

# Impact caused by imports in the Colombian pig market, starting from the entry into force of the FTA with the United States

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Contenido

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"We are what we repeatedly do. Excellence, then, is not an act; It is a habit."

Aristotle.

## **Thanks**

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#### Resumen

Para cualquier sector económico del país la firma de TLC genera impactos y más si se trata de Estados Unidos ya que es un país desarrollado con altos niveles en tecnología e innovación sin mencionar en sus intenciones de siempre ganar en las negociaciones y acuerdos, para sacar el mejor provecho de estos.

El fin de esta investigación fue analizar el impacto que generó la entrada en vigencia del tardado de libre comercio de Colombia con Estados Unidos en el sector porcícola, mediante investigaciones y entrevistas a dos grandes del gremio porcicultor lo cual arrojó resultados no esperados pues se creía que el sector iba a atravesar una crisis por el incremento progresivo de las importaciones de carne de cerdo y sus altas exigencias de calidad para la exportación de misma, pero a pesar de ello fue todo lo contrario ya que el sector porcicultor estaba preparado para la entrada en vigencia del TLC, debido a la implementación de nuevas estrategias para el crecimiento progresivo del sector, siendo así las más importante aumento del consumo de carne porcina en Colombia.

Para la presente investigación se realizó una recolección de información a través de artículos, noticias, entrevistas, entre otros medios para conocer la capacidad de producción del sector, el consumo y las importaciones para identificar los beneficios y/o amenazas que ha traído el TLC en los últimos años.

Palabras clave: Importación, consumo, sector, producción

#### Abstract

For any economic field of the country the FTA deal generates impact, and more if it is about the U.S which is a developed country with high standards of technology and innovation, without mentioning its intentions of earnings profict in the deals or negotiations and taking advantage of them.

VIII Contenido

The purpose of this research was analyzing the impact that has had the FTA

between the U.S and Colombian in the pigmeat field through investigations and

interviews to two big factories of the field, the research gave unexpected results. It

was believed that the field was going through a crisis because of the progressive

increase of the pork meat importation and its high quality demand for the

importation. In inspite of that it was all the opposite since the pigmeat field was

prepared for the FTA arrival, due to they implemented new strategies for the

progressive growing of the field, been the most important the increase of pork meat

consumption in Colombian.

For the present investigation, information was collected through articles, news,

interviews, among other means to know the production capacity of the sector,

consumption and imports to identify the benefits and / or threats that has brought

the FTA in last years.

**Keywords:** Import, consumption, sector, production

# Content

		<u>Pág.</u>
Lis	st of figures	x
Lis	sta de tablas	XI
1.	Project formulation  1.1 Background  1.1.1 State of art  1.2 Approach to the problem  1.3 Justification  1.4 Objectives  1.4.1 General objective  1.4.2 Specific objectives  1.5 Methodological framework  1.5.1 Method  1.5.2 Methodology  1.6 Scope	
2.	Project execution  2.1 Demand and consumption of pork in Colombia  2.2 Production capacity in Colombia.  2.3 TLC Colombia - United States  2.4 Behaviour of the imports of pork.	10 14 20
3.	Findings	25
4.	4.1 Conclusions 4.2 Recommendations 4.2 Recommendations	26
A.	Annex	30
B	Annov	21

<u>Contenido</u> X

# **List of figures**

	<u>Pág.</u>
Figure 1 Relief TLC Colombia - United States	4
Figure 2 World pork consumption	
Figure 3 Consumption of protein in Colombia	11
Figure 4 Per capita consumption of pork in Colombia	12
Figure 5 World production of pork 2006 - 2016	14
Figure 6 Production of meat of pork	16
Figure 7 Imports of corn to United States contingent	19
Figure 8 Imports of pork meat in 2016 (tonnes)	22
Figure 9 Relief TLC Colombia - United States	22
Figure 10 Imports-monthly pork in Colombia 2016	24

Contenido

# Lista de tablas

	<u>Pág.</u>
Tabla 1 Benefit of pigs by Department	17
Tabla 2 Imports of pork (tons)	23

Contenido

# List of symbols and abbreviations

## List of abbreviations

FTA: Free trade agreement indicates

FNG: Indicates the national guarantees Fund

DANE: It indicates the National Administrative Department of statistics

TRM: Indicates the rate of change of the Colombian peso

FINAGRO: Indicates the Fund for the financing of the agricultural sector

INVIMA: Indicates the National Institute of drug surveillance

Introducción 1

## Introduction

This research aims to make known the impact that had the free trade agreement with the United States in the Colombian farmer sector, in order to demonstrate that as favorable or unfavorable, it was for the country and for the said sector treated, identifying how the Colombian farmer is the sector after enters it into force of NAFTA.

The most relevant factors for research as the consumption of pork, the pork sector production and imports of this protein were determined. The project is based on a review of different sources reliable and interviews with experts in the field, which include Sr Manuel Aristizábal Italcol enterprise zone manager who handles all the subject of pig production, besides it is in constant contact with the Guild farmer given to his work as a veterinarian , and Sr Jorge Mario Escobar Manager of the cattle station in Medellin, who give us two different points of view with the impact of the FTA, giving greater knowledge and understanding on the subject of swine.

By this work identified factors that contribute to and can be turned into an action plan. While Colombian hog sector is a young industry with approximately thirty years of formal activity under a structure of the pork trade, the Outlook is encouraging for swine producers because that pork consumption stimulates all the links in the meat chain.

For some years the country has strategy increase national economic development so it launched its open markets, which has brought about changes in the national economy directly impacting the primary production of food. And Although Colombian swine has generated great advances in implementation and strategies for change at the level of productive parameters and health status overcoming problems such as swine, although we have notable differences with those Nations today send us derivatives of pig in terms of infrastructure capacity of cold storage and plants of benefit, low operational capability of authorities of surveillance and control.

Introduction 2

All new project generates resistance and concerns as they were the impacts of the FTA with the United States, but is also a great opportunity to take on new and best challenges to plot targets that break with everyday life looking for ways to create better infrastructure and services, with more attention by the State, high productivity and low costs. In the sector Colombian pig is part of a review of the regulatory framework of the FTA, on a theoretical look, the positive and negative impacts on the sector, to do so in the present investigation will come to approach the problem, the objectives that were considered relevant to carry out the solution, showing the different graphics for better understanding of the data; the same occurs to know all of the findings found throughout the investigation and finally some conclusions, some recommendations on the analyzed subject and important annexes for more information on interviews.

