Trade opportunities and challenges for the cassava chain in the Dominican Republic, within the framework of the trade agreement with the United States

July 2016

This publication is also available in electronic (PDF) format from the Institute's Web site: http://www.iica.int

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Trade Opportunities and Challenges for the Cassava Chain in the Dominican Republic, within the Framework of the Trade Agreement with the United States/ Ruth Montes de Oca S.; in collaboration with Javier Tavares. – San Jose, C.R. : IICA : USDA, 2016.

p. 48

ISBN: 978-92-9248-656-3
Published also in Spanish

1. Trade Agreements 2. International Trade 3. Markets 4. Marketing Policies 5. Agricultural Products 6. Capacity Development 7. Decision Making 8. Public-Private Cooperation 9. Cassava 10. Exports 11. United States of America 12. Dominican Republic I. Tavares, J. II. IICA III. Title

AGRIS DEWEY

San Jose, C.R.
2016

Acronyms and abbreviations

AGDP	Agricultural gross domestic product
BANDEX	National Export Development Bank
BNV	National Housing and Production Bank
CACM	Central American Common Market
CAFTA-DR	Free Trade Agreement between the Dominican Republic, Central America and the United States
CBI	Caribbean Basin Initiative
CBTPA	Caribbean Basin Trade Partnership Act
CEDOPEX	Dominican Center for the Promotion of Exports
CEI-RD	Export and Investment Center of the Dominican Republic
CNMSF	National Committee for the Application of Sanitary and Phytosanitary Measures
COOPEYUCA	Agricultural and Multi-Service Cooperative of Cassava Producers
DIA	Department of Agrifood Safety
FDI	Foreign direct investment
FTA	Free trade agreement
GATT	General Agreement on Tariffs and Trade
GSP	Generalized System of Preferences
IICA	Inter-American Institute for Cooperation on Agriculture
III	Import Intensity Index
MFN	Most-favored-nation
MIPYME	Micro, small and medium-sized businesses
NDS	National Development Strategy
NSA	National Supermarket Association (United States)
OCDE	Organisation for Economic Co-operation and Development
OPI-RD	Office for the Promotion of Foreign Investment of the Dominican Republic
OTCA	Office for Agricultural Trade Agreements
PAE	Export Acceleration Program
RCAI	Revealed Comparative Advantage Index
SPS	Sanitary and phytosanitary measures
USDA	United States Department of Agriculture
WTO	World Trade Organization

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Introduction

It is important to highlight that this study forms part of a series of four documents prepared as a product of the project entitled "Strengthening bilateral trade between the USA and those countries in Latin America with which the United States has established Free Trade Agreements", which was made possible through funding from the Foreign Agricultural Service of the United States Department of Agriculture (USDA-FAS), and through technical cooperation from the Agricultural Chains area of the Inter-American Institute for Cooperation on Agriculture (IICA), under the leadership of Dr. James French. Also participating were the IICA Delegation in Dominican Republic, with support from Dr. Frank Lam, and the Delegations in El Salvador and Peru.

As is often stated in different forums, studies, and analyses, the Free Trade Agreement between the Dominican Republic, Central America, and the United States (CAFTA-DR) has played a critical role in developing and strengthening the Dominican Republic's trade relations with the United States as well as with Central American countries with which the country already had a free trade agreement (FTA) since late 1998.

Despite being considered innovative and modern, the CAFTA-DR agreement is, at the same time, a complex document for trade operators, given that it incorporates a series of standards that regulate a very broad range of topics, including market access within the free trade area, service trade, intellectual property rights, and work-related and environmental matters. This situation makes sense, given that current international trade is a lot more regulated than it was in the past. Although this has been a positive change, it has also required that stakeholders (importers, exporters, governments) possess much greater knowledge of the "rules of the game" and how to act in any given situation in order to take advantage of tariff advantages, reduce risks in their businesses, among other things.

The CAFTA-DR has allowed the Dominican Republic to consolidate its access to the U.S. market, since it grants preferential treatment to 99.6% of Dominican tariffs. The Agreement includes a large number of products and maintains free access for any products that were already covered by other preferential legislation, such as the Caribbean Basin Initiative (CBI) and the Caribbean Basin Trade Partnership Act (CBTPA)[1].

The institutional progress that has been achieved over the past decade since the CAFTA-DR came into effect is noticeable. Reforms and structural changes that seek to facilitate trade and attract foreign investment have contributed to improving the business climate. However, the country's relative competitiveness has not improved significantly. Central American exports have exhibited more dynamic performance, although they maintain a greater level of sectoral concentration. Although exports from the Dominican Republic to the United States are a lot more diverse, they have not grown at the same rate as imports. As a result, the country's trade balance has exhibited a loss-making trend.

Agriculture is an area that is sensitive to trade negotiations, including the CAFTA-DR. According to the Agreement, some agricultural products will enjoy tariff protection for up to for 20 years, thanks to three protective measures: gradual tariff reduction, tariff-rate quotas, and automatic agricultural safeguards. The full tariff reduction will be completed in 2025.

The CAFTA-DR has helped production sectors to focus on export. Certainly, specific agricultural and industrial sectors and products have shown greater export dynamism as a result of resources and programs geared toward strengthening production, diversification and commercialization capacities, both in markets included in the Agreement and other international markets. Nevertheless, between 2004 and 2015, most Dominican exports remained virtually static, while others showed a negative balance.

[1] Will be in effect until 2020 or until another free trade agreement enters into effect.

The country's poor performance in trade with other countries in the free trade area is attributed to a number of reasons, one of which is that the Dominican Republic has not taken advantage of this period of time to strengthen the production fabric of exporting companies. Additionally, the country did not adequately negotiate the conditions of the Agreement, given that it agreed with the provisions proposed by Central America (Soto 2016).

With the aim of mitigating some of those negative effects, some analysts have proposed improving current administration of the CAFTA-DR, which would help to minimize risks and threats posed by the Agreement, which has affected the country's trade balance in relation to the United States and Central American countries. Similarly, policy coordination between the public and private sectors is critical to generating desired competitiveness and taking full advantage of the CAFTA-DR and other free trade agreements.

Trade liberalization in the Latin American region is demonstrated by the interest of countries in establishing new free trade agreements, especially with major economic powers. As a result, the majority of Latin American countries possess a legal framework with provisions that promote the exchange of a wide range of products and services.

The economic weight of the relationship between the United States and Latin America has led to the negotiation of special conditions for a broad range of agricultural and agro-industrial goods as well as the supplies needed to produce them. At present, eleven Latin American countries have signed a free trade agreement with the U.S.

However, between 2009 and 2013, the trade value of agricultural products (excluding chapters 03 and 12) between the United States and some of its Latin American partners has, in relative terms, diminished or increased only slightly. This is worth noting given the fact that despite the existence of agreements with other countries and regions, the United States continues to be Latin America's most important trade partner.

