

MARKET SURVEY

CONTRACT FARMING



Caracas, August, 2016
Bolivarian Republic of Venezuela





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Survey by **AL&C** Consulting Group
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Initial considerations

The following study aims to assess the potential possibilities of establishing agricultural contracts in different sectors of the Venezuelan economy. Contract Farming is a modality which has been used worldwide for more than three decades; however, nowadays this modality has gained a significant boost in continents such as Asia, Africa, and America (Latin America). For the present study, Contract Farming is understood as the agricultural production modality based on the agreement between farmers and buyers, where parameters are set on the quality and quantity to be delivered by the farmers on dates fixed by the parties. The agricultural contract has many variations and applications, according to the sector being dealt with. For the purposes of the following work, the Contract Farming model to be used is one that allows investments and inputs along the production chain of the items, starting with the variables that are characteristic of production (output) as are costs, materials, capital, machinery, chemicals, up to the distribution and transport of goods (freight).

Likewise, the study identifies three potential sectors where there are investment opportunities to boost the production of agricultural goods, the-

se are cocoa, tropical fruit and shrimp. Each sector was approached and analyzed from various perspectives, in order to assess the sector's real potential; firstly, an analysis of fluctuations and product trends in international trade is established for each item, based on the analysis of variables, such as countries that import or export the goods and the total value of trade relating to the product. Secondly, a study is provided concerning the localization and production potential of the sector in the Venezuelan economy, including data analysis on foreign trade performance.

Finally, considerations of legal and cultural nature of each sector are set out, according to their special characteristics, such as the analysis of the main legal instruments governing the development of production, as well as the analysis of cultural and environmental variables, which must be taken into account when carrying out Contract Farming in those sectors. Statistical information was constructed from data published by the Observatory of Economic Complexity and the Foreign Trade System (SICOEX, by its initials in Spanish) of ALADI (Latin American Integration Association).



PART I

ECONOMIC SITUATION OF THE BOLIVARIAN REPUBLIC OF VENEZUELA

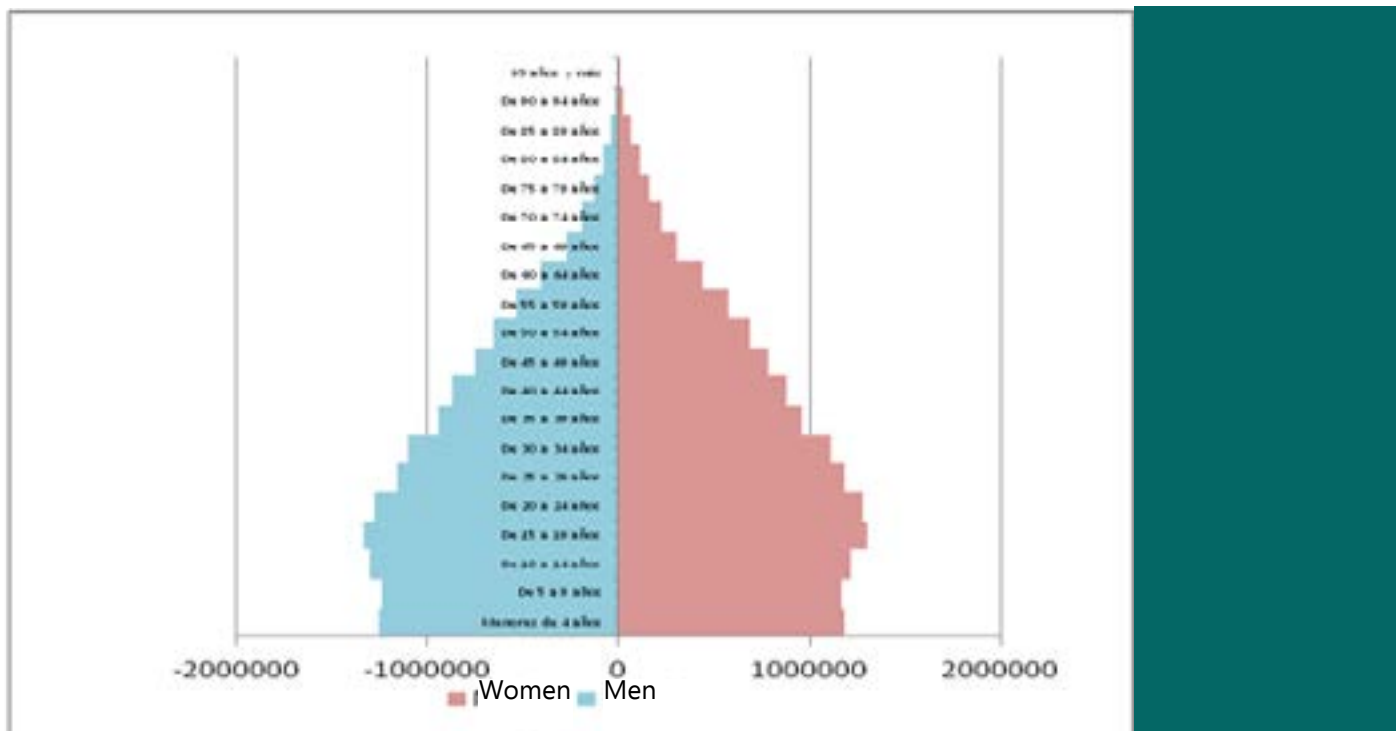
Bolivarian Republic of Venezuela

| | |
|--|--|
| Country profile | Bolivarian Republic of Venezuela |
| Official language | Spanish |
| Population (2016) | 30,851,343 inhabitants |
| Form of Government | Federal Presidential Republic |
| Head of State | President, Nicolás Maduro Moros |
| GDP Per cápita (2016) | US\$ 12,820 |
| Foreign Direct Investment (FDI) (% of GDP) (2015) | 1.6 (UN) |
| Gross Fixed Capital Formation (% GDP) (2015) | 20.3 |
| Public expenditure on education (2015) (% GDP) | 6.9 |
| Public expenditure on health (2015) (% GDP) | 3.4 |
| Currency | The official currency is the Bolívar (VEF), with a system of foreign exchange control which has two rates: DIPRO (type: protected change) for essential products 10 Bs/\$ and DICOM (type: complementary change) for all transactions not contained in DIPRO. The floating rate is controlled by the BCV and starts at US\$1=206.92 Bs |

Demography

Venezuelan population pyramid

Venezuelan population pyramid shows that the bulk of the Venezuelan population is between the ages of 10-24 years old, which results in a young population with aspirations to enter the labor market, after an average of 8.9 years of studies, representing an educated population that almost finish high school and that can become labor for any growing industry or development, also the Venezuelan population has a life expectancy at birth of 74.2 years .



Life expectancy at birth

74.2 years

HDI (adjusted for inequality)

0.612 (UN)

Population density (2015)

33.34 inhabitants per Km²

Mortality at birth

110 (deaths per 100,000 live births) (2015)

Expected years of schooling

14.2 years

Average years of schooling

8.9 years

Geography

Location:

Venezuela is a country located at the most northern point of South America, with coasts on the Caribbean Sea and the Atlantic Ocean. It has a land area of 916,445 km². Its borders are: Brazil and Guyana to the East, Colombia and Brazil to the South, Colombia to the West, and the Caribbean Sea and the Atlantic Ocean to the North. Because of its location, Venezuela enjoys a tropical climate with two seasons a rainy one and drought one, with temperatures ranging between 28 ° C.

Venezuela has four well defined regions:

1.- **Central-coastal Region:** Where the capital city, Caracas, is located. It is a region consisting

of coasts and is the seat of major cities that have international ports and industrial cities.

2.- **Andes Region:** Formed by Táchira, Mérida and Trujillo states; defined as the country's mountainous zone with agricultural settlements with banana, potatoes and coffee plantations.

3.- **Los Llanos Region (Plain region):** Consisting of plains and rivers and formed by Guárico, Apure, Barinas and Portuguesa states, it is the fertile land of the country for agricultural industry.

4.- **Guyanese massif:** In geological terms, it is the oldest part of the country, consists of large plateaus, and is the region with the largest mineral reserves.



Attractiveness

There are regulations affecting business efficiency in the country, such as exchange control, which puts the country in the position 182 in the world ranking. In terms of labor freedoms, Venezuela occupies position 181 in the world ranking and in the post 169 worldwide about freedom of business .

Doing Business 2016 classification puts the Venezuelan economy at No. 186 among 189 eco-

nomies, taking into account aspects such as: operational aspects regarding the opening of a business, dealing with construction permits, getting electricity, registering property, obtaining credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.

Venezuelan market is constituted by 30 million inhabitants, is the fifth largest GDP in Latin America, owns the largest proven reserves of crude oil in the world. Regarding to gas reserves, Venezuela possesses the eighth worldwide. Never-

theless, there is need for renewal the national infrastructure (roads, rails, ports), industries and machinery.

Happiness Index

In addition to the basic economic indices it is important to know how does work the subjective well-being of the population of a country and evaluates the human being's ultimate goal: happiness. Because economic policies should enhance the usefulness of the population defined as the amount of pleasure, satisfaction or happiness of individuals ; to carry out the survey, people's opinion is asked by a series of questions. In this survey, Venezuelan people perceived themselves as a people with high levels of happiness. Venezuela in ranked in the 44th place, above El Salvador, Ecuador and Japan, but below countries such as France, UK, Colombia, Germany, Chile, Uruguay, among others .

Profitability

According to ECLAC, FDI decreased in 2014 by 80%, from US\$ 2.68 billion to US\$ 320 million. In previous years had happened the opposite, because of the difficulty of repatriation of capital due to exchange controls, foreign companies tried to reinvest in the country in real estate sector. However, it is possible that because of the economic contraction in 2014, foreign companies have decided to back their investment because of reduced profits .

Marketing Channels

In Venezuela there are six commercial ports, whose customs are authorized to import, export and transit, as well as to provide services of transshipment, cabotage and postal packages :

1.- Port of Puerto Cabello: It is Venezuela's main port, located in Carabobo state. It is the sixth largest port in Latin America and the Caribbean. In terms of capacity, has a total regional foreland of 75%: to United States and Canada (20%), the Caribbean (17%), Colombia and Trinidad (15 %), South America East Coast (10%), Central America (8%) and South America West Coast (3%); to other ports in Venezuela, this port foreland is 15% and to the rest of the world 10%.

2.- Port of La Guaira: An artificial port located in Vargas state. It has a total of 26 docks, some of them are not operational, and its maximum depth of water is of 9,7 m.

3.- Port of Guanta: Located in Anzoátegui state, has 6 docks, and a maximum depth of water of 10,5 m.

4.- Port of Maracaibo: Located in Zulia state, has 12 docks, 8 of them remain operational and have a maximum depth of water of 10,97 m.

5.- Port of Sucre-Cumaná: Located in Sucre state, has two floating docks for general cargo and vehicles, its maximum depth of water is of 10,4 m.