Introducción 3

## 1. Project formulation

#### 1.1 background

Free trade agreements have become a way of promoting the sale of pork, therefore developing countries seek to establish a treaty with the great powers; but swine production of these systems are not large scale, as a result, they are at a disadvantage compared to the developed countries that have established free trade agreements, so that developing countries imported more pork in comparison with which can be exported in such agreements (Muñoz, 2015).

Pork exports are concentrated in a few countries, including China, Denmark, Holland, Germany, Belgium, Spain and France, Canada, United States and Brazil. All these countries export more than 80% of the pork in the international market; However, the American continent has played certain role regulating the pig in the global context production (Muñoz, 2015).

Colombian swine is has been preparing to cope with the FTA with the United States, which has generated an important determinant for the livestock in recent years (Muñoz, 2015).

Is clear that throughout history the farmer in Colombia sector has gone through critical moments, smuggling, classical swine fever and other epidemics and the entry into force of different trade agreements and free trade agreements, have been key factors to affect strongly the sector (Diario del Huila, 2014). The free trade agreement with the United States, is that it is the agreement that represents more threats in the field of swine for the country, since it is the second largest producer of meat around the world, with more than 10 million 187 thousand tons in 2009, as well as being the second largest exporter after Germany and although at the time of the signing of the Treaty was established relief, in the year 2016, the products enter the country tax-free.

Based on the threat posed the FTA with the United States for the country, the entire sector farmer has had to take on big challenges and has been preparing to cope with the arrival of all these agreements, sector has shown great structured progress, that, despite the increase in imports of pork, compete and export can be achieved. It has among its goals, achieve integration and strengthen competitive structures, to achieve scale economies, also as all sectors needed the support of the Government to strengthen institutions (communications, 2016).

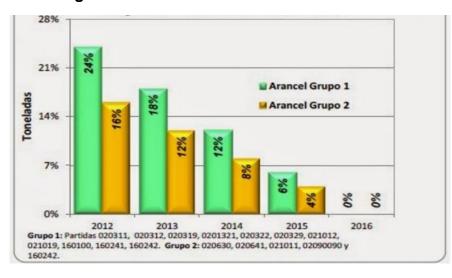


Figure 1 Relief TLC Colombia - United States

Source: taken from (Diario del Huila, 2014)

**Group 1:** frozen and refrigerated meat together some salted and smoked sausage products. **Group 2:** frozen Swine livers; hams, pallets and savory chunks; Bacon lean parts and other preparations and preserves

Figure 1. Evidence the Elimination of two groups of products in percentage from the year 2012, when it entered into force the FTA until 2016, where products come without tariff (Diario del Huila, 2014).

#### 1.1.1 State of art

From the negotiation and entry into force of the FTA with the United States, have been multiple controversies across the country with respect to the different livestock guilds, where the Colombian Government meanwhile claims to have the ability to respond to global competition and a potential country to be a great world food pantry, while the farmer sector shows that the Guild does not have an easy task, since they not only have that compete with a great power, but who were

working every day to be eradicate swine fever and so be able to look into new markets for exporting their products (context livestock, 2013).

"Report: poultry, cattle and swine, are affected by FTA with the US and the EU?", is a digital magazine report livestock context in the year 2013, which sets out the position of the Colombian Government against free trade, the uncertainty of three large livestock associations in the country and the opinion of the leaders of Fedegan, FENAVI and Porkcolombia treaties. In farmer sector, shows that it is one of the sectors most affected by the epidemics which have occurred in the country, and from there the drawbacks to export its products and the work to upgrade and modernize the production of pork. (Context livestock, 2013) "Economic sector farmer April 2014 newsletter, report economic sector farmer 2014, is a report submitted by the National Fund of the pig, where it is exposed the internal market the sale of pork, the U.S. pork prices and growth trends of imports of pork between 2004 and 2013" ", where record numbers and the main cause has been the free trade agreements are" (Porkcolombia, 2014)

"Hog production grew up in Colombia 14.4% in 2015, is an article that is exposed by the journal of Huila, where the current reality (2015) is displayed according to the President of the Porkcolombia Association, shows the increase in the per capita consumption of pork, the decline in imports by the exchange rate and the increase in the price of pork in the market." (Huila, hog production in Colombia grew 14.4% in 2015, 2016).

"Colombian swine: 2016 forecast, is an article of the pig site, where it is exposed the prognosis for the year 2016 a 7% profit growth, although it is estimated that it may be greater growth of heads, presents estimated raw material prices and production costs and the panorama of the international market and imports of pork '. (The pig site, 2016)

#### 1.2 Approach to the problem

In the last years the increase in consumption of pork has shown. Estimated that in 5 years of pork consumption increases and pass consume 4 Kg to 8 Kg per capita, due to the Treaty of free trade with the United States the Colombian farmer sector presents threats, keep in mind that one of the major challenges that presents this sector not only is the entry into force of the FTA with the United

States if not also the weakness that has domestic companies with low productive modernization and low sanitary conditions, having to fight for the eradication of swine, and the lack of support from the Government, as for the production of pork there is with the support and subsidies offered by Governments to their pork, therefore makes us a less competitive country.

The Colombian farmer sector is one of the youngest in the country's economy, given that it carries approximately 25 years in the market, the consumption of pork meat is growing, as well as imports of the same; from a study that conducted Porcicol, pork imports have increased by 15% between 2009 and 2012.

Colombia is in a big drop against the United States is the second largest pork producer after Germany. In spite of that pig farms in Colombia imports have brought advances important in recent years mainly at the level of production, after the entry into force of the FTA, we have several difference countries today send us products derived from pork; such differences found as inefficient infrastructure, high costs of production low-capacity cold storage and limited capacity for surveillance and control of situations for this reason we are forced to import pig and its derivatives that put us at a disadvantage in an increasingly competitive market. It seeks to establish projects and strategies that allow you to use the advantages and disadvantages that brought with follow the signing of the FTA generating opportunities for the pig producers and thus seeking to become more competitive.

What has been the impact of imports of pork meat in the market? Colombian with the entry into force of the FTA?

#### 1.3 justification

The country increasingly has been generating different strategies for the opening of the market, thus generating changes in the economy; impacted sectors, both positive and negative.

Sector farmer has been affected by the FTA with the United States in recent years, since it's really hard to compete with a market as large as it is, since they are one of the largest producers of pork meat worldwide; despite this sector has shown great progress structured despite the increase in imports due to its assessment has been reduced more and more, reaching 0% this year.

The pork producers have done everything within their reach, to be able to be competitive in this market and export, but have had to deal with issues like swine.

Because of this, research will be an analysis of the impact that the FTA has had in recent years, about how it has affected this sector; the price of the sale of pork and the capacity of companies porcicultoras of Colombia to comply with the demand that requires market, and quality standards to be able to increase consumption of this meat produced in that country.