The project entitled "Strengthening bilateral trade between the United States and the Latin American countries with which the United States has established free trade agreements," implemented by the Inter-American Institute for Cooperation on Agriculture (IICA) using resources from the United States Department of Agriculture (USDA), is framed within the abovementioned context. The project's intervention strategy focuses on:

1. Identifying obstacles that affect the entry of food and specific agricultural products included in current free trade agreements that the Latin America and Caribbean region has signed with the United States, and which are not being exported or are not showing significant improvement with respect to exports.
2. Building capacities in the participating countries, to enable them to identify and benefit from opportunities, in the area of trade and market policies for agricultural products, as negotiated in FTAs with the United States.
3. Providing public institutions related to international agricultural trade with reference information to better understand and support the administration and implementation of FTAs.

The abovementioned objectives, as well as a wide range of criteria including geographical representativeness, IICA's country presence, trade liberalization, agricultural trade balance, political stability, and trade relations with the United States, were taken into account in order to select three countries, and a specific product chain for each, that would participate in the project. The Dominican Republic, Peru and El Salvador were the countries selected in order to analyze the cassava, coffee and plantain chains, respectively. In each of the three countries, interviews were conducted with stakeholders from the government and private sectors, in order to identify institutional and market-access constraints, as well as challenges and achievements in bilateral trade with the United States.

Based on the findings, it is important to study both the obstacles that limit the ability to take advantage of the CATA-DR as well as relevant experiences related to the administration and implementation of the Agreement, which could be replicated and strengthened.
Therefore, the main objective of this project is to promote local cassava production and marketing initiatives in the Dominican Republic, in order to take better advantage of trade opportunities with the U.S. market. This effort should be undertaken by making use of the conditions offered by the CAFTA-DR regarding regulations that should be fulfilled, and together with strengthened, relevant institutions that are willing to provide the support that Dominican cassava producers need in order to regularly and ambitiously produce and compete with high-quality and value-added products.

The specific objectives of the project are to:

- Assist in identifying and systematizing the main obstacles that cassava from the Dominican Republic faces in accessing the U.S. market, and provide recommendations on ways to overcome these obstacles. This effort will include a validation workshop with the main public and private stakeholders linked to cassava production in the Dominican Republic.
- Identify and systematize relevant experiences in the administration and implementation of trade agreements, especially as they relate to the access of Dominican cassava to the U.S. market, with the help of a virtual seminar for sharing experiences.
- Identify and analyze the contributions of the CAFTA-DR to agricultural trade between the Dominican Republic and the United States, especially those that foster cassava trade in the U.S. market.
- Analyze the cassava value chain in the Dominican Republic.

The abovementioned objectives stem from an initial methodology that focused on carrying out interviews with government and private stakeholders in order to identify institutional and market-access constraints, as well as challenges and achievements in bilateral trade with the United States. The interviews made it possible to understand the topic in its totality and identify the main factors that hinder cassava trade (in the case of the Dominican Republic) with the United States. Finally, a national workshop was held to enable IICA specialists and the persons responsible for conducting the interviews to share findings gathered from these interviews.

The workshop made it possible to share and prioritize the main constraints identified with the help of participants. It also provided an opportunity to reflect on some of the constraints faced by different stakeholders in the first few chain links. Participants emphasized the fact that these factors are very important to agro-export businesses; however, given the nature of this project, the study focuses on factors that directly influence the ability to take advantage of the cassava chain in the U.S. market.

The work, which was carried out in groups using the “causes and effects” tree methodology, facilitated the analysis of the causes and effects of each constraint. The tree was then transformed into a tree of objectives. The present document stems from the recommendations issued by participants through that exercise. Each of the problems/causes/effects trees created by the groups received feedback at a plenary session. This activity allowed for validating the results, by incorporating the perspective of all participants. Finally, it is important to highlight the excellence of participants and the willingness of the public and private sectors to cooperate. As a result, the presentations were not only interesting to stakeholders, but were also proactive and spontaneous, which will increase the sustainability of future processes.

This methodology made it possible to achieve good results by:

a) focusing on the constraints of greatest interest to the project (those related to trade and market-access regulations);
b) going beyond simply identifying constraints, by analyzing their main causes and effects;

c) validating the results of the workshop, which received widespread acceptance from participants (chain stakeholders, government representatives, academia, etc.), who even expressed their interest in participating in future stages.

Furthermore, data sheets were created in order to systematize possible experiences related to market access as well as the administration and implementation of the Agreement. Additionally, a virtual seminar was carried out with the participation of the three countries included in the project. The purpose of the seminar was to learn more about how the CAFTA-DR was being used, the changes experienced by each country since the Agreement came into effect, and aspects related to the administration of the CAFTA-DR and the access of each of the products to the U.S. market.

Secondary sources of information were also reviewed in order to gain greater clarity on certain topics, such as the administration of trade agreements, market access within the commercial framework, regulations regarding cassava production and marketing (given that this was the product selected for the Dominican Republic), and relevant institutions, businesses and producer associations, among others, and their operation and level of coordination in efforts to facilitate trade.

I. The Free Trade Agreement between the Dominican Republic, Central America, and the United States (CAFTA-DR)

1.1. General characteristics

The CAFTA-DR is an agreement that establishes a free trade area[2] among the countries that make up the area: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, the Dominican Republic, and the United States.

This free trade agreement (FTA), signed by the Dominican Republic in August 2004, is the most important trade agreement that the country has signed in its history. It encompasses all of the commercial topics of a state-of-the-art agreement.[3] This instrument consolidated preferential tariffs for Dominican exports to the U.S. market and also forced the Dominican State to transform the structure of its institutions and modify its commercial legal framework in order to adapt it to the new reality shaped by the Agreement. Therefore, the Agreement did not officially come into effect in the country until March 1, 2007.

In a way, the CAFTA-DR has strengthened the Central America-Dominican Republic Free Trade Agreement signed in 1998 by the Dominican Republic with the Central American countries that make up the Central American Common Market (CACM), which facilitated exports to the Dominican Republic. As stated in the CAFTA-DR, in 2015 98% of Dominican and Central American exports, including textiles, would enter into the United States free from tariffs (JAD 2004).

The process of negotiating the CAFTA-DR began in 2003 among all of the signatory countries, with the exception of the Dominican Republic, which did not become involved in negotiations until 2004. On December 17, 2003, the Agreement was finalized with El Salvador, Guatemala, Honduras, and Nicaragua; in the case of Costa Rica and the Dominican Republic, the Agreement was signed on January 25, 2004, and August 5, 2004, respectively.

The CAFTA-DR came into effect gradually, since approval was required from congresses in all parties involved. The application of the provisions began on the following dates in each country:

- Costa Rica: January 1, 2009.
- El Salvador: December 17, 2004.
- The United States: June 30, 2005.
- Guatemala: March 10, 2005.
- Honduras: March 3, 2005.
- Nicaragua: October 10, 2005.
- The Dominican Republic: September 13, 2005.