6.- Port of Guaranao: Located in Falcón state. Currently, this port is operating only for refinery and industrial zone products import.

Regional agreements and trade blocs

• **ALADI (Latin American Integration Association):** Signed by Argentina, Brazil, Bolivia, Colombia, Chile, Cuba, Ecuador, Uruguay, Mexico, Panama, Paraguay, Peru and Venezuela, in which Venezuela signed a Regional Tariff Preference agreement, which decreases the proportion of ad-valorem duties stipulated to the tariff schedule.

• **MERCOSUR (Southern Common Market):** Signed by Argentina, Brazil, Uruguay, Paraguay and Venezuela, where the total elimination of taxes is agreed through the signing of three agreements: "Treaty of Asuncion", "Protocol of Ouro Prieto" and "Olivos Protocol for the settlement of MERCOSUR disputes".

• **ALBA-TCP (Bolivarian Alliance for the Peoples of America- Treaty of the Peoples):** Signed by Venezuela, Cuba, Bolivia, Antigua and Barbuda, Dominica, Ecuador, Granada, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and as observers: Haiti, Iran and Syria. It is based on the use of hedge funds to reduce socioeconomic differences among its member countries.

Economic situation in Venezuela

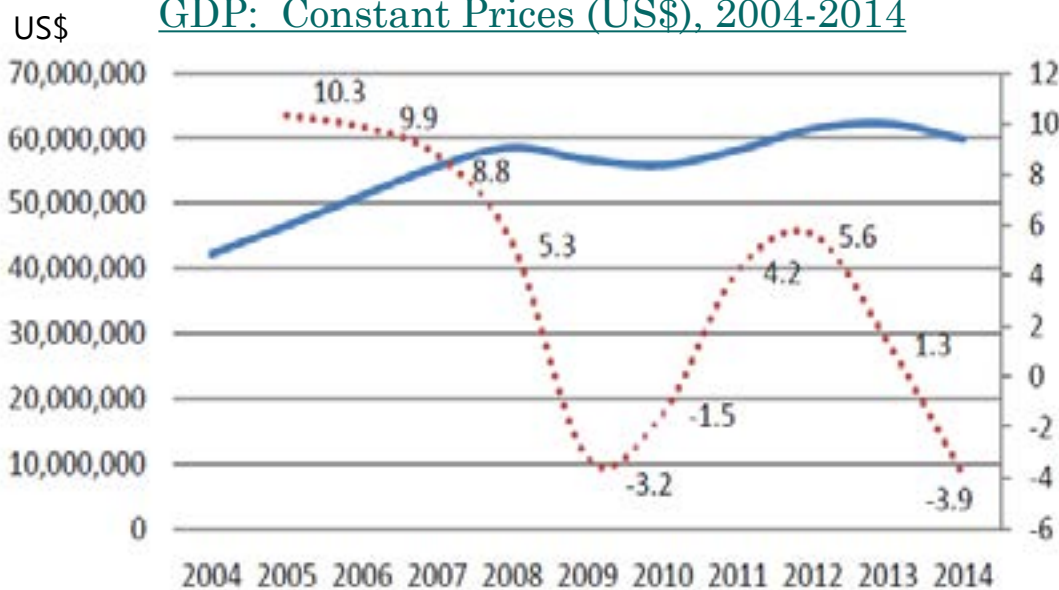
According to the data submitted by the Venezuelan National Bank (or Banco Central de Venezuela - BCV), Venezuelan economy shows very unstable levels of economic growth, with high rates (8% and 10%) in 2005 and 2007, while a sharp drop occurred in 2010, 2014 and 2015, with levels around -4%. (Chart 1.1)

Despite being an oil economy, the contribution of the oil sector in the country's economy is decreasing, representing only 11% of the Gross Do-

mestic Product (GDP), which is a worrying situation because this is the only productive sector participating in international trade, and which contributes 98% of income in foreign currency. (Chart 1.2)

Chart 1.1

GDP: Constant Prices (US\$), 2004-2014

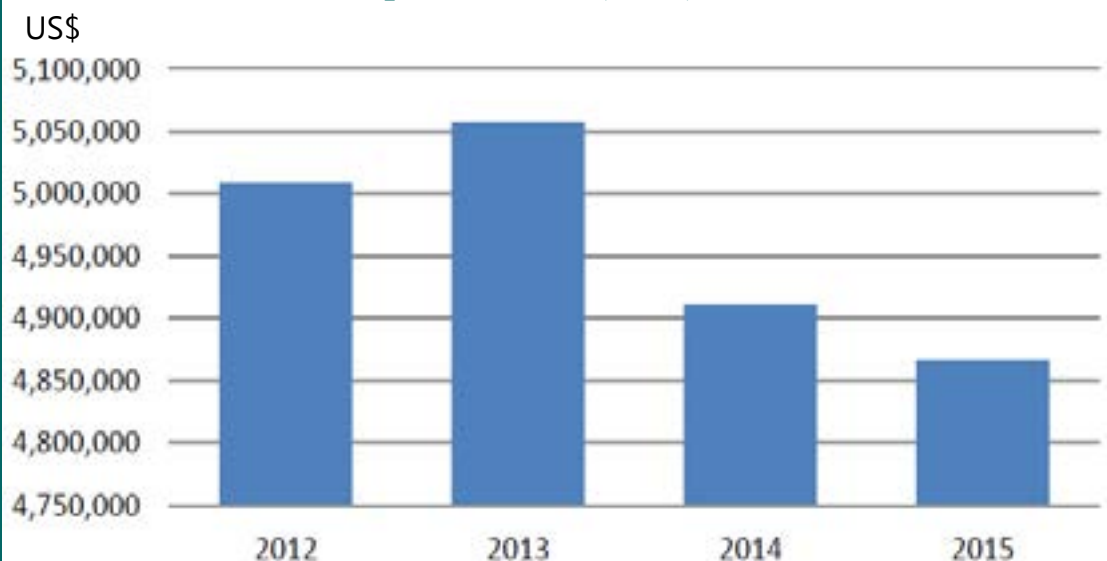


Venezuelan economy shows very unstable levels of economic growth, with high rates in 2005 and 2007, while a sharp drop occurred in 2010, 2014 and 2015, with levels around -4%.

Percent variation

Chart 1.2

Oil sector production (US\$), 2012-2015

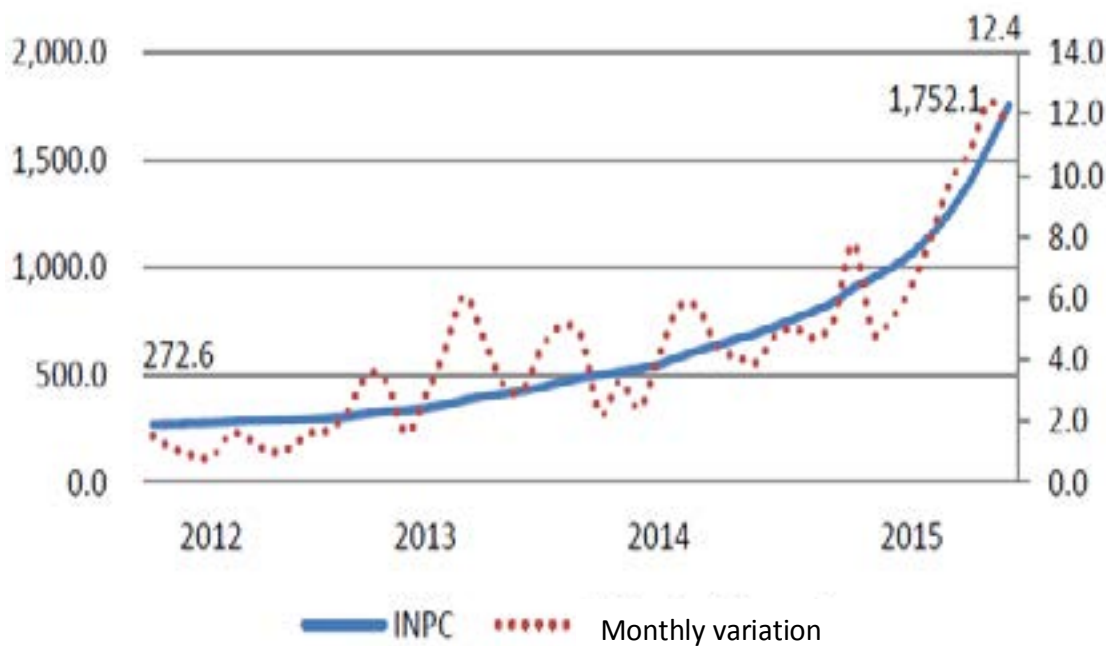


Despite being an oil economy, the contribution of the oil sector is becoming less to the national productive apparatus, representing only 11% of the Gross Domestic Product

The variation of prices is changing exponentially: prices are six times higher in the period between 2012 and 2015. Inflation in 2015 was 200%. In 2016, inflation rate is projected 600%. A month-on-month variation of 10% will represent an annual inflation rate of 313%. (Chart 1.3)

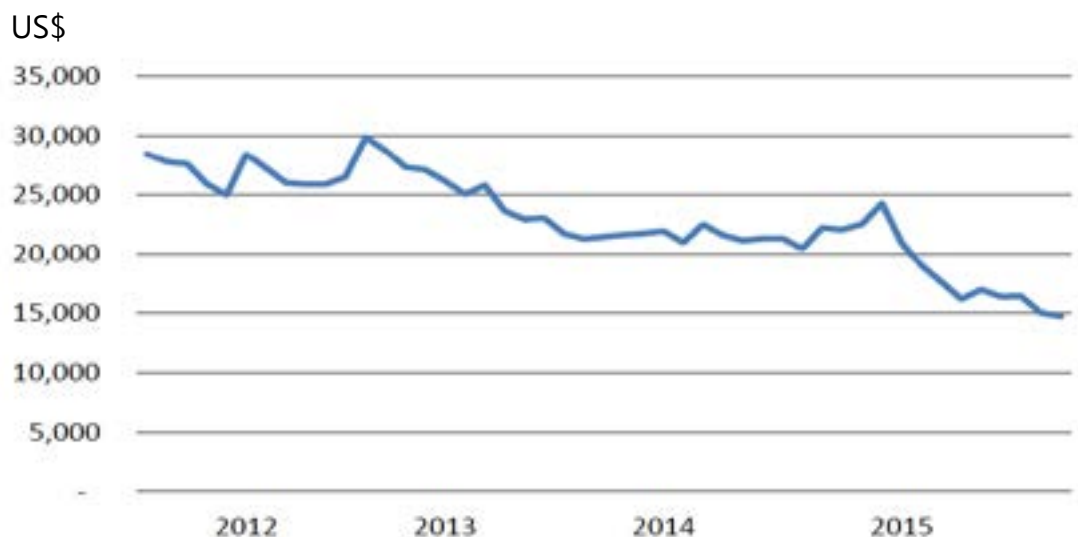
In the same period, international reserves have fallen to less than half, reaching levels as low as those of 12 years ago. This creates a strong pressure on their external balances. (Chart 1.4)

Chart 1.3
Price index, 2012-2015



The variation of prices is changing exponentially: prices are six times higher in the period between 2012 and 2015.