#### Theoretical justification

Relations between Colombia and the United States each day are more narrow, however companies in some sectors are affected, as described in work the pork of Colombia market looks every day moreaffected by imports of pork, is clear that globalisation allows us to enter into agreements with other countries and generate economic, social and cultural progress for our country; but also strategies that benefit domestic companies of all economic sectors in Colombia should be generated.

#### Social justification

The consumption of pork in Colombia every time increases and also increase imports of, is a reality that for small and medium-sized companies producing pork raw is each time more expensive and mostly must be imported. For this 2016 assessment of imports pork is 0% which puts at risk those companies for final consumers it is more economic eating imported meat to the local market. According to this can generate alternatives to increase consumption meat pork of pig Colombian market generating value added so that final consumers are interested more in this in the imported and feel satisfied with the consumption of it, this would lessen the crisis of companies porcicultoras.

Porkcolombia - National Fund for the porcicultora Association has been working for the formation of alliances between producers and traders calling for all regions.

## 1.4 objectives

#### 1.4.1 General objective

Analyze the impact that has the TLC Colombia - United States farmer, through an exploratory research sector.

#### 1.4.2 Specific objectives

- Determine the demand for pork consumption in the last 5 years.
- Determine the capacity of the Colombian farmer sector.
- It negotiated in the TLC Colombia United States in that it affects the farmer sector review
- Review the behavior of imports of pork meat in the past 3 years.

### 1.5 methodological framework

#### 1.5.1 *Method*

Using a descriptive exploratory research seeks to deepen and address informational components, making known the impact that imports in the pigmeat market after the entry into force of the free trade agreement with the United States, using primary and secondary sources, all this with the aim of examining the information giving an investigative approach, enabling to determine and analyze the production capacity of the company Colombian and the consumption of meat in the country.

#### 1.5.2 Methodology

Methodology starts with the collection of information of articles and research onthe impact of the free trade agreement with United States in the production of pork in Colombia, which has sought to learn about the current state of the sector Colombian farmer and its production capacity to compete with the United States swine industry. There was also a data collection to the hog producers and experts of the environment through semi-structured interviews carried out on February 23 and marzo16 of 2017 to two large in the Guild to identify his opinion regarding the FTA and the benefits or threats that has brought them, see annexes A and B

### 1.6 Scope

This research is performed to identify the impact that imports of pork in Colombia, from the entry into force of the Treaty of free trade with the United States in 2012, and all that has happened this year, but to do this it is also necessary to take relevant data before the TCL so we can make a comparison of the before and after to be able to identify what has been the impact of this Treaty in the country.

## 2. Project execution

#### 2.1 Demand and consumption of pork in Colombia

This chapter is confronted information deemed pertinent to establish demand and consumption of pork in Colombia, to take into account the consumption in world, the per capita consumption of the protein in the country and also to identify regions with greater demand for pork.

World pork consumption is concentrated in five countries, China (50.1%), European Union (19.0%), United States (8.7%), Russia (2.8%) and Brazil (2.7%) by 2016, a significant increase in the consumption of pork was observed except in china which slightly decreased to 53.5 million tons, because of the reduction in its inventory of breeding females. Among some of the pork-consuming countries presents an upward trend in consumption, highlighting Mexico with growth of 4.3% annual average; Viet Nam, with annual average growth of 3.2%; Brazil, with 3.1%; Russia, with 2.9%, and Korea in the South, with a growth rate annual average of 2.8%. Some factors that explain this increase are the relatively affordable prices of the meat, as well as the growing consumer confidence, since there is more information on the sanitary measures in pig production units, see Figure 2 (FIRA, 2016)

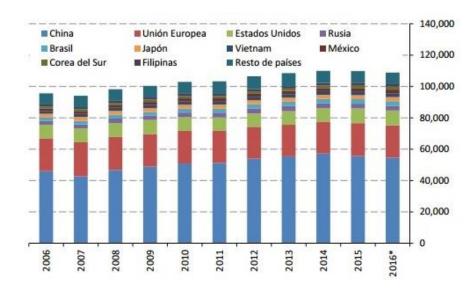


Figure 2 World pork consumption

Source: USDA, taken from (FIRA, 2016)

The consumption of pork in Colombia has increased in the last five years, to the year 2012 increased by the fall in the price of cuts of meat for example in Antioquia Department cuts fell as leg, loin and head of loin, on the other hand in the year 2013 the sector felt very favored because pork consumption increased and was not due to the fall in price for August this year the meat had increased 53% compared to 2012 and 2011 all this due to various factors and among them is a new advertising campaign "what you like, do it more times a week. Eat more pork meat".

For 2014 as well as in the previous year's meat consumption increased, but in this case was due to the dynamics of the economy spanning the country in its time, in which households registered higher spending per capita. This same year el animal protein consumption was 62.3 kilos per capita which beef has contributed to 31.1%, pigs with 11.6%, 47.5% chicken and fish with 9.8% according to figures from FNG, Fedegan, Fenavi, Porkcolombia and Fedeacua. In comparison the years 2014-2015 with 2016 the consumption of pork grows at one rate greater than the other proteins with a 15% as well as the production of animals in this same period, see Figure 3

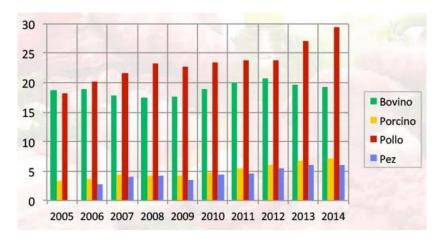


Figure 3 Consumption of protein in Colombia

Source (livestock, context 2015).

No doubt in the country are has been consumed mainly beef and chicken, but despite this we see that the consumption of pork meat has been growing in recent years as shown in Figure 4.

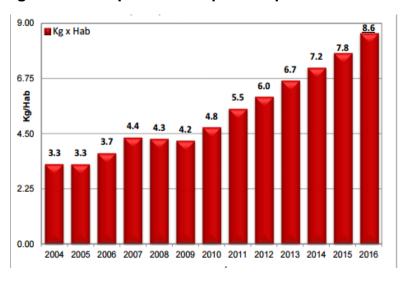


Figure 4 Per capita consumption of pork in Colombia

Source: Porkcolombia - F.N. P, DANE. Estimates Economic Area (2016)

By the year 2015 pork consumption continued to increase despite the difficulties that the pork had MDR-TB increased from 1940 to 2,400, and continued her rise gradually, which the sector was affected in terms of production costs. (Porkcolombia, 2016).