From the Central American standpoint, the objective of the CAFTA-DR is to promote economic growth through trade liberalization, improve conditions to access the U.S. market, regulate trade by means of transparent and stable rules, avoid the application of unilateral measures, and promote economic cooperation. On the other hand, official statements by U.S. officials suggest that, from the U.S. perspective, the role of the CAFTA-DR is to serve

[2] According to the WTO, a free trade area is nothing more than trade within the group that comprises it. It is duty free but members set their own tariffs on imports from non-members. One example is the North American Free Trade Agreement (NAFTA).
[3] These agreements are characterized as being more comprehensive, given that they not only address the trade in goods, but they also address new topics such as service trade, investments, intellectual property, state purchases, environmental aspects, etc. They also include complex measures related to rules of origin, sanitary and phytosanitary measures, and anti-dumping rules.

as a means of leveling the playing field between the United States and other countries, given that the U.S. market has a high degree of openness. Additionally, statements by these officials reveal an additional interest in influencing regulations and business climates in other countries, since the U.S. considers that the CAFTA-DR "serves as a means of promoting freedom, democracy and reforms in our neighboring countries." The Dominican government, in turn, has justified the signing of the Agreement by referring to the intensity with which the country has traditionally conducted trade with the United States, as well as the need to maintain market access conditions that are similar to those enjoyed by Central American countries.

The CAFTA-DR was created to serve as an instrument for facilitating trade and investment among the Member States and promoting regional integration by eliminating tariffs, opening markets, reducing obstacles faced by services, and promoting competition, the protection of intellectual property rights, and the progress of transparency.

The CAFTA-DR permanently guarantees the Dominican Republic's ability to freely export most of its products and services to the other Member States. The CAFTA-DR has freed a number of services from obstacles, including: financing, insurance, investments, tourism, energy, transportation, construction, government contracts, telecommunications, express courier, electronic trade, entertainment, professional services, IT and related services, and environmentalist services.

On the other hand, the CAFTA-DR requires that Member States rigorously apply regulations related to the access of goods to markets, and local labor and environmental matters, as well as the elimination of obstacles that make it difficult to guarantee free competition and equal conditions for all members.

However, certain constraints that limit free trade are still maintained in the treaty. Each Member State reserves the right to impose tariffs on the import of several agricultural products to a certain extent, to prohibit the import of certain goods, and to apply whichever sanitary and phytosanitary measures it deems pertinent at any given time, after it has notified the Member State that will be affected.

The CAFTA-DR summarizes the results of the negotiation in 22 chapters, which can be grouped into the following five subjects areas: institutional matters and matters related to the administration of the Agreement, trade in goods, service and investment trade, public contracting of goods and services, and other topics that, though not of a commercial nature, address goods that are marketed within the framework of the Agreement, such as intellectual property and labor and environmental regulations (OAS 2016) (see Table 1).

Table 1. Contents of the CAFTA-DR

Chapters	Contents	Chapters	Contents
Chapter One	Initial Provisions	Chapter Twelve	Financial Services
Chapter Two	General Definitions	Chapter Thirteen	Telecommunications
Chapter Three	National Treatment and Market Access for Goods	Chapter Fourteen	Electronic Commerce
Chapter Four	Rules of Origin and Origin Procedures	Chapter Fifteen	Intellectual Property Rights
Chapter Five	Customs Administration and Trade Facilitation	Chapter Sixteen	Labor
Chapter Six	Sanitary and Phytosanitary Measures	Chapter Seventeen	Environment
Chapter Seven	Technical Barriers to Trade	Chapter Eighteen	Transparency
Chapter Eight	Trade Remedies	Chapter Nineteen	Administration of the Agreement and Trade Capacity Building
Chapter Nine	Government Procurement	Chapter Twenty	Dispute Settlement
Chapter Ten	Investment	Chapter Twenty-one	Exceptions
Chapter Eleven	Cross-Border Trade in Services	Chapter Twenty-two	Final Provisions

Source: OAS 2016.

The CAFTA-DR has become one of the main trade policy and economic development instruments in the Dominican Republic, by establishing regulations and regimens not only for the trade in goods, but also in areas related to the trade in services, investment, government procurement, telecommunications, insurance, electronic trade, intellectual property, and labor and environmental matters.

1.1.1. Performance of trade between the participating countries

Despite the economic challenges that the world economy has faced in recent years, intraregional trade between the Dominican Republic and Central American countries belonging to the CAFTA-DR increased from USD 6.30 billion in 2010 to over USD 7 billion in 2015. At the same time, exports from Central America and the Dominican Republic to the United States climbed from USD 24.870 billion to USD 19.238 billion in 2015.

In the case of the Dominican Republic, exports to the United States dropped by 8%, from USD 4,874,035 in 2014 to USD 4,495,468 in 2015. Nicaragua stands out among the countries of the sub-region, given that its exports to the United States increased by 6%, followed by El Salvador with a 5% increase. On the other hand, imports of U.S. products in Central America and the Dominican Republic increased from USD 24,181,784 in 2010 to USD 28,671,333 in 2015. In 2015, imports from the United States represented 42% of total imports in the Dominican Republic.

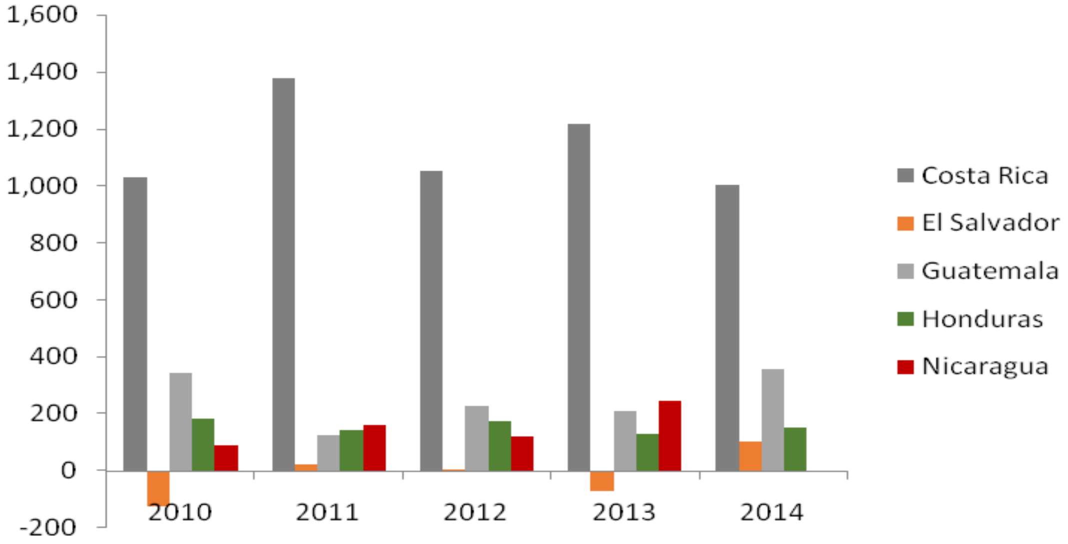
Table 2. CAFTA-DR.: Imports from the United States as a percentage of total imports.