Chart 1.4
International Reserves (US\$), 2012-2015



International reserves have fallen to less than half, reaching levels as low as those of 12 years ago

The growth of external debt adds to the drop in international reserves, makes that the current coverage be less than 10%. That means the amount of the international reserves only pays 10% of the total external debt. By beginning of 2016, the country already had a trade deficit of US\$ 24 billion. (Chart 1.5)

Venezuelan external debt is divided in two sectors: government owes 83%, and private sector owes the remaining 17%. At the same time, this is related to 25% of short term debts (less than

a year) and 75% of long term debts. Public and private commercial credits represent 19% of the external debt, while most are concentrated in bonds and other forms of loans.

As to the position of the reserve assets, Venezuela has decided to concentrate 70% in monetary gold, and this assets has had the same behavior as of international reserves. It has fallen almost by half: from US\$ 21 billion in 2011 to US\$ 11.5 billion in 2015. Although public operations regarding monetary gold have not been made. The fall is evident in the Venezuelan

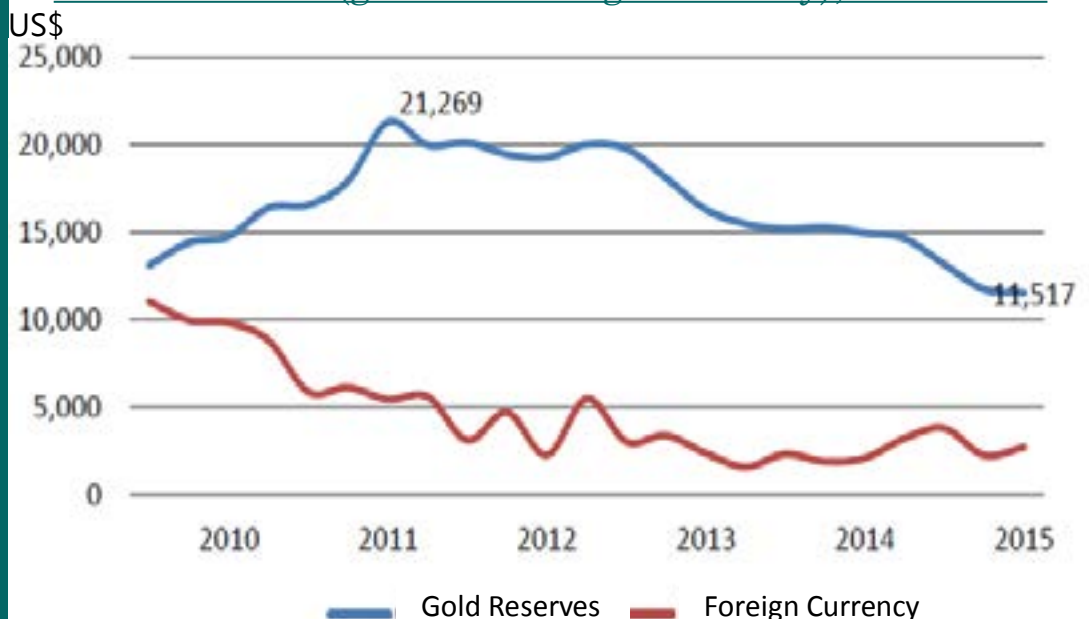
Chart 1.5

Relation between external debt and International Reserves, 2012-2015



Chart 1.6

Reserve assets (gold and foreign currency), 2010-2015



The behavior of the balance of payments remains negative during the last six years, with the characteristic feature of maintaining positive trade balances, but capital outflows exceeding this

surplus. By 2015, for the first time in 20 years, quarters are shown with negative trade balance, mainly due to the fall in oil prices.

Chart 1.7

International Investment Balance (US\$), 2010-2015

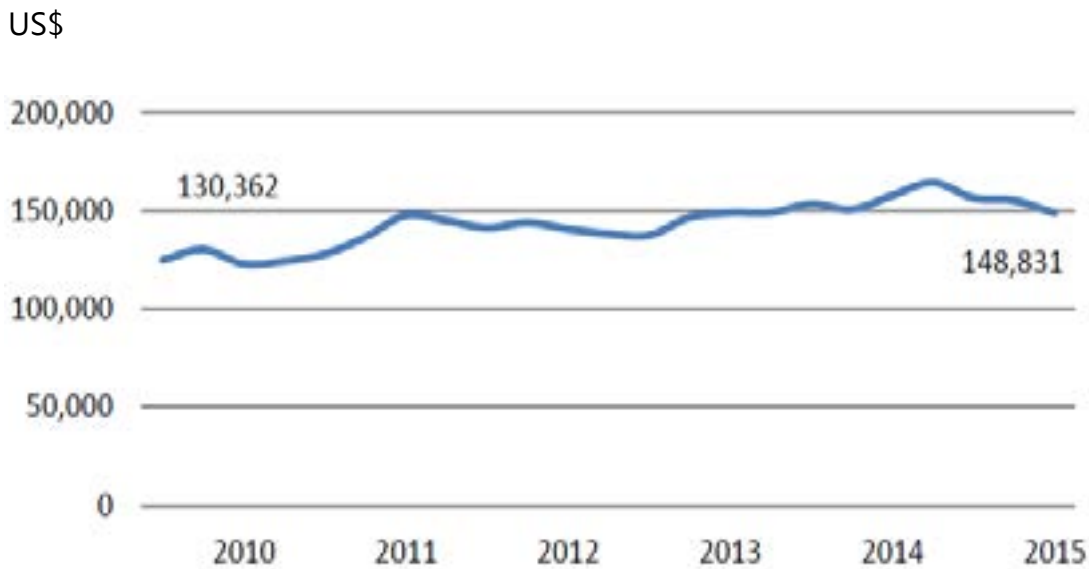
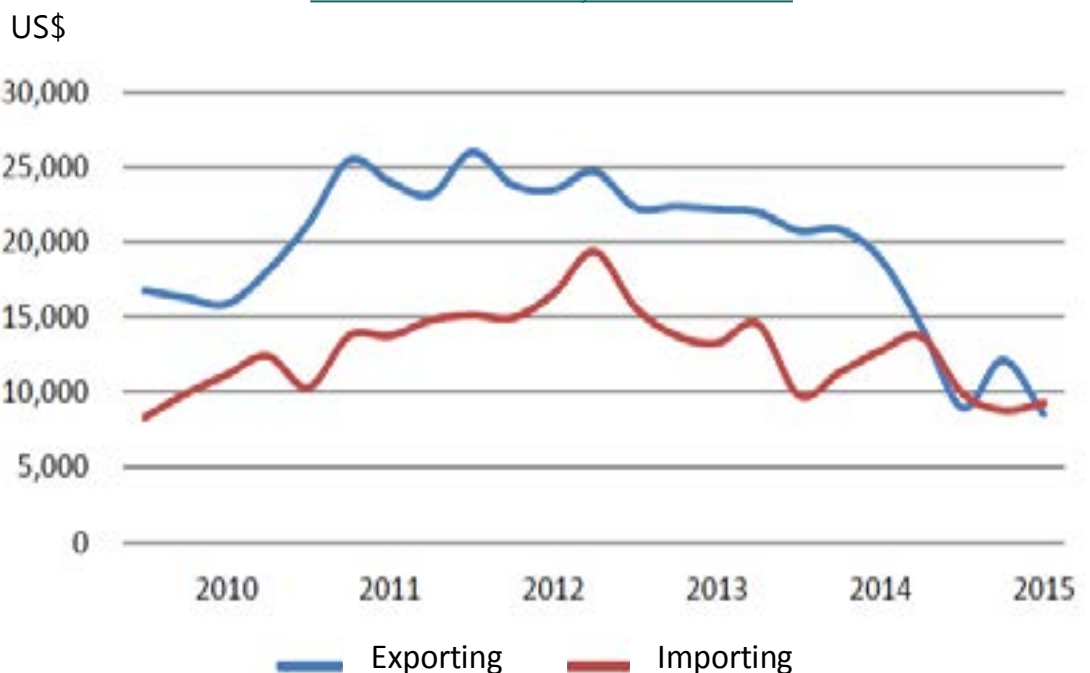


Chart 1.8

Trade Balance, 2010-2015



By 2015, for the first time in 20 years, quarters are shown with negative trade balance, mainly due to the fall in oil prices.

PART II

CONTRACT FARMING IN THE PRODUCTION CHAIN OF TROPICAL FRUIT FROM VENEZUELA

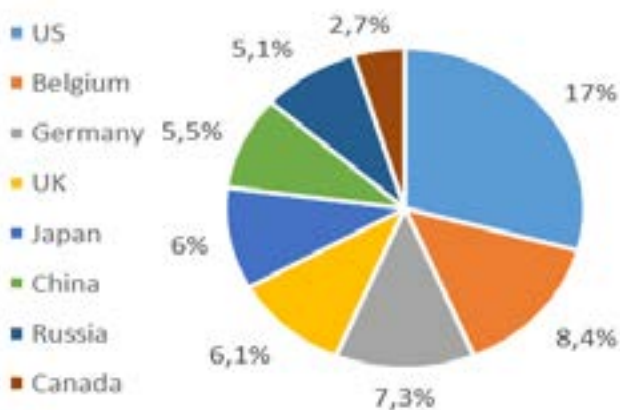
The Tropical Fruit Sector

Tropical fruits are highly valued exotic goods, both in import markets, as in local markets. The value of world exports of tropical fruit in 2014 reached a total amount of 20.6 Billion USD. This category includes the most representative tropical fruits in international trade, among which

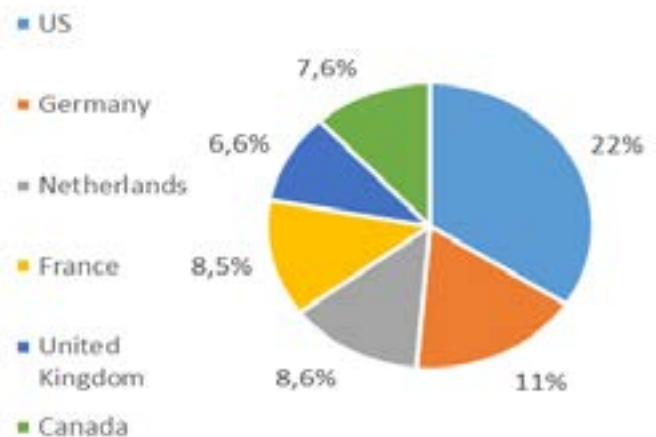
bananas, melons, mangoes and coconuts. As per FAO predictions, tropical fruits shall continue to grow in terms of production and international market demand; thus, a number of countries consider the cultivation of tropical fruits as a trade opportunity. The US and China are the main import markets for tropical fruit.