An estimated 375 thousand tons of pork consumed in the year 2015, 85% was domestic production and for this year the per capita consumption was 7.8%, i.e. 0.2% more than expected and over the front year, an aporximado of 800 grams more per capita. (Porkcolombia, 2015)

After conducting an interview with the Manager of the company Italcol<sup>1</sup> area-who leads and manages the topic of swine is considered that the consumption of meat in the country has been increasing; According to their expertise in the sector, explains that the consumption of meat in the country is between the 8 or 9 kilos per capita for 2017, being Antioquia Department with increased demand for pork meat, as in this is consumed about 21 kg per capita, in the same way this is the Department that produces more pork with 49% of the national population swine (Aristizabal 2017).

In Colombia especially in Antioquia increasingly grows more pork consumption, because this is one of the proteins most consumed in the world. By 2016 the

<sup>&</sup>lt;sup>1</sup> Italcol is a company dedicated to the elaboration of food for animals such as cattle, swine and cattle, among others. In addition it has hog farms

Antioquia consumed 24 kilos per-capita pork, figure that represented a growth versus those that occurred in the year 2015 with 20 kilos per capita (News Telemedellín, 2017).

According to the Executive President of the Porkcolombia Association<sup>2</sup>, Carlos Maya Street, in dialogue with livestock context, he said that the work that has been doing the Guild and the producers allowed to have increases in the last 6 years up to 100%, success that is due to the campaigns conducted on behalf of the consumption of the meat of pig, which has allowed that the dynamics of the Colombian pig production is very strong; they not only seek to change the perception of the consumer but also to improve the frequency of intake and make the product part of the dietary habits of the consumer.

Also the President of Porkcolombia indicated that during 2017 will continue to strengthen the message through campaigns to promote the consumption. In addition, will aim it to work to improve the health status, which will allow the sector to be more productive and competitive (Finagro,s.f.). In the same way through an interview conducted by the magazine week and your Opinion in 2016, highlighted how the sector farmer has doubled its consumption in recent years as evidenced above and that this activity is reaping the benefits of the decisions taken years ago, this view also shares it the Manager of the fair of cattle in an interview, in view that has been very good opportunities this sector, from both farms and entire supply chain that is engaging.

For the first time in 2016 the sector looks very benefited with pork consumption since benefited four million barrier, breaks that is to say slaughtered, ratifying the sector among the three livestock activities in the country. The price of beef for 2016 increased significantly (20.4%) and therefore consumers saw in pork attractive to meet their need for protein; these not gave significance to the increase in the price of cutting of pork still increase of 13.4% more than the products that make up the family shopping basket (7.2%) as it was one increase lower than the beef meat.

He is expected that the growth of farmer sector bring great benefits such as:

- Greater efficiency of the market
- Promoting the development of technology and innovation in the farms to comply with regulations imposed by the Government.

<sup>&</sup>lt;sup>2</sup>-Porkcolombia is the Guild that represents the pork producers, seeking the development and growth of the sector, managing the resources of the National Fund of the swine

- Best use of the resources that today have the pork.
- Increase the production capacity

#### 2.2 Production capacity in Colombia.

This section will discuss the production of pork meat, taking into account the growth of the sector in the country; the production of the protein by departments to supply the domestic market, in the same way it was considered relevant to talk about global production to have a broader view of the capacity of the Colombian sector.

Swine production ceased to be a task of rural for-profit to be an activity carried out in technical and professional way. Around the world, China is the country that produces more pork in the world with approximately 51% of the world total production followed by the European Union and United States; in the same way, the Asian giant is also the largest consumer of pork. Dentered the world market of pork, Colombia is ranked number 45, seen in the figure below the main step on producers (FIRA, 2016)

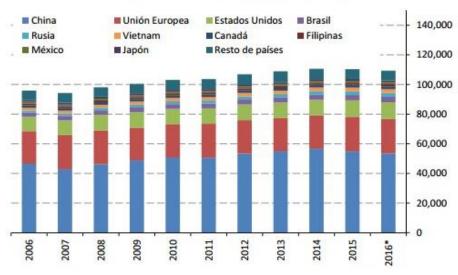


Figure 5 World production of pork 2006 - 2016

Source: USDA, taken from (FIRA, 2016)

In Colombia began to develop this pork industry in the Decade of the 70s and early 80s, establishing large farms on which are handled imported animal (Moreno Prada, Onofre Rivera, & Chavez Porras, s.f).

The production of pork in Colombia is destined mainly for domestic consumption and to meet the needs of the national market, since large scale there is little integration and support from the national Government to change the conditions of production and marketing of meat of pork.

Farmer sector has been looking for ways to improve production complying with the standards and implemented parameters of biosecurity to provide consumer safety and product quality, compliance with health regulations, in order to face a competitive market that will help Colombia to show to the world globalised as a competent market.

The market of pork in Colombia represents an important source of food for the Colombian population, as a source of animal protein, between formal and informal consumption. The hog producers are an essential link for the growth of the animal feed chain (Perry, 1995), precisely in this sense (Porter, 1990), says that a country's competitiveness is the result of adding the individual competitiveness attained by the industries and sectors where they operate.

The farmer during the 2015 sector growth was around 3'602 200 heads, which represent 11.6% compared to the year 2014 in accordance with the report of the Association Porkcolombia balance. According to the Association in terms of volume of pork meat was estimated that the domestic supply grew by 14.2 per cent given the higher slaughter weight, exceeding the 317,000 tons including imports and increasing the national supply which was approximately 40.0000 tons.

The Organization of the pork industry noted that integration and increasing scales of production are also a measure of survival in the economy, taking into account the international competition which is exposed to the sector, as well as the interest of the same companies play a greater market share and extend their operations to other markets (Diario del Huila, 2016). See Figure 6

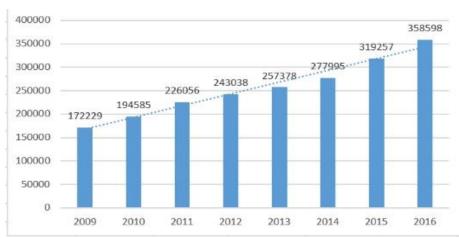


Figure 6 Production of meat of pork

Source: Own elaboration from the national system of collection fee swine (2016)

The Antioquia Department provides approximately 50% of the production the country from about 1,300 farms hog. Likewise in the region is the Integral of pork producers cooperative<sup>3</sup> that have managed to boost the economy of scale among its 140 members with joint purchases of concentrate, genetics and to unify production (Rojas, 2015).

Leads the regional participation in the production of pork Antioquia, followed by the Capital District, being at the same time the areas with the largest consumption in the country (Standard Sofia).