Country	2014	2015	Variation
Guatemala	40%	37%	- 8%
Honduras	41%	35%	-14%
Costa Rica	44%	40%	-10%
Nicaragua	16%	18%	10%
El Salvador	41%	39%	-4%
Dominican Republic	41%	42%	1%

Source: Prepared based on data from ITC 2016.

In turn, foreign direct investment (FDI) from the United States in CAFTA-DR member countries reached a maximum amount of USD 8.6 billion in 2008. Starting that year and up until 2012, investment diminished gradually, but recovered by showing a 4% increase in 2013. In 2014, FDI remained stable in the sub-region, and Costa Rica was the only country that showed a reduction (21% or almost USD 2.11 billion) compared to 2013 (see Graph 1).

Graph 1. Foreign investment: U.S. Investment in Central America in millions of USD between 2010 and 2014.



Source: Prepared based on data from ITC 2016.

1.2. Agricultural matters

This section addresses the main aspects related to the Dominican agricultural sector that were taken into account in the CAFTA-DR negotiations, as well as topics related to the administration of the Agreement.

1.2.1. Topics negotiated for the Dominican agricultural sector

Given the nature of the sector and sensitive agricultural products, the Dominican agricultural sector is considered to be the sector that is most protected by the Agreement, as reflected by the strategic objectives set forth by the negotiating team, namely:

a) to protect and safeguard national production of sensitive products;
b) to introduce Dominican products into the U.S. protected market (beef, pig, chicken, cold cuts, ice cream, evaporated milk, cheese and yogurt); and
c) to consolidate CBI tariff preferences and the Generalized System of Preferences (GSP).

The sector's main achievements upon concluding the negotiation process are detailed below:

a) Five sensitive products (string beans, garlic, onion, beef and pork) received 15-year protection (basket D) from the technical rectification. In order to protect turkey meat, the tariff of the Most-favored-nation (MFN[4]) for turkey was increased from 8% to 40%.
b) Very high maximum tariffs (of up to 99%) were achieved. Tax reduction processes over 20 year-periods were negotiated for rice, chicken meat, milk and cheese, including a 10-year grace period before tariff reduction begins. At present, 5-10 years still remain before these products can freely enter the Dominican market. By the year 2025, products such as rice, string beans, powdered milk, chicken thighs, yogurt and mozzarella cheese will enter the country in unlimited amounts, paying no tariffs.
c) Ratification of the tariff approved by the World Trade Organization (WTO) for agricultural products protected by the Dominican Republic's Technical Rectification of List XXIII.
d) Creation of the SPS Committee and ratification of the WTO SPS Agreement.
e) Protection by means of agricultural safeguards for agricultural goods using an automatic trigger mechanism as many times as necessary during a year, without exceeding this period.
f) A pest-risk assessment conducted by Dominican technical personnel was recognized in order to export sweet potato, lemongrass, passion fruit, snake gourd, breadfruit, giant granadilla, moringa, and coconut.
g) Reestablishment of the fruit and vegetable pre-inspection program.[5]
h) Establishment of an initial quota of 1,100 metric tons for beef with a 0% tariff.
i) Resolution of the technical constraints for exporting fertilizers to the Puerto Rican market, which existed before the signing of the CAFTA-DR (Diario Libre 2005). The CAFTA-DR includes provisions on ways to resolve this type of trade barriers; as a result, these obstacles would be resolved as stated in the Agreement, which would in turn contribute to reducing their incidence.

1.2.2. Negotiated rules of origin

This section refers to the agricultural rules of origin[6] that were negotiated under the "special rules of origin" criterion. Chapter IV of the CAFTA-DR establishes the rules and procedures

[4] The most-favored nation principle is considered the cornerstone of the multilateral trading system which, according to the WTO, establishes that that the most favorable access conditions granted to one country, must be automatically granted to all of the other countries participating in the system. In this way, all countries benefit without the need for new negotiations regarding concessions that may have been agreed to between important commercial representatives with great negotiation skills.
[5] This program has been implemented jointly with plant health authorities in the United States, and has involved the execution of plant health inspections required locally to determine whether pests, diseases or other pathogens are present in shipments of plant products, in order to guarantee compliance with phytosanitary requirements of the country that will receive the shipment, in accordance with the obligations established by international trade.
[6] Rules of origin are a series of provisions in free trade agreements that establish the criteria that a product must fulfill to be considered originating in a country. The origin establishes the "nationality" of a product. This is important because tariff elimination only applies to products from countries that are part of the agreement. Each country establishes its own criteria for determining whether a product is "originating."

for determining if a product is originating, authentic or produced in one of the countries that form part of the Agreement. Only goods produced in the territory of one or several CAFTA-DR member countries are eligible to benefit from the facilities afforded by the Agreement and to enter markets with reduced or zero tariffs. This represents a shift from rules of origin for regional value content (RVC) toward tariff classification. This change in the method for determining the origin of goods implies a simplification of the process for complying with rules of origin (Salcedo Llibre 2012). Additionally, negotiations also addressed guidelines on headings and subheadings, requirements for changes in tariff classification, rules for groups of headings and subheadings, as well reference to weight in the rules for goods provided for in chapter 1 through 24 of the Harmonized System.

Within the framework of the CAFTA-DR, a distinction is made between supplementary and transitory rules of origin between the Dominican Republic and the United States, as well as special rules of origin between the Dominican Republic and Central America. The former are considered supplementary because they apply in addition to the rules of origin set forth in Annex 4.1, “Specific Rules of Origin.” The latter apply instead of the specific rules of origin. Some of these rules apply only during the first two years of the Agreement. On the other hand, transitory rules of origin only apply between the Dominican Republic and Central America. These rules of origin are detailed in Appendix 3.3.6, apply at the bilateral level, and must be fulfilled in order to obtain the bilateral tariff treatment established in Annex 3.3.6 (MIC 2009).

1.2.3. Administration and implementation of aspects negotiated for agricultural goods

With respect to treatment for agricultural goods, the CAFTA-DR includes provisions regarding a number of topics, including market access and safeguards, which are described below:

- **Market access**

When the CAFTA-DR became effective, a number of agricultural products in signatory countries were automatically freed from tariffs; however, certain products that are considered sensitive were included in a separate list and will be able to enter markets with tariff preferences, while undergoing a gradual tariff reduction until it reaches zero percent. This means that many (up to twenty) years will go by before these products can be freely traded. The list of these products for each country is included in Annex III of the Agreement. [7]

Products that are able to enter with tariff preferences do so within the framework of a mechanism known as tariff-rate quota, which is a set import volume with a set tariff and quantity;[8] the CAFTA-DR addresses the administrative aspects of the tariff-rate quota in Chapter 3 on market access for goods, specifically in Article 3.13 of Section F.