Chart 2.1
Tropical Fruit Importer Countries (2014)

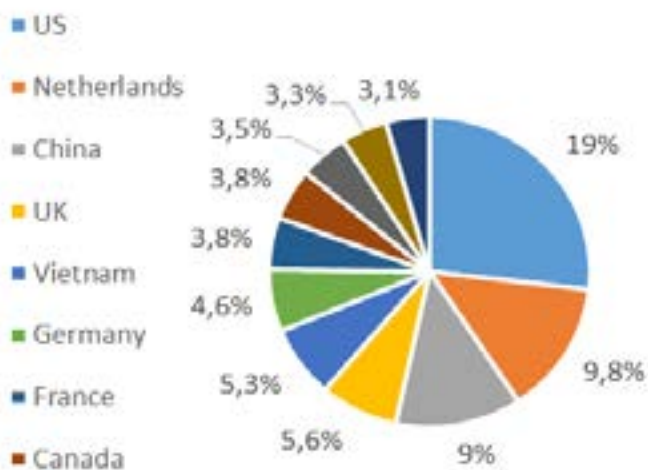
Banana Importer Countries
(Total 12,4 B USD)



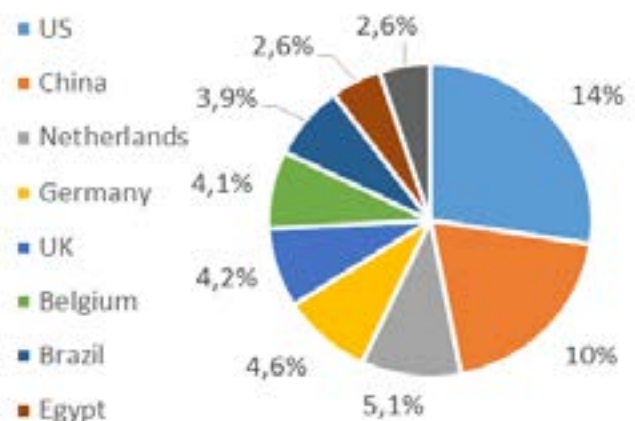
Melon Importer Countries
(Total 3,17 B USD)



Mango Importer Countries
(Total 2,18 B USD)



Coconut Importer Countries
(Total 1.21 B USD)

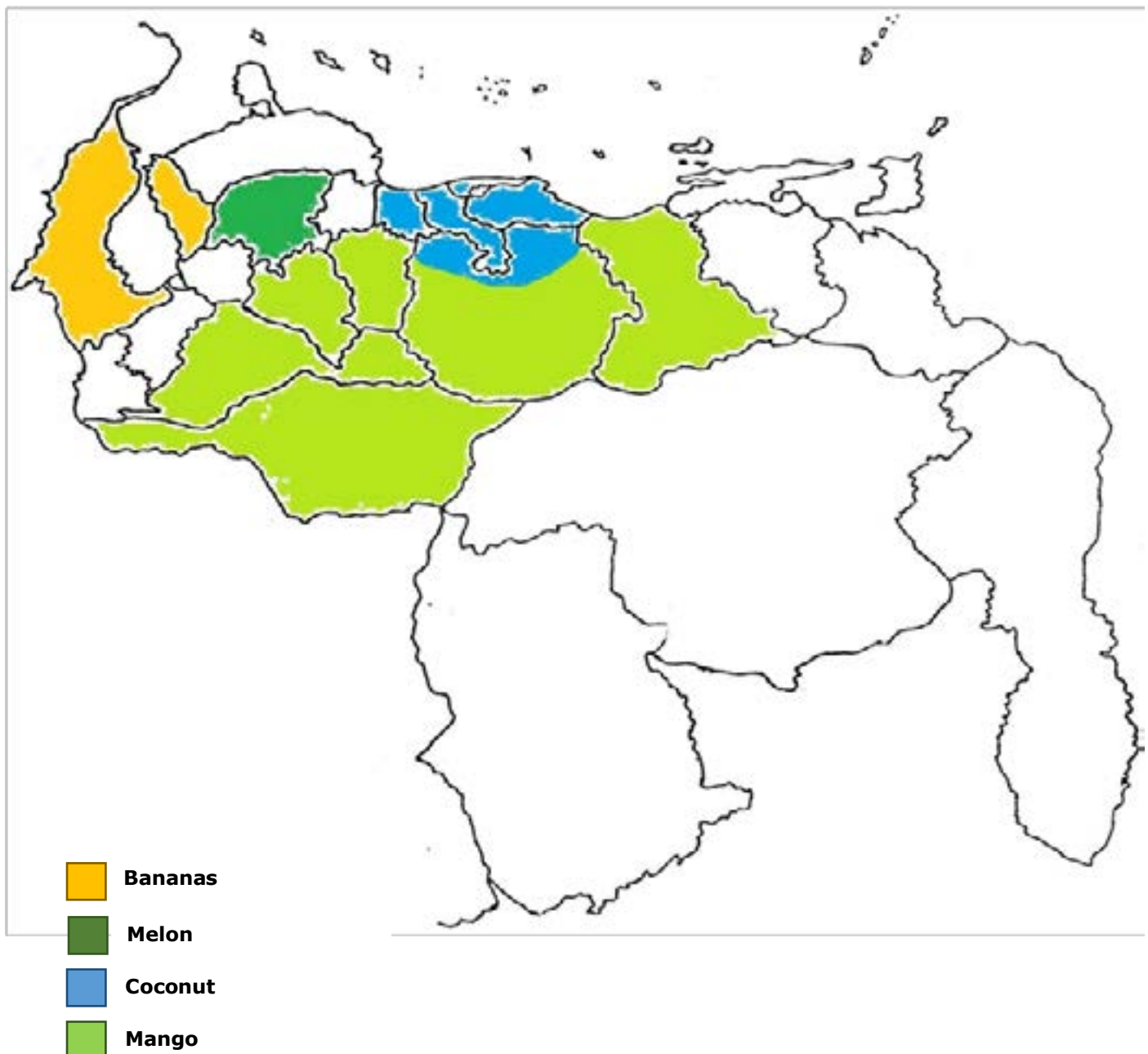


Tropical Fruit production in Venezuela

Tropical fruits have different origins, depending on environmental conditions that allow the production of these items. On the coasts of Aragua and Miranda, we can find coconut. Most of the industries engaged in the extraction of coconut are concentrated in this region. Moreover, in the state of Lara, around towns like Cubiro and Sanare, fruits like strawberries, apples, pears and melons can be found. The state of Zulia is the

largest plantain producer in Venezuela, and supplies 70% of the domestic market. In the southern state there are bananas, as well as in the northern state of Lara. Finally, throughout the llanos (plains) region, we can find mango production, since the region has specifically tropical climate conditions.

Chart 2.2
Tropical Fruit Production in Venezuela



Potential of the Fruit Sector

In Venezuela there is a wide variety of tropical fruits, mainly due to the country's geographical and climatic conditions. Although it is a country where fruit production can be easily carried out, trade in these fruits is not representative in foreign trade (0.017%) and barely reaches a value of 4.46 million dollars. However, it is a very attractive sector to both the products and the production lines that can be developed. Venezuela exports mainly small amounts of fruits, such as bananas, melons, coconuts and mangoes.

Bananas

The value of international trade in Banana represents US\$ 12.4 Billion, and Ecuador is the first exporter, with 26%. In 2014, Venezuela exported bananas in the amount of US\$ 740,000. This category is grouped under tariff code number 0803.10.00 as BANANAS, INCLUDING "PLANTAINS", FRESH OR DRIED

Melon

The value of international trade in Melon is US\$ 3.17 Billion. 99% of Venezuela's exports are destined for Aruba, with a value of US\$ 823,000. This

category is grouped under No. 08.07, as FRESH MELONS, WATERMELONS AND PAPAYAS.

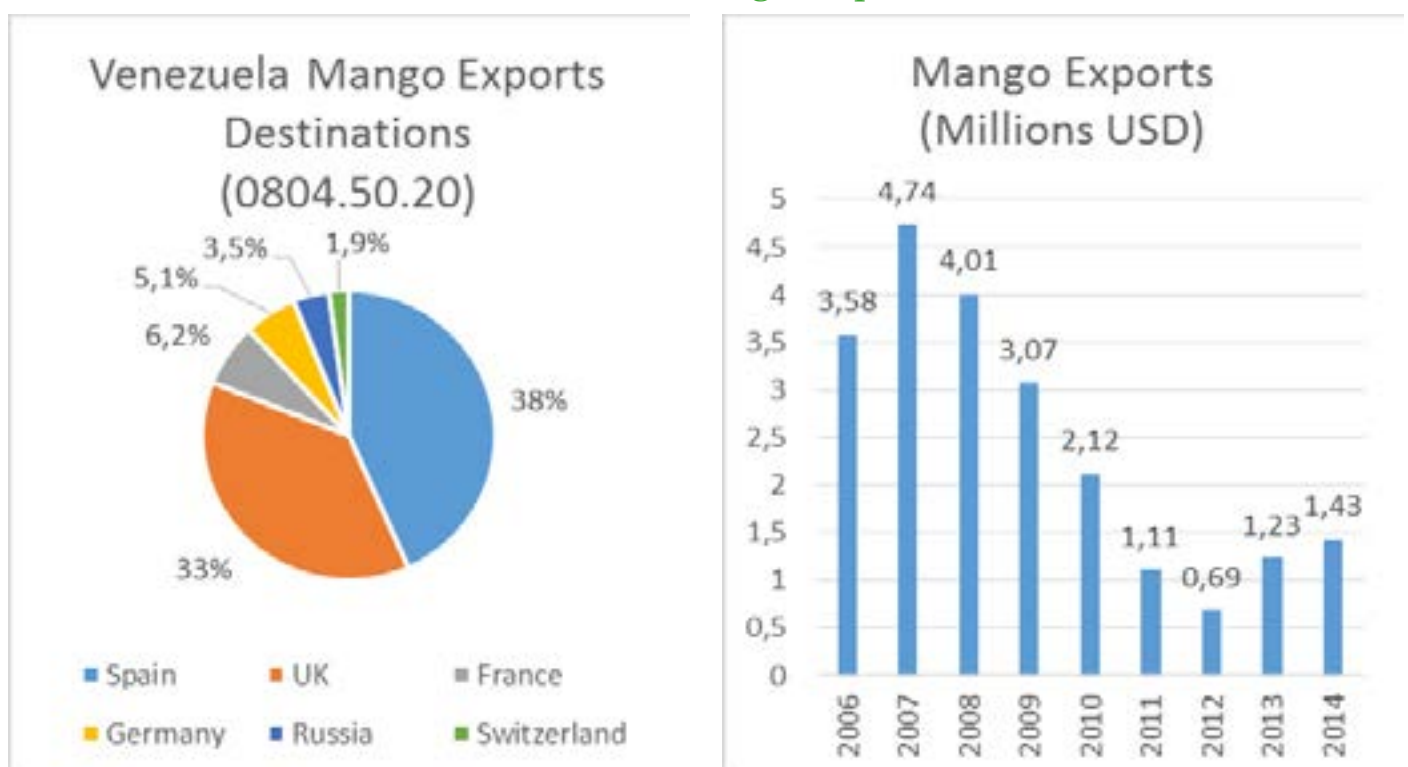
Coconut

The value of international trade in Coconut is US\$ 1.21 Billion. In Venezuela, coconut trade reaches a value of US\$ 1.16 million, 99% of exports are destined for Colombia. They are located under number 0801, as COCONUTS, BRAZIL NUTS, AND CASHEW NUTS, FRESH OR DRIED, EVEN SHELLLED OR PEELED.