The benefit of pigs in 2016 grew 12.4 per cent on the year 2015, which had tabled an increase of 12.2%, almost 25% in two years. For Porkcolombia this behaviour consolidates pork between the main three livestock activities in the country. The following table shows collection of promotion of the charity of pigs share by Department.

<sup>&</sup>lt;sup>3</sup> Cooperative integrated hog producers is a non-profit organization that watches over the strengthening of swine

**Tabla 1 Benefit of pigs by Department** 

	DEPARTMENT	2015	2016	DIFFERENCE	2016 PARTICIPATION	GROWTH RATE 2015/2016
1	Antioquia	1.672.431	1.867.217	194.786	46%	11,60%
2	Bogotá, D.C	793.554	861.944	68.390	21%	8,60%
3	Valle del Cauca	571.039	651.104	80.065	16%	14,00%
4	Risaralda	132.684	177.164	44.480	4%	33,50%
5	Altlántico	94.698	107.823	13.125	3%	13,90%
6	Caldas	75.877	82.757	6.880	2%	9,10%
7	Quindío	55.987	68.338	12.351	2%	22,10%
8	Nariño	38.516	42,540	4.024	1%	10,40%
9	Huila	32.927	39.296	6.369	1%	19,30%
10	Meta	27.278	31.327	4.049	1%	14,80%
11	Santander	35.415	31.265	-4.150	1%	-11,70%
12	Chocó	18.061	21.258	3.197	1%	17,70%
13	Cundinamarca	15.745	19.494	3.749	0%	23,80%
14	OTHERS	57.835	68.163	10.328	2%	17,90%
15	NATIONAL TOTAL	3.622.047	4.069.690	447.643	100,00%	12%

Source: own elaboration based national system of collection, Porkcolombia (2016)

As shown in table 1. by 2016 the pork promotion fee amounted to 4.069.690 heads that are equivalent to 358.598 tons of pork, 40,000 tons more than in the year 2015. Porkcolombia explains that the growth of the pig sector responds to increasing scales of production which in recent years has been committed to large and medium-sized companies in the sector.

However, after interviewing experts in the sector, as the Manager of the Central livestock of Antioquia, according to its experience in the sector, Colombia is not competitive in the production of pork meat because no account with the infrastructure suitable for export to other markets as the United States, because it is country requires high quality standards for the production of pork which makes for Colombia is difficult to enter this market; for this reason the Government implemented Decree 1500 which obliges to benefit plants have high standards of cooling to make the total swine meat refrigerated, maximum up to 7° C; the Decree should have begun to govern this year 2017, but the Government gave to the pork for two years more to winterize their benefit plants, therefore are working infrastructure and making investments in cellars. At the moment Colombia alone is dedicated to supply the local market, but the pork producers are doing the utmost to meet the criteria and standards necessary to export to the United States (Escobar Calle, 2017).

We can also say that Colombia if it is preparing to export pork meat, entrepreneurs from the sector ensure that by 2020 it would be exporting and for this should begin to produce quality meat and make this a healthy, healthy and clean food.

Although farms of the country lack much infrastructure is working on it, for example, farms champion <sup>4</sup>obtained accreditation by producing quality which was granted by SGS Colombia pork. This year projections carried out by Economic Area are inclined to growth of formal benefit for pigs so that at the end of the year it would be reaching a spike of in the highly productive and satisfactory production of pigs for the economy of the country and the sector.

In terms of raw materials, Colombia is an importer of them for the production of food pork such as corn and soybeans, which influences the cost of production of meat. In Colombia also is planting corn, but this is essentially used for the production of various foods such as the arepa, tortillas among others and not much for the production of food of the pigs; We must bear in mind that the maize is 60% for the production of these food.

Due to the low maize production in Colombia is that you must import it and United States is the largest producer of corn worldwide, worth noting that the production of corn in the United States represents half of the world production.

Since it came into effect the free trade treaty with the United States applied the desgravamen of corn to 12 years, this began with 25% but United States gives the country a quota of 2.55 million tons a year with the 0% tariff, after having consumed such amount applies the regular percentage that there for that year; According to the Manager of swine of the company Italcol Manuel Aristizábal the quota must be ordered on January first. (Aristizabal, 2017) see Figure 7

<sup>&</sup>lt;sup>4</sup> Farms champion is a family dedicated to the production of pork, which is the first in the country with the accreditation of the seal of quality pork.

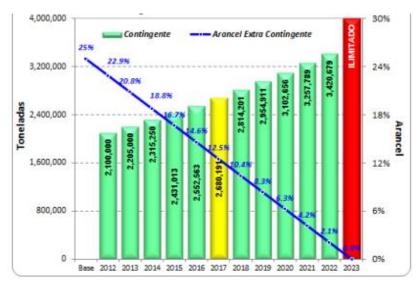


Figure 7 Imports of corn to United States contingent...

Source: Association Porkcolombia (V. Rojas, Carlos Andres; 2017)

In the previous figure is can demonstrate the quota that gives United States to Colombia for imports of corn, also evidenced the extra quota tariff or desgramen having to 12 years; We see this year 2017 the desgravamen is with 12.5% of tariff.

However, for this year, the quota of yellow corn from United States tariff-free, was set at 2' 680.191 TRM and that, to date, already has been consumed about 67% of the same (Gonzalez, Fredy, 2017)

For end of 2017 and 2018 early imports of corn to the United States are affected and it is believed that 14% would fall since climatic conditions in the exporting country have not been favourable (Gonzalez, Fredy, 2017)

Of United States we also import soybeans that represent more than 80% of the formula for the production of pig food with corn, and although it will be a 5% increase in the planting of soybeans by climate issues is no good omen for this.

Therefore, the new 1500 Decree above mentioned sector farmer has been proposed improving the production of pork through three phases transformation, seeking to create a combination of creative organizational, social and technical innovations, which are:

 In the Organization of production, seeking to reduce production times; replacing some chains, responding quickly to the demands of the customers and reducing inventories to reduce the capital costs of rotation.

Organization of the development of the product that seeks to reduce the cost
of product by integrating development, production and marketing contribute
to decrease development time, to manufacture products with greater
efficiency and to market them more easily.

 Organization of relations of supply, leading companies to reduce manufacturing depth. To reorganize the supply of providers introducing systems "just in time" and to reorganize the subcontracting processes when it decreases the number of direct suppliers.

#### 2.3 TLC Colombia - United States

This section will discuss the negotiated in the free trade agreement Colombia - United States in what corresponds to the Colombian farmer sector in order to give context to the present investigation.