From the perspective of the Dominican agricultural sector, negotiations regarding import tariff-rate quotas for the most sensitive products were some of the most important negotiations made within the framework of this agreement. Import tariff-rate quotas serve as a tool that enables governments, during a transition period, to maintain the tariff protection that certain products had before the Agreement came into effect. At the same time, tariff-rate quotas allow governments to open up to competition (minimum market access level), by establishing tariff-rate quotas for products with preferential tariffs.

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[7] For more information, visit: http://www.mic.gob.do/media/1842/DR-CAFTA%20Cap%C3%ADtulo%2003.%20Anexo%203-3.%20Listas%20de%20Rep%C3%BAblica%20Dominicana.pdf.

[8] In the Dominican Republic, tariff quotas are governed by Decree No. 705-10, which states that they shall be administered by the Commission for Agricultural Imports.

Despite the fact that the Dominican Republic had some experience with tariff-rate quotas within the framework of the WTO Technical Rectification,[9] it was not until the CAFTA-DR came into effect that this became a much greater demand. As a result of the large number of products that were subject to this trade tool, the Dominican Republic had to further develop and modernize a series of regulations in order to achieve an efficient and transparent system for submitting requests and assigning, distributing and applying tariff-rate quotas.

- **Special agricultural safeguard[10]**

Article 3.15 of the CAFTA-DR addresses the use of agricultural safeguards, as a temporary defense mechanism for producers in the signatory countries that allows customs authorities to apply greater tariffs to products that are part of the CAFTA-DR tariff reduction program. Each Party may apply an additional import duty on an agricultural good whose quantity of imports during the calendar year exceeds the trigger level for that good set out in the corresponding country's Schedule to Annex 3.15. Agricultural safeguard measures may only be maintained until the end of the calendar year in which the Party applies the measure, and cannot be applied or maintained on goods that are subject to duty-free treatment.

In addition to trigger levels for agricultural safeguard measures, the country-specific lists included in Annex 3.15 establish the right to apply an additional import duty on goods. As stated in Article 3.15, the sum of any additional import duty and any other customs duty on such good shall not exceed the lesser of: (a) the prevailing most-favored-nation (MFN) applied rate of duty; or (b) the MFN applied rate of duty in effect on the day immediately preceding the date of entry into force of this Agreement. Likewise, the CAFTA-DR states that agricultural safeguard measures may not increase the in-quota duty on a good subject to a tariff rate quota.

No Party may apply an agricultural safeguard measure and at the same time apply or maintain a safeguard measure under Chapter Eight (Trade Remedies) of the Agreement or a measure under Article XIX of the GATT 1994 and the Safeguards Agreement with respect to the same good. According to the Agreement, the parties agree to establish an Agriculture Review Commission in the 14th year after the date of entry into force of the Agreement, to review the implementation and operation of the Agreement as it relates to trade in agricultural goods. This Commission will be responsible for evaluating the effects of trade liberalization under the Agreement, the operation of Article 3.15 on agricultural safeguard measures, and possible extension of agricultural safeguard measures.

Goods subject to agricultural safeguard measures. Agricultural safeguard measures are applied at the bilateral level. The Dominican Republic agreed on this mechanism with three countries: the United States, Costa Rica and Nicaragua.

To date, the Dominican Republic has not applied this mechanism, despite the fact that on different occasions, different sectors have requested analyzing the possibility of applying it during a set period of time.

[9] Under the provisions of the 1994 GATT, the Dominican Republic made a Technical Rectification of its List XXIII of Tariff Concessions included as an annex to the Marrakesh Protocol; this involved applying a basic tariff and a tariff quota or import volume different than that which was negotiated for agricultural products included in the list.
[10] This measure involves the application of an additional import tax or tariff on an agricultural good whose import volume in a calendar year has been so high that it exceeds the market tolerance in each country. It is only allowed in the case of very sensitive agricultural products, can only be maintained until the end of the calendar year in which it is applied, and only be applied to goods that are still subject to tariffs or restrictions.

1.2.4. *Agricultural export subsidies*[11]

Article 3.14 of the CAFTA-DR, establishes the multilateral elimination of export subsidies for agricultural goods. The countries agreed not to apply export subsidies for agricultural goods from another member country, except in order to compete with export subsidies from countries that are not part of the Agreement.

In August 2014, this situation presented itself between Costa Rica and El Salvador. Costa Rica requested that the CAFTA-DR arbitration group settle a case related to the “originating” status and special regimen, specifically with regard to "fair competition" (Chapter 1.2 of the CAFTA-DR). The case was submitted to a higher instance due to the possible existence of subsidies on the part of El Salvador. As a result of this discussion, the question emerged regarding whether the effects of subsidies could be neutralized by eliminating the tariff treatment established in the Agreement (Arbitration Group 2014).

1.2.5. Sanitary and Phytosanitary Measures

Sanitary and phytosanitary (SPS) measures are any laws, regulations, prescriptions, and procedures established by a given country to protect people, animals or plants from any contaminants or pathogens.

The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), which entered into force with the establishment of the WTO, concerns the application of food safety and animal and plant health regulations. Given that these measures can easily be used to restrict trade, the agreement seeks to avoid their use for protectionist purposes, by establishing clear guidelines regarding their application.

1.2.6. Commitments undertaken and fulfilled by the agricultural sector for the entry into force of the CAFTA-DR

Prior to the CAFTA-DR coming into effect, the Dominican livestock vowed to fulfill as many of the commitments set out for the sector as possible. This included the preparation of documents, laws and regulations that were drafted, reviewed and modified throughout the implementation of the Agreement and which played a central role in the Agreement’s entering into effect. Additionally, entities were created in order to guarantee the effective implementation of the Agreement. Some of the most important actions in this regard are detailed below:

- **Documents and measures related to the implementation and administration of the CAFTA-DR as it relates to the agricultural sector**

    - **Resolution No. 54-05, by means of which the Office of Agricultural Commercial Agreements of the Ministry of Agriculture was created**. The office was created with the goal of strengthening and promoting the ability of the agricultural sector to present and negotiate favorable initiatives for the country in bilateral, regional, and multilateral trade processes and negotiations. This entity possesses the capacities needed to efficiently and effectively manage and implement the commitments derived from trade agreements that the Dominican Republic has already signed or will sign. This initiative has been considered a relevant experience for the country.

    - **Regulation No. 534-06 on the administration of CAFTA-DR tariff-rate quotas.** This regulation was drafted taking into consideration the provisions of Article 3.13 of the CAFTA-DR, which details the requirements for the administration and implementation of tariff-rate quotas, in accordance with the provisions of the

[11] As defined by the WTO, a subsidy is a measure that includes three basic elements: i) a financial contribution, ii) by a government or any public entity in the territory of a member country iii) that provides a benefit.

appendices of the General Notes of the Schedule of the Dominican Republic to Annex 3.3. This regulation is currently implemented by means of Decree 705-10.