Mango

In 2007, the value of trade in mango was US\$ 689 million, and by the end of 2014, the figure exceeded US\$ 2.18 billion, increasing almost by 70% in just 7 years. India is the world's largest mango producer, its production reaches approximately 15 million tons, though a small part of this production is exported, while much of the production remains in the domestic trade. The first mango exporter is Mexico, reaching 24% of total global exports, followed by Brazil 9%, and Peru 8%. The tariff code is located under 0804.50.20 as DATES, FIGS, PINEAPPLES, (ANANAS), AVOCADOES, GUAVAS MANGOES, AND MANGOSTEENS, FRESH OR DRIED.

Chart 2.3
Venezuela Mango Exports



Legal aspects and other considerations

There are several aspects to be considered before entering into agricultural contracts in the tropical fruits sector, among the most important are: Venezuelan legislation on genetically modified, GM, seeds (Seed Law, Official Gazette No. 40,817, Extraordinary 6,207)

Seed Law'9

Article 1 of the Seed Law sets forth as its purpose the protection, preservation, and production of national seed, with special emphasis on the appraisal of the indigenous, Afro-descendant, rural, and local seed, against corporate or industrial seed, modified by plant breeders. In its Article 9, the law prevents the production, importation, marketing, distribution, release, use, multiplication, and entry into the country of GM seeds. There is also emphasis on the creation of the National Seed Commission as an inter-institutional agency coordinated by the Minister of People's Power in charge of Agriculture and Lands. This committee has the task of ensuring the technical, organizational, and institutional capacity to prevent, identify, correct, reverse, and punish violations of this law.

However, in the case of fruit like mango, it is usually spread by seed, which is very delicate and loses its germinating power within a month after its extraction from the fruit. It is grown by grafting in commercial plantations. Grafting is a method of vegetative propagation, which consists of joining two or more parts of various plants, without any genetic recombination, ie, they have the same properties and are not considered as genetically modified.

Contract Farming

The biggest challenge faced by farmers to increase production of these items is represented at the level of the cost structures of each activity. Generally, any investment in this area must perforce consider inputs in the following variables: fertilizers, agrochemicals, water, cultural labors and crops, machinery, technical assistance, packaging, harvesters and freight.

Potential Partners

Frutas Orientales , C.A.

Mango pulper company and mango juice factory.

Location: Cantaura.

Tropical Products C.A.

Import and export of tropical fruit, mango in 3 varieties, coconut water, and coconut purchase for oils, and exotic fruits from Venezuela and Colombia. Haden, Kent and Tommy Atkins Mangoes.

Location: Maracay.

Asociación Cooperativa La Gran Viña

Planting, import and export of fresh fruits: Papaya, Mango, Banana, Guava, Apple, Pear, among others.

Location: San Fernando, Apure.

Tropical

Import of frozen foods, especially pulp of exotic fruits brought from Venezuela and Colombia, such as mangoes, passion fruit, watermelons, melons, pineapples, tangerines.

Location: Granada, Spain

Veneimportexport

In charge of locating products for their marketing to the general public in Venezuela, for export to Mercosur, with the possibility of custom-cleared to-door delivery. A marketer in relationship with investors and companies, preferably with consumer products.

Location: Valencia

PART III

CONTRACT FARMING IN THE PRODUCTION CHAIN OF SHRIMP FROM VENEZUELA

The Shrimp Sector

Presentation of the Shrimp Sector

Shrimp is one of the most popular, widely consumed foods in the world, which has led several countries to engage in the cultivation of this species of high commercial value.

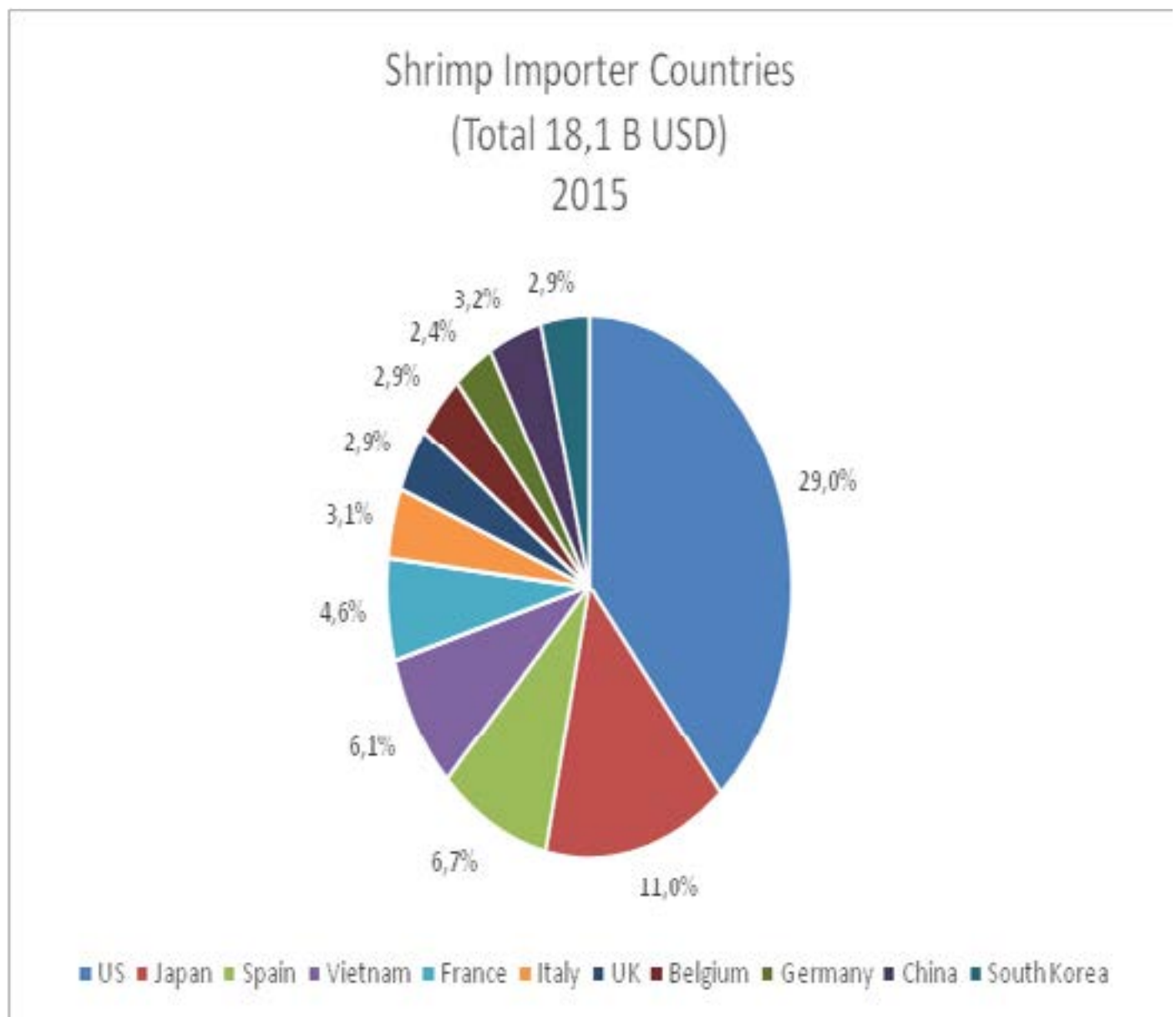
Venezuelan shrimp has been characterized as very dynamic in foreign trade. The figures highlight that 99% of shrimp production (30,000 tons) are mainly exported to the European Union

(France, Spain), and the United States.

The latter is the world's largest shrimp importer, with 29% of total global imports, followed by Japan with 11% and Vietnam with 6.1%. The total global shrimp imports add up to US\$ 18.1 billion.

Venezuelan shrimp is certified to the highest standards of quality, approved by the United States' FDA, such as the HACCP (Hazard Analysis Critical Control Points), distinguishing it as a high-quality, reliable product.

Chart 3.1
Shrimp Importer Countries (2015)

