agriculture The Community Esteem Value." *Agriculture and Agricultural Science Procedia*, Elsevier, 23 Feb. 2016, [www.sciencedirect.com/science/article/pii/S2210784316300171](http://www.sciencedirect.com/science/article/pii/S2210784316300171).
- "Op Zoek Naar Hét Business Model Voor Vertical Farming." *Grensverleggers*, 31 May 2016, [www.grensverleggers.nl/bibliotheek/op-zoek-naar-ht-business-model-voor-vertical-farming](http://www.grensverleggers.nl/bibliotheek/op-zoek-naar-ht-business-model-voor-vertical-farming)
- "KUBO Group." *Urban Clima Greenhouse*, [www.kubogroup.nl/nl/kubo-sustainable-greenhouses/producten-en-concepten/urban-clima-greenhouse](http://www.kubogroup.nl/nl/kubo-sustainable-greenhouses/producten-en-concepten/urban-clima-greenhouse).
- "10 Examples of Urban Food Policies: Feeding the Cities, Part 2." *The Fifth Estate*, 14 Aug. 2017, [www.thefifthestate.com.au/urbanism/environment/10-examples-of-urban-food-policies-feeding-the-cities-part-2/93970/](http://www.thefifthestate.com.au/urbanism/environment/10-examples-of-urban-food-policies-feeding-the-cities-part-2/93970/).

- "Top 100 Smallest Countries by Area." *The Smallest Countries in the World by Area*, [www.countries-ofthe-world.com/smallest-countries.html](http://www.countries-ofthe-world.com/smallest-countries.html)
- "List of Countries and Dependencies by Population Density." *Wikipedia*, Wikimedia Foundation, 30 Oct. 2018, [en.wikipedia.org/wiki/List\\_of\\_countries\\_and\\_dependencies\\_by\\_population\\_density](http://en.wikipedia.org/wiki/List_of_countries_and_dependencies_by_population_density)
- Simpson, CFA Stephen D. "Top Agricultural Producing Countries." *Investopedia*, Investopedia, 15 June 2012, [www.investopedia.com/financial-edge/0712/top-agricultural-producing-countries.aspx](http://www.investopedia.com/financial-edge/0712/top-agricultural-producing-countries.aspx).
- "Corruption Rank." *Corruption Rank - Countries - List*, [tradingeconomics.com/country-list/corruption-rank](http://tradingeconomics.com/country-list/corruption-rank).
- Klerkx, Laurens, and Cees Leeuwis. "Establishment and Embedding of Innovation Brokers at Different Innovation System Levels: Insights from the Dutch Agricultural Sector." *Technological Forecasting and Social Change*, vol. 76, no. 6, 2009, pp. 849–860., doi:10.1016/j.techfore.2008.10.001.
- Fund, International Monetary. "Colombia: Review Under the Flexible Credit Line: Staff Report; Press Release on the Executive Board Discussion; and Statement by the Executive Director for Colombia." *IMF Staff Country Reports*, vol. 09, no. 312, 2009, p. 1., doi:10.5089/9781451808988.002.
- Treat, Jason. "This Tiny Country Feeds the World." *How the Netherlands Feeds the World*, 14 Jan. 2018, [www.nationalgeographic.com/magazine/2017/09/holland-agriculture-sustainable-farming/](http://www.nationalgeographic.com/magazine/2017/09/holland-agriculture-sustainable-farming/).
- "Colombia - Agricultural SectorColombia – Agricultural Sector." Colombia - Agricultural Sector, <https://www.independent.co.uk/environment/ships-emissions-carbon-dioxide-pollution-shipping-imo-climate-change-a8303161.html>
- <https://cgspace.cgiar.org/bitstream/handle/10568/92502/Food%20and%20Nutrition%20Security%20in%20Colombia.pdf?sequence=1&isAllowed=y>
- <https://assets.kpmg.com/content/dam/kpmg/pdf/2015/02/colombia-hgm.pdf>
- [https://www.rvo.nl/sites/default/files/2018/07/Handels-en-investeringscijfers-Colombia-Nederland-juli-2018\\_0.pdf](https://www.rvo.nl/sites/default/files/2018/07/Handels-en-investeringscijfers-Colombia-Nederland-juli-2018_0.pdf)

- <http://www.bdlaw.com/news-699.html>
- <https://www.oecd.org/countries/colombia/Colombia%20Highlights%20english%20web.pdf>
- [https://mvonederland.nl/sites/default/files/media/MVO\\_factsheet\\_GreenSenseFarms.pdf](https://mvonederland.nl/sites/default/files/media/MVO_factsheet_GreenSenseFarms.pdf)
- <https://www.ellenmacarthurfoundation.org/assets/downloads/Cities-and-the-circular-economy-for-food-1.pdf>
- <https://mvonederland.nl/sites/default/files/media/Feeding%20cities%20presentatie%2018%204%2017%20DEEL%202.pdf>
- <http://www.fao.org/docrep/i9255e/i9255e-CRFS-entry-points.pdf>



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