- **Regulation No. 535-06 on the application of CAFTA-DR agricultural safeguard mechanisms.** Dated 15 November 2006, this document regulates the application of agricultural safeguard measures in the Agreement. Article 1 states that safeguard mechanisms will take the form of an additional import duty, and will apply to imports of agricultural goods from the United States, according to the definition in Article 7, provided that the quantity of imports of the good during the calendar year exceeds the trigger level for that good set out in the Dominican Republic's Schedule to Annex 3.15 of the CAFTA-DR.

- **Resolution 24-06, which states that the phytozoosanitary no-objection permit** is indispensable in order to be able to import agricultural products into the Dominican Republic. Article 5 of the resolution states that the Agricultural Imports Committee must issue import licenses according to the requirements established in Article 3 for imports under the CAFTA-DR agricultural quotas, and Article 4 for imports under the WTO agricultural quotas (the eight products of the Technical Rectification). Additionally, the resolution states that the Committee must not issue or deny import licenses based on sanitary or phytosanitary concerns, domestic purchase requirements or discretional criteria.

- **Resolution No. 438-06, by means of which the Dominican Republic ratified the International Convention for the Protection of New Varieties of Plants (UPOV)**, which was adopted on December 2, 1961 and revised in Geneva on November 10, 1972, on October 23, 1978 and on March 19, 1991. The country's ratification of this agreement was essential to the CAFTA-DR's entry into force. Similarly, the Dominican Republic enacted **Law No. 450-06 on the Protection of the Rights of Breeders of New Varieties of Plants**, dated December 6, 2006.

- Conclusion of the review process for the regulations of Law No. 311-68.

- Publication of all documents related to the agricultural sector on the website of the Ministry of Agriculture.

- Automatic link between the Ministry of Agriculture and the General Directorate of Customs to administer and implement agricultural safeguard measures.

* **Documents related to sanitary and phytosanitary, sanitation and food safety**

    - **Via Decree No. 515-05, dated September 20, 2005, the Dominican Republic modified Decree No. 58-03, dated January 23, 2003, which established the creation of the National Committee for the Application of Sanitary and Phytosanitary Measures and Technical Barriers to Trade**, as a way of responding in a more practical, efficient and simple manner to the need to adopt strategies and quick actions in accordance with the requirements of trade processes for animals, plants, and agricultural products and by-products. This modification allowed the country to address the new challenges brought on by the signing of the CAFTA-DR on August 5, 2004.

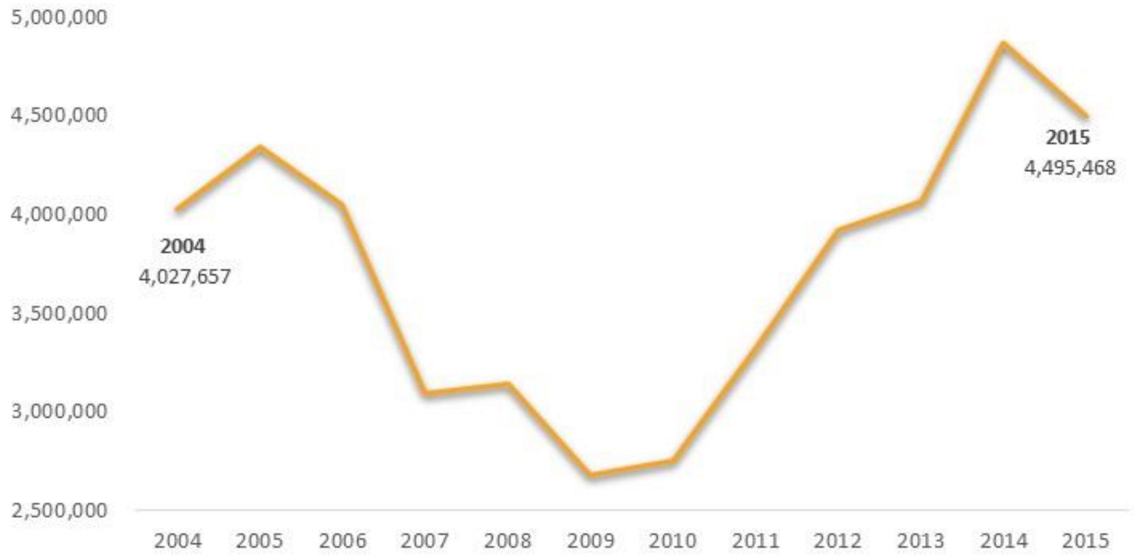
    - **Resolution No. 021/2006 (bis), which states, in Article 1, that the Ministry of Agriculture recognizes the inspection system of the Food Safety Inspection Service (FSIS) of the United States Department of Agriculture (USDA)** as being equivalent to the Dominican Republic's inspection system for cattle, pig and poultry products and sub-products that will be imported into the country.

II. Agricultural trade between the Dominican Republic and the United States

2.1. General trade

During the period 2004-2015, the Dominican Republic exported an average of USD 3,732,636,000 in goods to the United States, for an average annual growth rate of 1.3% (see Graph 2).

Graph 2. Dominican Republic: Total exports in thousands of USD in 2004-2015.



Source: Prepared with data from ITC 2016.

Graph 2 shows that, since the entry into force of the CAFTA-DR, Dominican exports to the United States have exceeded the levels prior to the Agreement. In the period 2008-2015, the average growth rate was 8.1%. It is important to note that the United States, together with Haiti, are the main trading partners of the Dominican Republic.

Dominican exports to the United States are concentrated in large product categories, which include those produced in the free trade zones, such as textiles and medical and scientific equipment; and traditional products, such as tobacco. The country is also the largest exporter of cigarettes, ferronickel and sugarcane to the United States.

The main product categories exported by the Dominican Republic in the period 2004-2015 were the following:

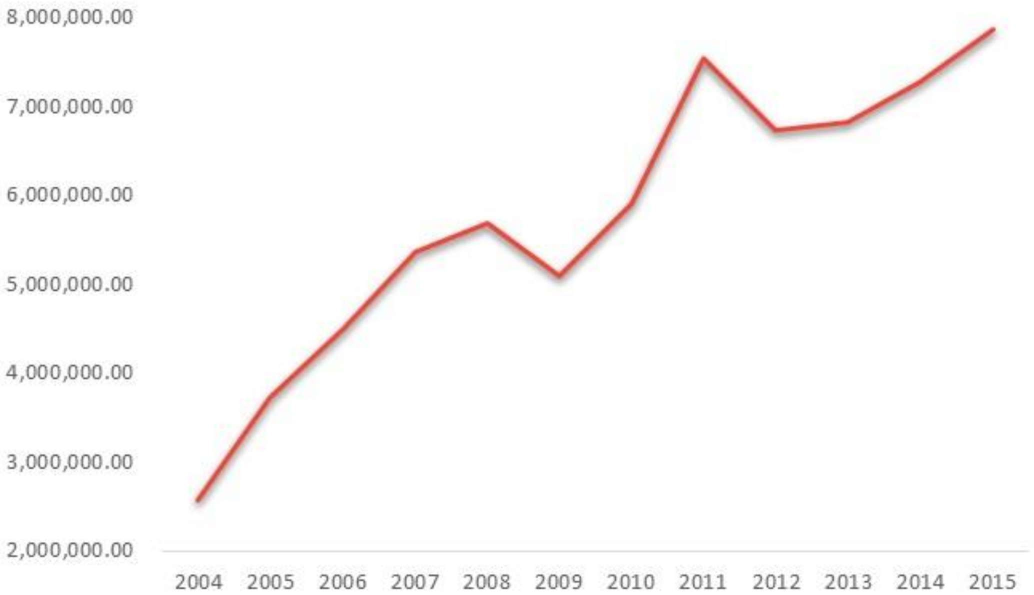
Table 3. Dominican Republic: Main export categories in thousands of USD in 2004-2015.