The Colombia - United States free trade agreement entered into force on 12 may 2012, with the purpose of expanding the domestic market to new horizons, this agreement includes 23 chapters and several appendices; the chapters have aspects similar to other trade agreements, but the annexes are peculiar to each country, such as the timelines for tariff elimination of certain products, among others. (Colombia - United States free trade agreement)

The agricultural sector is one of them that has been most affected since they must comply with the high standards of quality which has imposed United States to Colombia, which has caused discomfort for some sectors in the country. Unlike other sectors, Colombian swine has been preparing to cope with trade agreements, to be able to show progress structured with a view of string that allows you to have a chance to compete in the market, domestic and export, despite threats that represents the agreement.

Colombian porciola is negotiated according to the Treaty of free trade for the sector:

- For the import of pork from the United States included five periods of tariff reduction for products and sub - pork products starting with a tariff of 16% for 2012 and ending with 0% tariff for the year 2016
- For the import of commodity raw that this case is corn, product for the prociolas food processing was a relief to 12 years beginning with a 25% tariff

and is currently finishing with a 0% tariff to the year 2023 in the 2017 with a 12.5% of tariff. In the same way United States gave Colombia a contingent which varies each year as set out in the Treaty (see Figure 5) for this year 2017 the quota was found at 2.6 million tons, which come with a 0% tariff and call on the beginning of each year

 The law will also be implemented 1500 which obliges to benefit plants have high standards of quality and infrastructure, should have veterinary inspection, their way of building must have very good specifications and divisions, to be able to exploit it to United States.

## 2.4 Behaviour of the imports of pork

This section refers to imports of pork meat Colombia and the world, in addition will be referred to the desgravamen who has had since the entry into force of the FTA with the United States, will be discussed if they have increased or decreased imports and how much has been imported in the last three years.

It is no secret that the entry into force of the trade agreements in Colombia in particular the FTA with the United States have been of great impact for the pork sector, imports of pork meat increased in particular products and frozen by-products, however, despite the trade agreements signed by Colombia, imports van very linked to the price of the currency. In Colombia the largest supplier of pork is United States with 74.3% in kilos and 81.8% in values, so the rise of the dollar affects imports. Likewise the increased consumption has generated that imports have opportunity in the domestic market, challenge faced by the pork producers to replace imports, see Figure 8

Canadá, 4,643,
9%

Estados Unidos,
40,892, 84%

Figure 8 Imports of pork meat in 2016 (tonnes)

Source: DANE, estimated Porkcolombia - FNP

Free trade agreement with the United States began to rule on 12 may 2012 and the date started his desgravamen. For products and by-products of pork, it has 5 periods of relief which for the year 2016 is 0% as shown in the following figure. (Porkcolombia, 2013)

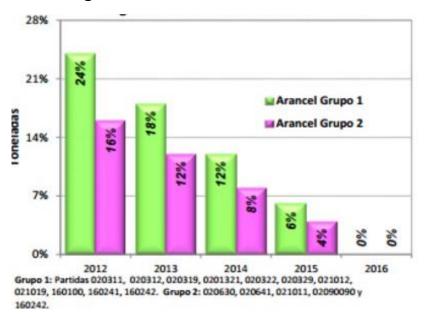


Figure 9 Relief TLC Colombia - United States

Source: National Fund of the swine (Porkcolombia, 2013)

In the figure above, we can see the desgravamen which has pork and its byproducts for import this from United States to Colombia according to their tariff items which are divided into two groups, which for the year 2016 I'll take 0% tariff.

According to figures from the DANE October 2016 imports decreased by 15.6%. In the first half pork was at very low prices and international prices were very high, resulting in the restriction of entry of pork to the country. In table 2, you can see that in 2016 is presented a decrease in imports of pork products

Tabla 2 Imports of pork (tons)

	JAN	IUARY - NO	VEMBER	2016				
PRODUCT -	2	2014 2015		)15	2016		Part(%)	Var(%)2016
	KG	\$	KG	\$	KG	\$	2016	/2015
MEAT	47,515	\$293.885	44.517	290.163	41.776	272.786	84%	-6%
REMAINS	5.164	21.287	3.399	29.393	3.736	28.556	9%	-3%
BACON	4.306	13.973	2.944	10.785	2.156	10.582	3%	-2%
EMBEDDED	1.406	11.205	1.504	8.226	1.374	5.874	2%	-29%
SALT AND SMOKED	109		217	5.818	165	5.655	2%	-3%
Total	58.500	\$340.350	52.581	344.385	49.207	323.453	100%	-23%

Source: own elaboration based DIAN (2016), DANE (2016) and calculations Porkcolombia (2016) data

However until now the DANE unveiled the closing report of the 2016 in imports of pork which was not positive in comparison to October of the same year international prices of pig fell given its demand in the country, the opposite happened to Colombia that in the second half of the year is when there is more demand for pork, and therefore the price tends to rise which generated that they increase imports as shown in Figure 10

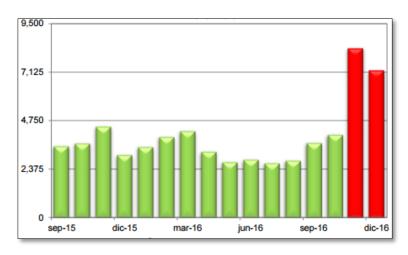


Figure 10 Imports-monthly pork in Colombia 2016

Source: DIAN - DANE, estimates Economic Area

Although the farmer Guild has seen an improvement in as to its position the hog producers in November 2016 exposed him to the Government the need to acquire new loans and support that help them improve the infrastructure needed to achieve the growth potential of the sector, likewise requested the pork through FINAGRO financing for equipment and technology that ensure competitiveness before the treaties of free trade.

One of the challenges proposed for this 2017 in the Guild was to join small hog producers in order to support this work and providing training education to improve processes and increase the number of plants of profit taking as a strategy in this regard is to point you to productivity on farms and differentiation in the commercial channels. On the one hand, it is key that occur more than today to reach out to replace imports, on the other hand, the purchaser to give priority to the local product. However, the tendency of the rate of change has its positive side, because it makes the pork more competitive against us imports, although it did not mean a decrease in purchases of food abroad, especially because they lowered the international price of pork (Delgado, 2015)

## 3. Findings

Through the implementation of the project can be analyzed the impact that had the free trade agreement with United States sector farmer, demonstrating the most important aspects such as production, consumption and imports in Colombia. The impact that the FTA in the country has been interpreted in different ways, depending on the point of view having the pork; being positive for some and negative for others. As interviews with experts in the field of swine can highlight these two points of view. The farmer sector has had challenges but at the same time had developments that impact is said to be the two sides of the coin and can be analyzed depending on the side that you look at; on the one hand Italcol enterprise zone Manager confirms that the Treaty has been flattering for the pork producers since have been reduced costs concerning production, due to the quota of 2.5 tons of maize which are imported with 0% tariff, after this amount the tariff takes up the percentage of the desgravamen which has for that year; corn accounts for 60% of the formula for pigs food is so important this contingent.