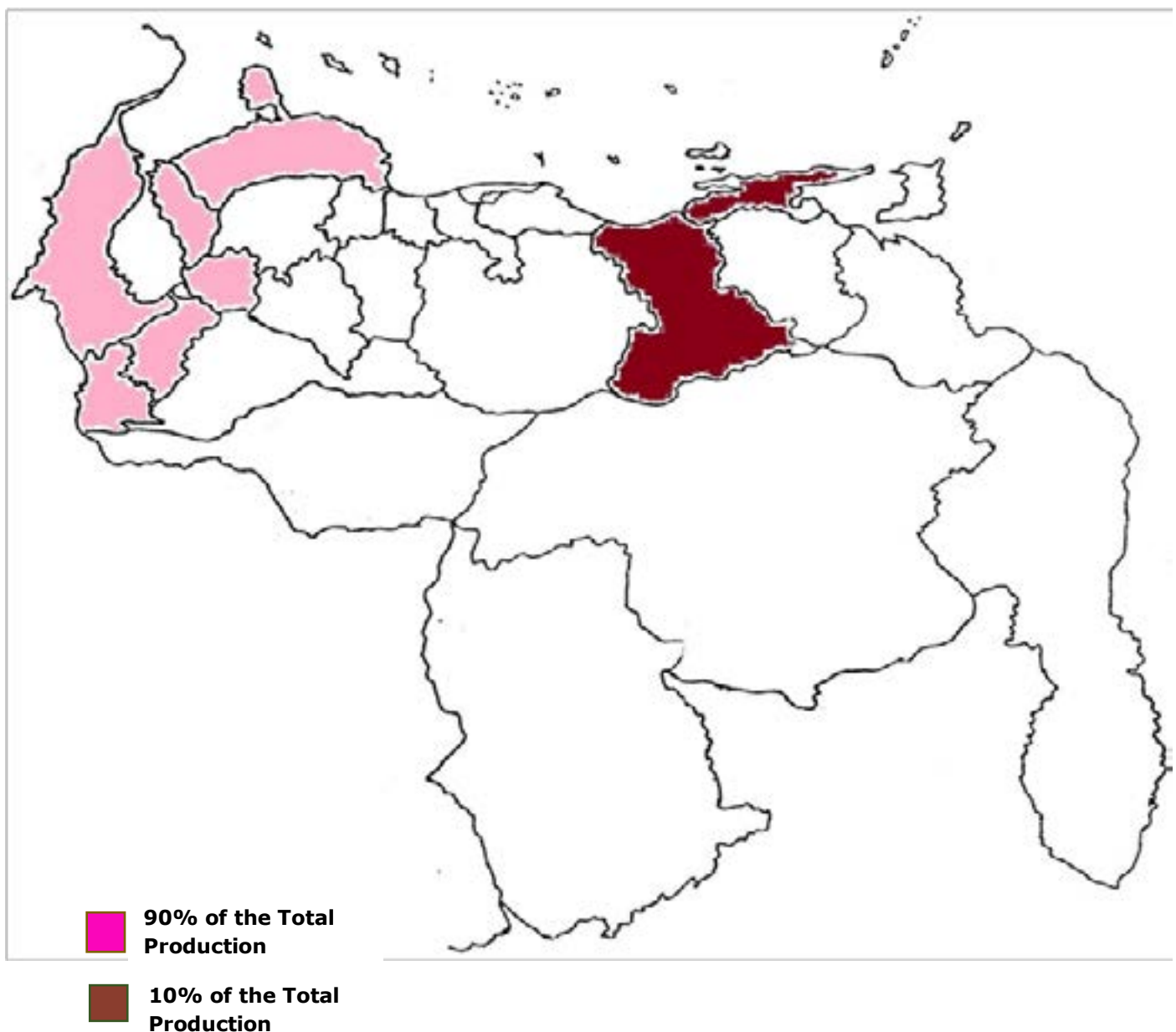


Shrimp Production in Venezuela

The total production of shrimp is close to 30 thousand tons per year. The major shrimp-producing states are Zulia, Falcón, Trujillo and Mérida, concentrating more than 85% of farmed shrimp in the country, 7,500 hectares. The main productions are located in Arapuey, Monte Alto,

and Ricoa, located in Trujillo, Zulia and Falcón, respectively.

Chart 3.2
Shrimp Production in Venezuela



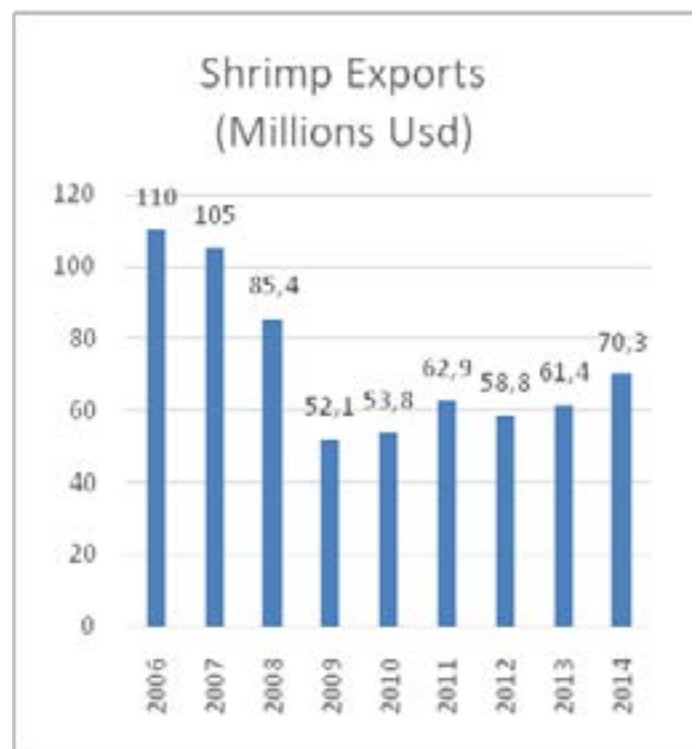
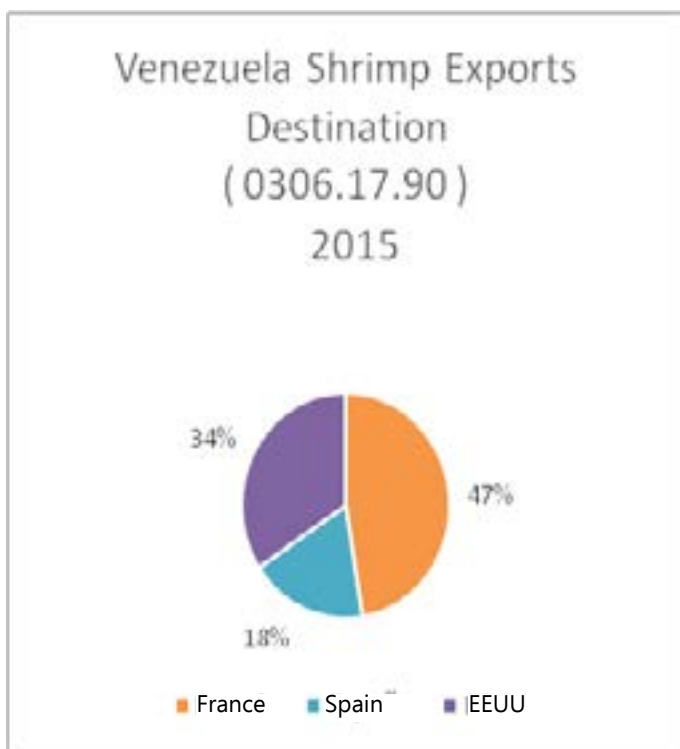
Market Potential

Venezuelan shrimp exports represent a value of US\$ 70 million and make up 0.07% of Venezuela's global exports. They can be located under the tariff code number 0306.17.90 as: OTHER SHRIMPS AND PRAWNS, AND OTHER NATANTIA DECAPODS, FROZEN.

Historically, the main trading partner was the United States, representing by 2007 the country of destination, concerning more than 50% of Venezuelan shrimp exports.

Currently, the US were replaced by France as the main trading partner in this area. France demands 47% of Venezuela's total shrimp exports. India is currently the world's largest exporter of frozen shrimp, followed by Ecuador and Vietnam. It is estimated that an approximate 20% of total world exports of this product comes from India. Its main trading partner is the US, accounting for 37% of export destination for 2014.

Chart 3.3
Venezuela Shrimp Exports (2015)



Legal Aspects and Other Considerations

Fisheries Law

The most important considerations to take into account for Contract Farming in the shrimp sector in Venezuela are closely related to the provisions of the Fisheries Law, published in Official Gazette No. 6,150 Extraordinary, dated 11.18.2014, published as Decree with Rank, Value and Force of Law on Fisheries and Aquaculture.

One of the most influential provisions in fishing is the trawling ban, since poaching shrimp threatened it with extinction.

The law states in its Article 3 that all hydro-biological resources are subject to its application, as well as fishing, aquaculture and other related activities, when developed under the sovereignty or jurisdiction of the Bolivarian Republic of Venezuela.

The following are the most important provisions of these regulations:

Article 24

The Ministry with responsibility for fisheries and aquaculture, the Socialist Institute of Fishing and Aquaculture, and the Ministry with jurisdiction over health, shall dictate the technical standards to ensure that products of fishing and aquaculture, whether domestic or imported, comply with national and international health standards and are properly processed, in order to maintain quality and safety. Health standards are validated through the fish health certificate required for any operation of international marketing, issued by INSOPESCA (Socialist Institute of Fishing and Aquaculture).

Article 25

To engage in fishing, aquaculture or related activities, any natural or legal person must obtain prior authorization issued by INSOPESCA. The granting of new licenses and renewal of same will depend on the state of hydro-biological resources.

Article 59

The Socialist Institute of Fishing and Aquaculture shall create, maintain, organize, direct and supervise the National Register of Fishing and Aquaculture, which shall contain information relating to natural or legal persons authorized to engage in fishing, aquaculture and related activities.

Article 86

Violations of the provisions of this instrument will be punished by INSOPESCA with fines, temporary suspension of authorizations, revocation of authorizations, seizure, disposal and destruction of hydro-biological resources that were the object of the offense, and objects used for committing the offense.

Contract Farming

In order to achieve an adequate level of productivity in aquaculture, shrimp farming in ponds requires a very precise care. A key step is the larval stage, which demands prime quality and temperature of water, as well as specifically appropriate food.

Over the past 30 years, shrimp aquaculture has proven to be highly profitable, but in many instances has emerged as an unstable or unreliable practice due to shrimp susceptibility to infection and diseases, including the White Spot Syndrome Virus, which has caused substantial destruction of shrimp farming worldwide, with no apparent solution.

For said reason, some researchers suggest crop rotation of tilapia and shrimp, as a means to prevent epidemic infections or, where applicable, the polyculture of shrimp and tilapia, because each occupies a different space in the pond with a compatible interaction, and it also optimizes the development of shrimp.

Also, more capacity-building and training is required for technicians and promotion and production managers, since most of them come from general technical careers, in which aquaculture issues are deficient, and they lack the basic knowledge to understand the processes governing aquaculture.

Potential Partners

Dipesmar

Company dedicated to the export line of seafood, such as shrimp curry, Caribbean shrimp, etc.

Location: Puerto Sucre

Golfo del Mar / Langostinos del Caribe

Prawns, shrimp and fish processing companies, with experience in import and export of these items.

Location: Punto Fijo, Edo Falcon

Dipromar,C.A

Specializes in seafood, shrimp and other frozen foods.

Location: Maracaibo

Aquamarina de la costa C.A

A shrimp company specializing in shrimp aquaculture.

Location: Caracas

PART IV

CONTRACT FARMING IN THE PRODUCTION CHAIN OF COCOA FROM VENEZUELA

The Cocoa Sector

Cocoa in Venezuela

The cocoa industry has grown rapidly in Venezuela, and many companies offer a wide variety of products, in which the main ingredient is the cocoa bean.