Code	Description	Average exported 2004-2015	Share %
'90	Optical, photographic and cinematographic instruments and accessories	579,590.8	15.5
'24	Tobacco and manufactured tobacco substitutes	461,350.5	12.4
'62	Apparel and clothing accessories, except knitwear	480,348.6	12.9
'85	Electrical machinery, equipment and parts; recording equipment	536,107.7	14.4
'71	Pearls, natural or cultured, precious and semi-precious stones, and similar	396,182.0	10.6

Source: Based on data from ITC 2016.

In imports, as in exports, the United States is the Dominican Republic's main trading partner, with a share of more than 35%. In the period 2004-2015, the country's imports averaged USD 5,760,045,750 with an average growth rate of 8.2% (See Graph 3).

Graph 3. Dominican Republic: Total imports in thousands of USD in 2004-2015.



Source: Prepared based on data from ITC 2016.

The main product categories imported by the Dominican Republic during the period 2004-2015 were the following:

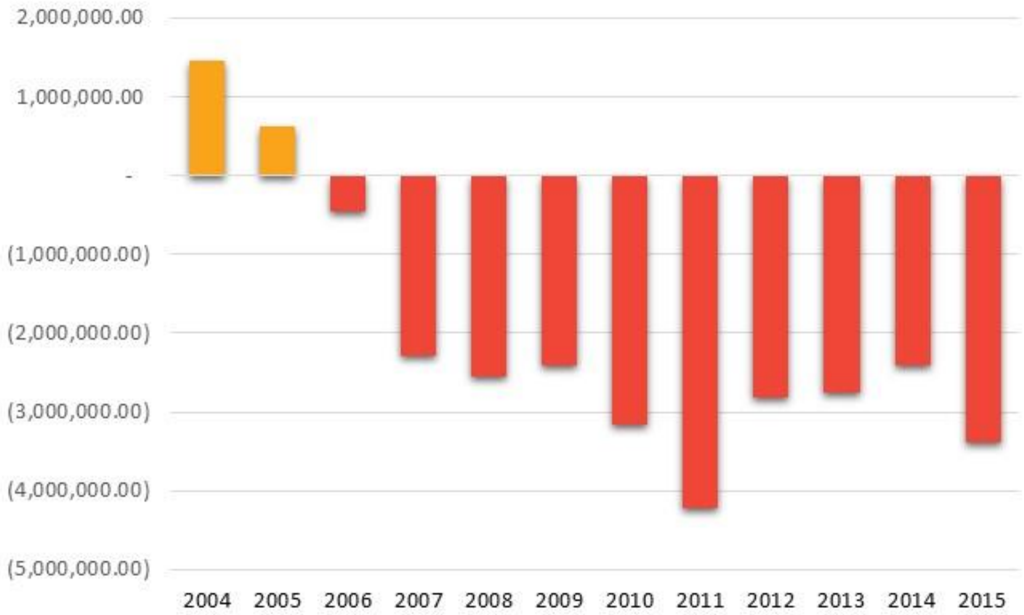
Table 4. Dominican Republic: main import categories in thousands of USD in 2004-2015.

Code	Description	Average imported 2004-2015	Share %
'27	Mineral fuels, mineral oils and distilled products	729,573.7	12.7
'85	Electrical machinery, equipment and parts; recording equipment	527,558.8	9.2
'39	Plastic and articles thereof	482,210.5	8.4
'84	Nuclear reactors, boilers, machinery and mechanical appliances	416,276.6	7.2
'87	Motor cars, tractors, cycles, other land vehicles and their parts	349,362.0	6.1

Source: Prepared based on data from ITC 2016.

As a result of the abovementioned trade flows, the Dominican Republic has a deficit in its trade balance with the United States. The only time it recorded a trade surplus was in 2004 and 2005 when, due to the country's financial crisis, the exchange rate increased considerably, prompting an increase in exports and a decrease in imports. In 2015, the trade balance was USD 3,376,485,000 (See Graph 4).

Graph 4. Dominican Republic: Trade balance with the United States in thousands of USD in 2004-2015.



Source: Prepared based on data from ITC 2016.

Since the entry into force of the CAFTA-DR, the trade deficit with the United States has not improved; on the contrary, it has worsened. For this reason, it is important to emphasize that the CAFTA-DR of itself is not enough to resolve the situation: this trade Agreement simply guarantees preferential access to the United States market, favorable business conditions and the establishment of clear trade regulations.

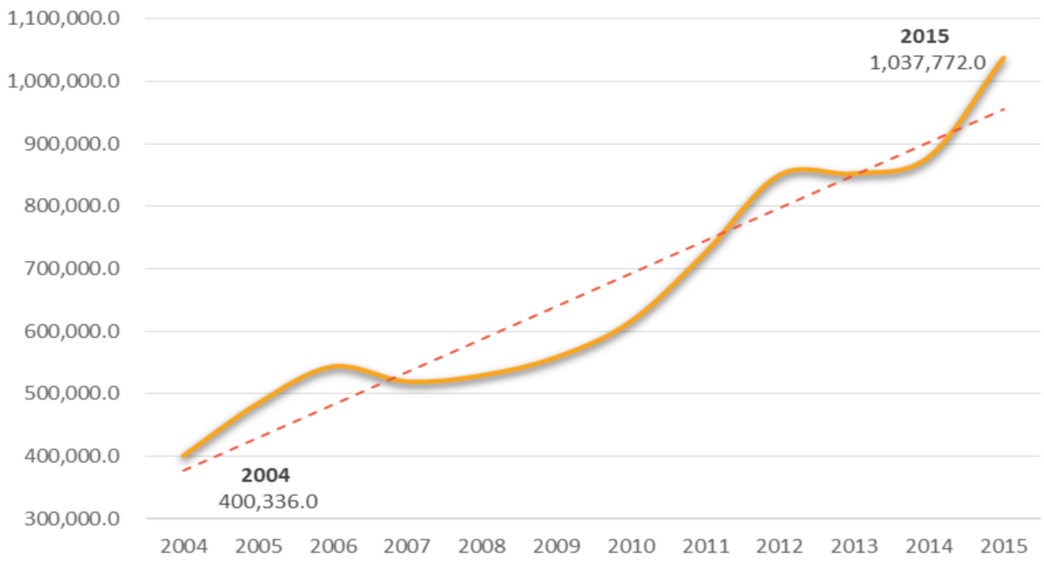
2.2. Agricultural trade

During the period 2004-2015, the Dominican Republic exported to the United States an average total of USD 666,222,400 in agricultural products,[12] representing an 18.1% share of the average for all goods exported to that country during the same period. The share of agricultural exports has increased considerably during the period 2004-2015, rising from 9.9% in 2004 to 23.1% in 2015.