Despite the fact that that is evidence of one benefit for the United States since the year 2016 for pork began entering with 0% tariff in the country since the desgravamen period to 5 years, while the period of the desgravamen for the import of maize is 12 years, which corresponds to the year 2016 a tariff of 14.6% the sector has not been as affected as expected thus increase national pork consumption increased significantly; so the imports do not replace domestic production since they are unable to meet the demand of the market (Aristizabal, 2017)

On the other hand the cattle station manager considers that this Treaty was not enough just to Colombia, due to the high standards for the export of pork to the United States and a desgravamen to 5 years for the import of the same country (Escobar Street, 2017). This Treaty also for producers of pork meat caused a negative impact because they had to improve the quality of the product, increasing the consumption of the same and generate greater production, since otherwise the national market was supply of pork imported from the United States.

In terms of the free trade agreement, hog sector was not the favored United States has more advantages over Colombia, as we mentioned above one of them are the desgravamen of front of raw pork and the high standards of quality required to export pork to United States In addition it is a country with a more

developed industry that has the ability to scale production of pork and high quality, not to mention its infrastructure and technology, while the sector in Colombia is just growing. However, the FTA has not caused great impact for the United States since Colombia is not the target market for the export of pork and its production is insufficient to supply the domestic market, but still continues exporting to Colombia in large quantities and over the course of the years from United States imports of pork meat in Colombia have increased. All this had the sector concerned so that the pork producers decided to improve the genetics of pigs, implement campaigns to encourage pork consumption, improve the quality of the meat fight against swine fever, likewise the Government implemented the law 1500 cooling chain forcing producers to have high quality standards, not only to curb the imports of pork but also to certify the sector and file it firstly the livestock of the country and thus export to different countries.

## 4. Conclusions and recommendations

#### 4.1 Conclusions

With the entry into force of the FTA with the United States was believed the farmer sector was not going to move forward and would be greatly affected because this Treaty was not just for Colombia or the sector Additionally is evidence of imports of pork do not stop growing, which expected a crisis, but the opposite occurred the sector since increasingly it targets growth and even more to the increase in the consumption of national pork, so find it among the main sources of protein in Colombia and that its per capita consumption increases 50% of what is consumed today.

At the same time the sector is projected to open markets, seeking a global expansion, but this sector is the least supported by the national Government, though with the FTA standards of quality for future exports became more demanding.

It is evident that the pork producers decided to implement growth strategies because they saw that United States could weaken over the sector, i.e., for us the FTA was the push he needed the sector so that it began to grow does not mean that the sector grew thanks to the Treaty because for the most part the growth is due to the increase in consumption of pork now well is necessary to remember that this study is an input for links the chain for the agents of interest and support, public and private institutions, providing arguments to prioritize strategies, define a plan of action in the short and medium term, with the sole purpose of improving the competitiveness of the production and distribution of pork.

#### 4.2 Recommendations

Due to the progressive increase in imports of pork meat in Colombia stemming from United States for the most part, the sector must point to a higher consumption of pork per capita on the market nationally and given advances in recent years should increasingly more encourage to the consumption of the same, with new advertising campaigns where you experience the process carried out the pork for the elaboration of the cuts of meat, campaigns with the benefits that brings to consume pork for health as economically to aspire to a global growth of the sector, first they must be strong in the local market.

The sector has much to improve should produce meat pork with standards of high quality required for export, this should improve farm infrastructure.

#### Recommended in general:

- Boost farmer sector to produce high-quality meat, improving the infrastructure of farms according to the Colombian law established, to compete with the world meat producers and export
- Solve the problems of continuing the process of improving infrastructure for progress in this field; must be to strengthen the system of innovation and development scientific to control and prevent pig diseases and affecting public health. Similarly, must replenish the network of laboratories in the country, further linking the universities and making to the State

support through bankruptcy funds research for the development of the sector. What will result, better control and monitoring in slaughter, cutting and storage plants.

## Bibliographic references

- Moreno Prada, a., Onofre Rivera, I., & Chavez Porras, a. (s.f). *Applied to a farm business PLAN design.*
- Standard Sofia. (s.f.). *Scribd.* Retrieved from the swine industry in Colombia: https://es.scribd.com/doc/64480810/2-La-Industria-Porcina-en-Colombia
- Aristizabal, M. (23 2 2017). Interview 1. (C. Marin, S. Sanchez, & C. Mejía, interviewers)
- Berrío Vélez, M. (September 21, 2012). *Antioch pork*. Retrieved from http://www.elmundo.com/portal/noticias/economia/antioquia\_porcicola.php#.WN1 wJW81 IU
- Livestock context. (September 20, 2013). Report: poultry, cattle and swine, are affected by FTA with the US and the EU? Retrieved from http://www.contextoganadero.com/agricultura/informe-avicolas-bovinos-y-porcinos-afectados-por-tlc-con-eeuu-y-la-ue
- Livestock context. (October 30, 2015). Retrieved from http://www.contextoganadero.com/economia/panorama-del-consumo-de-carnesen-colombia-en-la-ultima-decada
- Delgado, p. (February 20, 2015). *The it Republic*. Retrieved from http://www.larepublica.co/consumo-de-carne-de-cerdo-crecer%C3%ADa-8-este-a%C3%B1o-seg%C3%BAn-c%C3%A1lculos-del-gremio\_222436
- Diario del Huila. (16 03 2014). Retrieved from http://diariodelhuila.com/crisis-porcina/a-los-porcicultores-les-llegaron-todos-los-males-cdgint20140316080038167
- Journal of Huila. (16 03 2014). *Diario del Huila*. Retrieved from http://diariodelhuila.com/crisis-porcina/a-los-porcicultores-les-llegaron-todos-los-males-cdgint20140316080038167
- Diario del Huila. (March 07, 2016). Retrieved from swine in Colombia grew by 2015: http://diariodelhuila.com/economia/la-porcicultura-en-colombia-crecio-144-en-2015-cdgint20160307082234176
- The pig site. (2016). *Colombian swine: prognosis 2016.* Retrieved from http://www.elsitioporcino.com/articles/2714/porcicultura-colombiana-pronastico-2016/
- Escobar Calle, j. (16 03-2017). (C. Marin, S. Sanchez, & C. Mejia, interviewers)