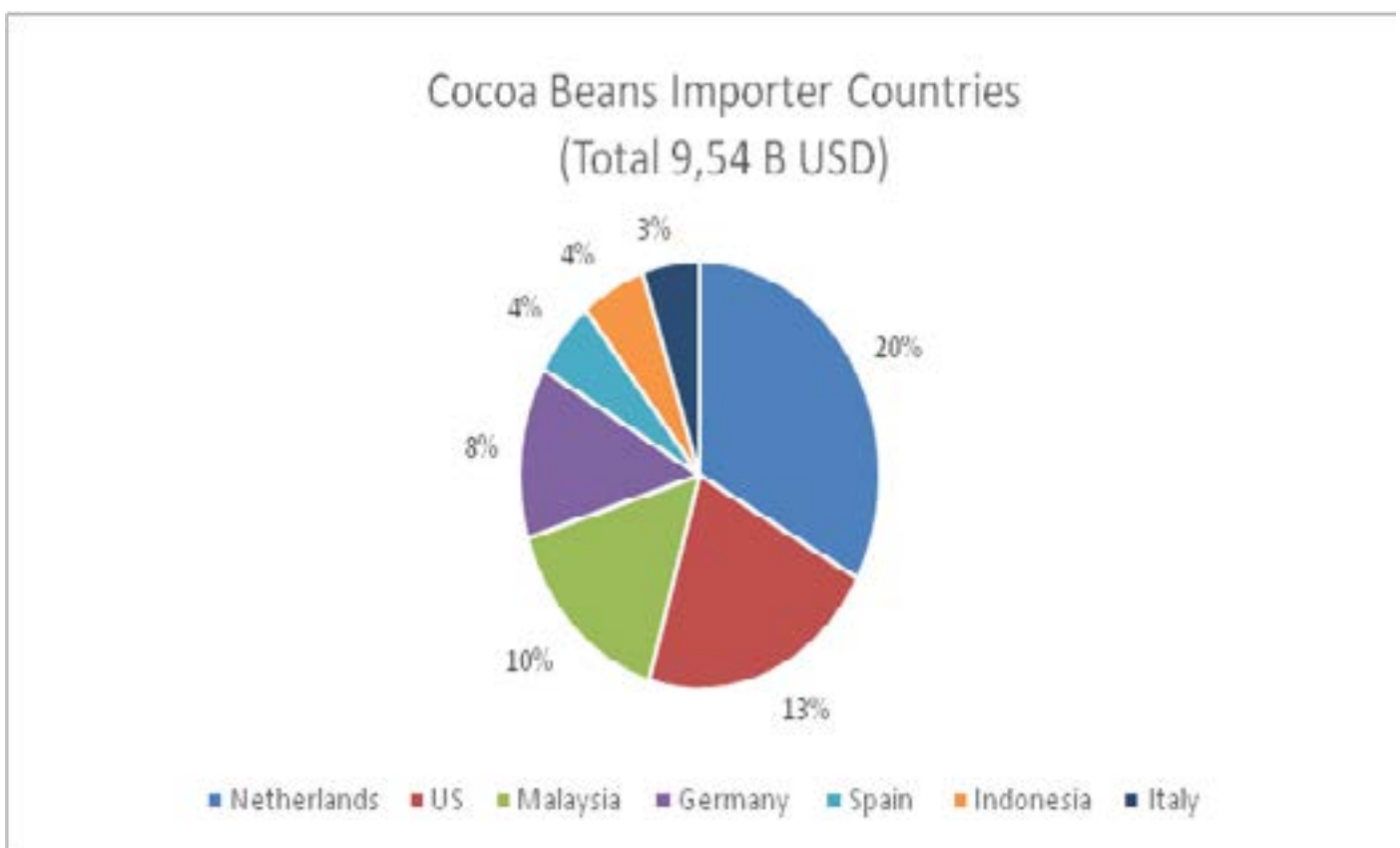
Therefore, a group of companies have decided to specialize in the preparation of semi-finished cocoa products (mills), and sell chocolate, cosmetics, beverages, and others, to produce finished cocoa goods with added value.

Barry Callebaut, Cargill, and ADM are currently the largest mills in the world. Activities generally related to cocoa include the purchase of cocoa from suppliers, extraction of cocoa liquor and preparation of cocoa butter to be sold to chocolate manufacturers and other industries. The co-

coa industry is currently in developing countries such as Africa, Central America, South America and Asia. Ivory Coast and Ghana are the biggest producers in the world, with an estimated production of 1,370,000 and 675,000 tons, respectively.

Other important cocoa-producing countries are Brazil and Indonesia. Venezuelan cocoa production is around 14,000 tons in 2015, with an expected growth to 17,000 tons by the end of 2016. It is important to note that the world's largest cocoa producers are specialized in the production of the bean called forastero (outsider), which is a type of variety used in the production of industrial chocolates and chocolate drinks, mixed with dairy products. In Venezuela there are three types of cacao varieties: Criollo, Trinitario and Forastero.

Chart 4.1
Cocoa Beans Importer Countries

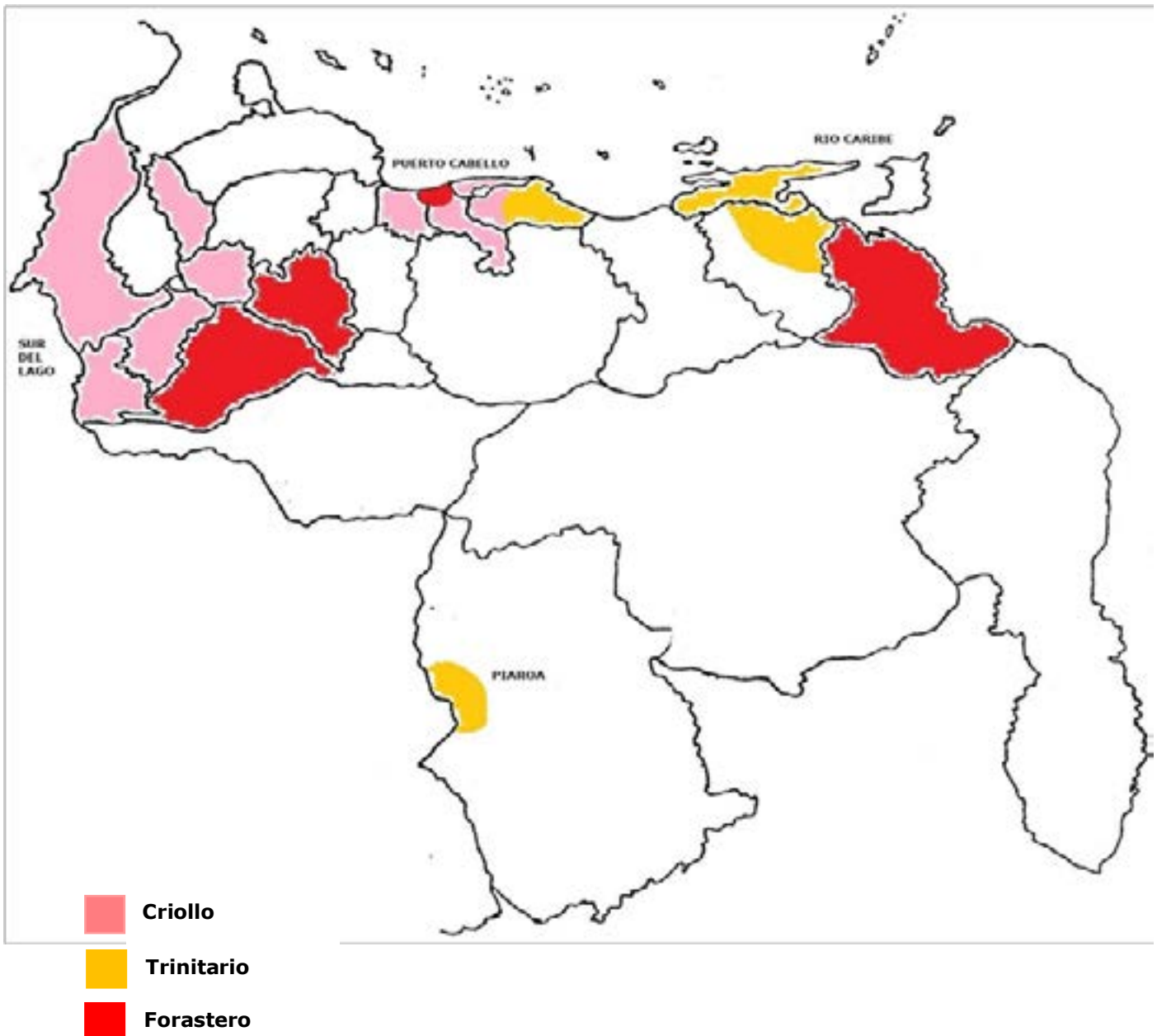


Cocoa Production in Venezuela

Venezuelan cocoa was one of the largest sources of income throughout the nineteenth century, and the first two decades of the twentieth century. This activity has been eclipsed by the oil industry. However, knowledge about cocoa has not disappeared, and there are even towns such as Chuao and Agua Fria engaged in cocoa cultivation nowadays. Cocoa production is not optimal, but still supports a wide range of investments that help to boost production. In Venezuela there can be found the three most

representative strains in the world, the criollos (Creoles), trinitarios (Trinidadians) and forasteros (outsiders). The criollos, which are used for the production of fine chocolates, are grown in the states of Zulia, Aragua, Carabobo, as well as to the west of the Capital District. The trinitarios, a mixture of criollo and forastero, are grown in the states of Miranda, Monagas, Sucre and Amazonas (Piaroa).

Chart 4.2
Cocoa Production in Venezuela

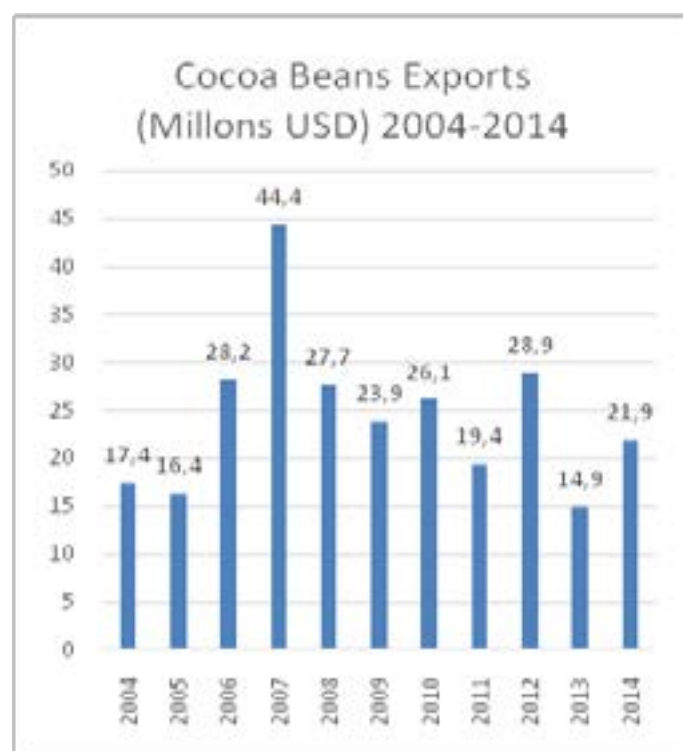
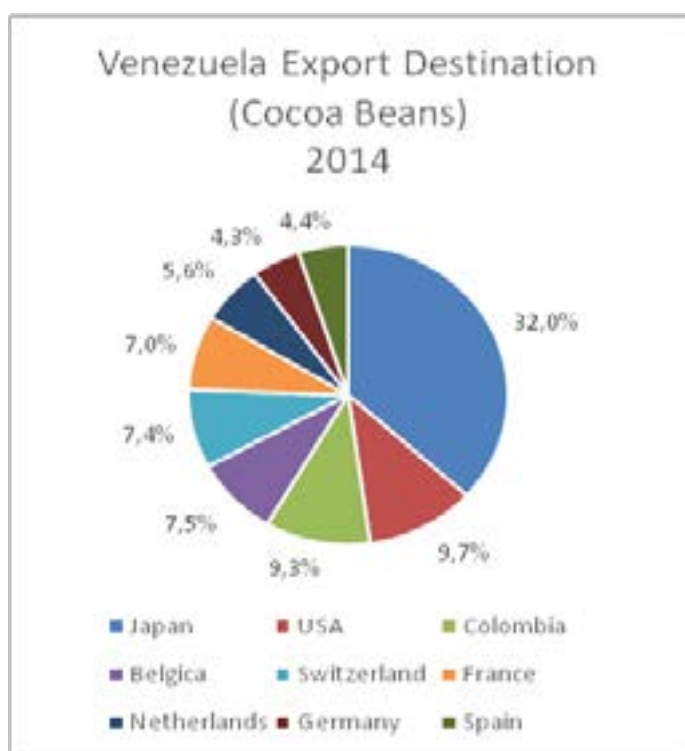


Market Potential

Currently, the Bolivarian Republic of Venezuela exports cocoa beans for an approximate US\$ 21 million, representing 0.03% of total exports. These exports are grouped under the tariff code No. 1801.00 as COCOA BEANS, WHOLE OR BROKEN, RAW OR ROASTED. Historically, the trend indicates that the largest market for Venezuelan cocoa beans is Japan and in some years, as in 2007, it commands more than 50% of the destination

of the goods. This is further explained by the gourmet chocolate industry that specializes in manufacturing fine dark chocolates, with concentrations exceeding 70% of purity, which can only be made from the strains known as Criollo, produced in the states of Zulia, Merida, Táchira, Carabobo and Aragua.

Chart 4.3
Venezuela Cocoa Beans Exports (2014)



Legal Aspects and Other Considerations

The considerations for implementation of Contract Farming in the cocoa production chain are associated with the control of pests and diseases that could affect crops

Disease Control

Moniliasis (thrush) is caused by the *Moniliophthora roreri* fungus. It is considered as the most destructive disease of cocoa cultivation in Latin America. In Venezuela, it is distributed in the states of Táchira, Merida, Apure and Barinas, entities in which it causes crop losses ranging from 20 to

80% of production, depending on the agronomic management that takes place in the plantation. It is an endemic disease that occurs when certain weather conditions, such as temperatures above 25 ° C and relative humidity of 80% are met. It also depends on other factors, such as rainfall and insects.

The black bug is perhaps the most influencing factor for the disease to occur; it has been shown that its presence in crops can increase up to 100% the degree of infection of the disease. At present, there are three levels of controls to avert the scourges of the disease:

Legal Control

Control at legal level is set forth in the Official

Gazette No. E37.901, which highlights the prohibition on the transfer of cocoa material from the states of Merida, Zulia, Táchira, Apure and Barinas to the central and eastern states of the country that are free of the disease, in order not to spread it to these entities.

Cultural Control

Furthermore, there is control at the cultural level, where farmers should adopt practices to live with the disease, and create awareness about good prevention techniques for possible pests. These practices are useful and should be reflected in the terms of any agricultural contract to be undertaken; methods include rehabilitating and constantly pruning crops at a height of no more than three meters to display the fruits affected by the disease, and remove them upon showing damage symptoms. It is also necessary to adjust the shadow, control weeds, and clean the drains to prevent water from accumulating. It is advisable to reap the fruits every two weeks, in order to avoid exposure of the crop to the conditions conducive to the disease. Removal and covering of diseased fruits with leaves is crucial, as it prevents sporulation, spore dispersal and subsequent infection of other fruits. In plantations with low productivity, cultural control practices have proven effective and sufficient to live with the disease, and keep crop losses below 15%

Chemical Control

The third control is chemical, and involves the application of a certain amount of fungicides and pesticides to crops, in the attempt to eliminate moniliasis (thrush) disease. However it is an uneconomic option, and is only viable for high productivity plantations (800 tons per year). Applications of protectant products made with copper oxychloride at doses of 40 grams of the active ingredient, remedial and systemic products such as Bayleton, at doses of 60 milliliters, in plantations with high yields. Ultimately, this control can only exist if the cultural control recommendations above are implemented before.

Potential Partners

Tisano

Since 2009, this producer is responsible for the

export of cocoa beans produced in different parts of Venezuela. It has contacts with different communities in Venezuela, and has two processing facilities outside Caracas. The sales office is located in the San Francisco Bay Area and it has facilities in California and New York.

The buyers visit monthly the regions, they keep up to date on the harvest, and maintain relationships with farmer producers or cooperatives in the community, through education, fair trade and agricultural co-investments. Their storehouses, at which they receive cocoa, are trained to perform complex processes for cleaning defects and prepare shipments for export to North America or directly to customers in Europe and Asia. It allows them to offer an integrated shipping service to deliver origin beans to any client. (www.Tisano.com)

Valle Canoabo

The lands of Carabobo have geographical characteristics and climate that are ideal for growing cocoa. Local trees protect the cocoa trees, and exotic flowers help in cocoa pollination. chocolatecanoabo@gmail.com

Kirikire

Its plantations are located in the state of Sucre, in the Paria Peninsula, to the east of the country, near the towns of Agua Fria and Agua Santa, Santa Isabel, Yaguaraparo, Pauji; it also has an office in Caracas. The KIRIKIRE farmers take part in the rescue of ancestral criollo cocoas from Venezuela in the area of Paria. It is dedicated to a quality approach, in order to increase production of Venezuelan cocoa. (www.kirikire.com)

Franceschi

Franceschi took on the rescue of some Venezuelan ancient varieties, which have been replanted in their land. For said reason, their plantations offer 6 types of strains in the soils of the Hacienda San Jose: 3 criollos and 3 trinitarios, which were displaced from their home region, except Rio Caribe. (www.franceschi.com)

PART V

GENERAL ASPECTS AND FORMS OF CONTRACT

General aspects and forms of contract

In the case of raw materials (cocoa, tropical fruit, and shrimp, in the present case), specific conditions of production and work are required; production must be subject to workforce training, and the need for continuous supervision.

Opportunities could come from the use of Contract Farming, offering farmers information about crop improvement, as well as different ways to increase their income.

But limitations are also identified: farmers are not free to suggest changes in production, since they only depend on the activities defined by contractors. In the case of small farmers, they have little or no access to information about market demands, in terms of quality and price fluctuations. The main challenge for stakeholders is related to the adaptation of farmers to new farming methods, quality control, and sustainable production.

Small farmers need time to understand and use what they learned in the training and extension of the centers. However, farmers need to see immediate results (increased production) to make changes in their traditional agricultural practices. The change in the behavior of farmers is a long-term process; it takes time until they are capable to adapt to new methods. It is therefore advisable to form alliances with other organizations (companies, groups) that can help train farmers to change their behavior, to be more flexible and adopt better farming practices, because it will improve their income.

Persuading farmers to change to a sustainable, especially organic production, is an issue, due to the difficulties of controlling pests and diseases, and poor performance.

Another major challenge is to reach the farmers' villages, due to road conditions and poor transportation. This is a particularly serious concern. It is important to reach communities and farmers, in order to monitor and maintain quality control on farms,

The importance of witnessing this is to see how farmers are undertaking previously-taught quality control activities, and also to monitor how quality control processes are carried out with visible examples. The difficulty of reaching farmers is not only attributable to the road conditions, but also to the lack of organization in cooperatives or associations.

Contract Farming Model

The parties involved hereby agree to the production of a finished item, expecting favorable results through their mutual cooperation. To further promote their cooperation, after extensive consultations, and under the principle of "mutual benefits, mutual support, and common development", the parties may agree to the following terms of this contract:

I. Quality, Quantity and Description of the Product

The party engaged in the production of the merchandise is subject to comply with the delivery of the quantities demanded by the contractor, valued at a price according to the merchandise, and must also specify the date of delivery of such products.

Likewise, quality parameters must be set as specified by the contractor party, such as health attestation of the product, information on intermediate products used in the preparation of the good, and the yield report on production.

II. Quality Control and Payment

The farmer shall notify the contractor of relevant production information, starting from the time of planting until transport routes are reached. After the harvest, the contractor shall make an assessment of the plants, the state of crops, weather conditions, and production of various products, so that the farmer can make the necessary preparations for purchase. The tools by which the quality of crops is measured may be provided by the farmer. The contractor is responsible for

evaluating and numbering all products. The parties shall agree on the financing possibilities with low interest return, whereby the contractor can pay for any of the following costs: fertilizers, agro-chemicals, water, mechanization, technical assistance, packaging, harvesters and freight. It is even possible to agree on who will be responsible for transportation to shopping stations, as well as for short-distance transport to the collection centers. As for the payment terms, the amounts of investment of the contractor party and the conditions of return on fixed capital by low monthly interest may be established, in order to give financing facilities and affordable payment to the farmer party.

III. Rights and Obligations of the Parties

The parties may agree on the need to adopt a standard name to identify the products, as well as on the change of the tools and applications to be used in the manufacture of the products, according to the requirements of the contractor.

Likewise, the contract must establish the obligation to deliver all the production required by the contractor prior agreement of the parties. Any breach of the agreement may result in both material and financial sanctions provided for by the parties to the agreement.



Final considerations

The basis for negotiating Contract Farming in the above mentioned sectors requires consideration of some essential aspects that will define the feasibility of potential projects. It should be mentioned that all experiences of successful agricultural agreements in the world are based on creating strong strategic alliances with different actors, who are involved directly or indirectly in the development of the sector, and who are known as stakeholders.

For the purposes of agricultural contracts, it would be a mistake to only take into consideration the parties directly involved (farmers and contractors), as this relationship can only be secured through ties and relationships with stakeholders. Among the most important stakeholders, we can mention the Venezuelan State, through which various actions can be channeled, such as the location of domestic producers, information on cooperatives and associations, and even raise the possible development of new production lines to boost growth in the sector.

Universities are another major player, as they carry out fairly comprehensive research on the main variables that affect the production of the items addressed in this study of Contract Farming. Moreover, we can also find banks as potential funders of projects in the medium and short term.

And finally, it is important to highlight as stakeholders the companies working in the sector, as they may be interested in expanding coordinated projects of mutual capital to generate substantial increases in the sector's production and profitability, and get acquainted with the experience of managing the sector-specific variables and difficulties of legal and cultural nature.