Finagro. (s.f.). Obtained from Sector farmer closes 2016 with a growth of 15%: https://www.finagro.com.co/noticias/sector-porcicultor-cierra-2016-con-uncrecimiento-del-15

- FIRA. (2016). *fideicomisos instituidos agriculture (FIRA)*. Retrieved from agri-food scene: http://www.ugrpg.org.mx/pdfs/Panorama%20Agroalimentario%20Carne%20de%2 0Cerdo%202016.pdf
- Gomez Polo, Germán. (October 30, 2016). *The Viewer.* Retrieved from http://www.elespectador.com/noticias/economia/via-libre-importacion-de-carne-de-cerdo-de-espana-articulo-663117
- Gonzalez, Fredy. (March 2017). *Porkcolombia*. Retrieved from newsletter economic: http://asociados.porkcolombia.co/porcicultores/images/porcicultores/informes/2017/Boletin%20Mar\_2017.pdf
- The opinion. (July 6, 2016). Obtained from growing consumption style of pork in colombia: http://www.laopinion.com.co/economia/crece-el-consumo-de-carne-de-cerdo-en-colombia-114834#ATHS
- Muñoz, r. (2015). *Redalyc.* Retrieved from electronic journal of veterinary medicine: http://www.redalyc.org/articulo.oa?id=63638739001
- News Telemedellín. (February 22, 2017). Obtained from growing consumption of pork in Antioquia: http://telemedellin.tv/consumo-carne-de-cerdo-antioquia/166655/
- Perry, S. (1995). *The growth of productivity in Colombia*. COLCIENCIAS Industrial Chamber of food of ANDI. Colombia.
- Porkcolombia. (2013). obtained from analysis of situation of FARMER SECTOR: http://asociados.porkcolombia.co/porcicultores/images/porcicultores/informes/201 3/Boletin-Final 2013.pdf
- Porkcolombia. (2013). *analysis of situation of FARMER SECTOR*. Retrieved from http://asociados.porkcolombia.co/porcicultores/images/porcicultores/informes/201 3/Boletin-Final\_2013.pdf
- Porkcolombia. (2014). review economic SECTOR FARMER 2014.
- Porkcolombia. (2015). *analysis of situation of FARMER SECTOR*. Retrieved from https://asociados.porkcolombia.co/porcicultores/images/porcicultores/informes/201 5/Inf\_Economico2015.pdf
- Porkcolombia. (2016). how it was the pig production in 2015? *Porcitultura Colombian Ed.209*, 36.
- Porter, M. (1990). The Competitive advantage of Nations. Harvard Business Review.
- V. rojas, Carlos Andrés;. (January 2017). Colombian Association of swine. Retrieved from economic newsletter: https://asociados.porkcolombia.co/porcicultores/images/porcicultores/informes/2017/Boletin%20Ene\_2017.pdf

Rojas, J. F. (November 17, 2015). *The Colombian*. Obtained in Antioquia, each person eats 25 pounds of pork a year: http://www.elcolombiano.com/negocios/agro/cada-antioqueno-se-come-25-kilos-de-cerdo-al-ano-YI3129045

Vélez, M. B. (September 21, 2012). *Antioch pork*. Retrieved from http://www.elmundo.com/portal/noticias/economia/antioquia\_porcicola.php#.WN1 wJW81\_IU

## **ANNEXES**

## A. Annex

INTERVIEW 1				
Interviewed	Manuel Aristizabal			
Company	Italcol			
Charge	Area manager			
Interviewers	Catalina Marin			
	Camila Mejía			
	Sirley Sanchez			
Conducted questions	Answers			
Is Colombia exporting pork?	Colombia is not exporting pork to the pig population (210,000 females and approximately 5' 000.000 head) just reaches for national consumption.			
Is Colombia importer of pork?	Yes, since with the national production is not sufficient to supply the market.			

Where matter Colombia pork?	Most tariff matter Colombia United States on the issue of 0%
That has both impacted the 0% tariff in Colombia?	Not much, since the sector has been growing progressively in recent years
For the Italcol company would impact has generated the TLC with United States examples farmer?	Italcol is mainly engaged in producing animals food, according to the context pork has been very benefit since corn accounts for 60% of the formula and with NAFTA an desgravamen of the corn tariff agreed to 12 years starting with 25% but what benefit them was a contingent of initially 2' 000.000 tons with 0% tariff clear when it is consumed are takes up the percentage of the corresponding desgravamen.
Because it is believed that the FTA if it has affected the sector?	The Colombian "Razo" believed that we would get more meat that is produced as the desgravamen of the tariff on pork was to less time that the corn, the desgravamen was 5 years, but not taken into account the scarcity of meat that exist around the world, and is not important to meat entering a country that is relatively good at production not to mention that for United States, the target market is not Colombia, among your target market is China.

# B. Annex

INTERVIEW 2		
Interviewed	Jorge Mario Escobar Street	
Company	Central livestock	
Charge	Manager	
Interviewers	Catalina Marin	
	Camila Mejía	
	Sirley Sanchez	

Conducted questions	Answers
Do Colombia has the capacity to export pork to the United States?	We could export to the United States if it weren't for all the phytosanitary barriers imposed to prevent pork from entering the U.S. market
What is the risk of the TLC with United States in the pork sector?	The risk are imports, because the same shift in consumption of domestic production
How much is the cost of 1K of pork and at what price is sold?	Get 1K of pork today is worth \$4,300 pesos and sold approximately \$5,500
What do you think of the FTA with the United States?	I think that these treaties are invisible economic barriers to make increasingly less competitive to Colombia and not be able to export but they bring products in this case pork. I.e. for the sector hog with the FTA United States demanded us for them import pork from Colombia have to apply the Decree 1500
That sets the Decree 1500?	Forcing plants benefit from having standards and infrastructure, as if the plants were high surgery operating rooms, they must have veterinary inspection, their way of building must have very good specifications and divisions.
	The only 2 plants that already entered after the Decree 1500, the first it had that sell to a firm Brazilian to enter Colombia and the other takes 3 years generating lost because they are not sustainable these businesses. Now plants that are already working to comply with the decree had to make high levels of investment that are increasingly less profitable since from one moment to another can be included that price to benefit rate many times these investments should subsidize them to the farmer in order to comply with the requirements imposed by Invima to continue to operate.
would when entered into force the Decree 1500?	This year 2017 1700 Decree should have entered into force, but the national Government granted 2 years more for the implementation of the caves and thus to reach the chain of cooling which is 7° c as it is to us as quality standard which requires to import pork from Colombia