The annual average growth rate for agricultural goods during the period 2004-2015 was 7.3%, a growth rate that can be considered dynamic, given that it was higher than the growth rate for all national exports to the United States market (1.3%) (See Graph 5).

[12] Agricultural goods are those goods included in Chapters 1 to 24 of the Harmonized System.

Graph 5. Dominican Republic: Agricultural exports* in thousands of USD in 2004-2015.



* Chapters 01 - 24 of the Harmonized System. **Source:** Prepared based on data from ITC 2016.

The main agricultural products exported from the Dominican Republic to the United States, based on the average exported during the period 2004-2015, are the following:

Table 5. Dominican Republic: Main agricultural exports in thousands of USD in 2004-2015.

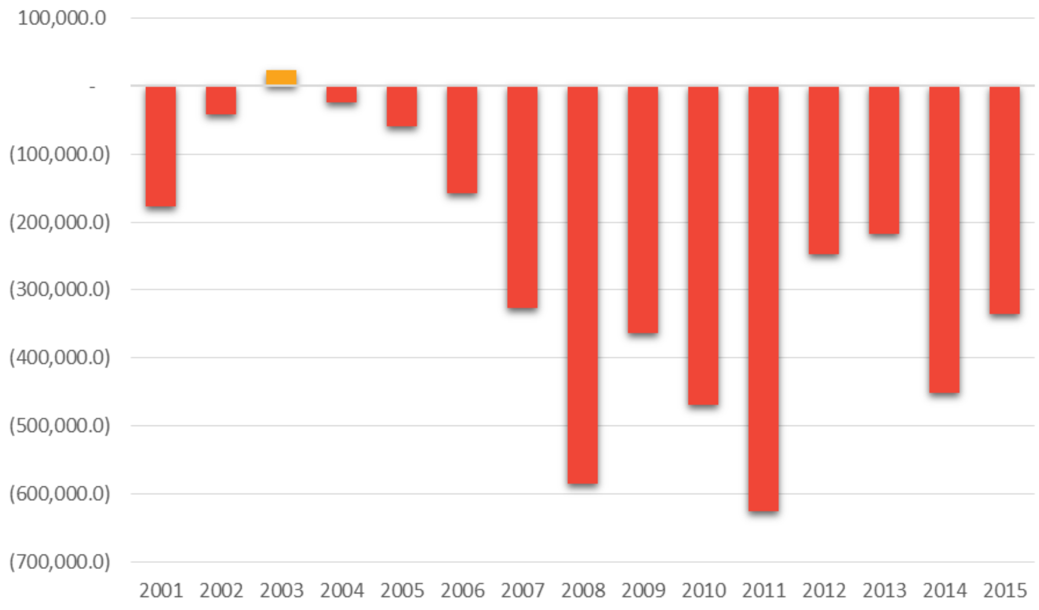
Code	Description	Average exported 2004-2015	Share %
'240210	Cigars or "puros"	309,044.7	46.4
'170111	Raw cane sugar, no added flavoring or coloring matter	56,647.2	8.5
'180100	Cocoa beans	50,365.8	7.6
'170113	Sugarcane mentioned in note 2 of the subheading of this chapter	24,639.5	3.7
'220300	Beer made from malt	18,719.5	2.8
'240120	Tobacco, partly or wholly stemmed	14,078.4	2.1
'210690	Other food preparations	13,906.2	2.1
'080440	Avocado	13,713.8	2.1
'070960	Pepper of the genus *Capsicum* or of the genus *Pimenta*	10,326.2	1.5
'210390	Other sauces and preparations	8,408.9	1.3

Source: Prepared with data from ITC 2016.

Table 5 clearly shows the weight of the country's *traditional export products* (sugar, coffee, tobacco and cocoa) in its agricultural exports. Although the top ten products only include tobacco, sugar and cocoa, these three account for 68.3% of the average exported during the period 2004-2015.

With regard to the trade balance, the Dominican Republic maintains a deficit in its agricultural trade balance with the United States, ranging between USD 23,312,000 (2004) and USD 625,083,000 (2011). The only year in which there was no deficit in the trade balance was in 2003, due to the country's national financial crisis (See Graph 6).

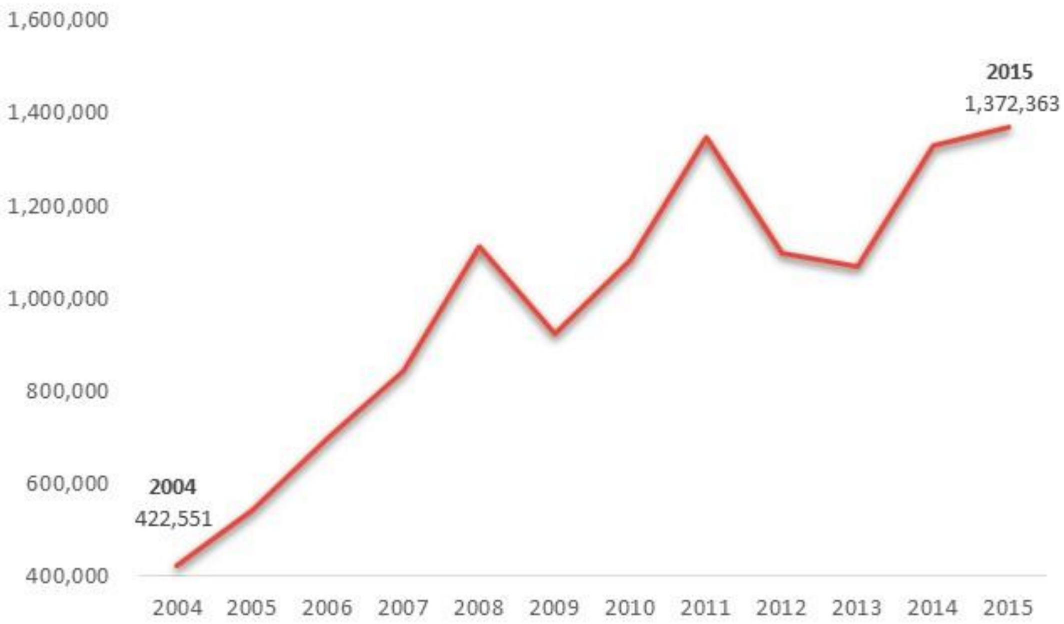
Graph 6. Dominican Republic: Trade balance with the United States in thousands of USD in 2004-2015.



Source: Prepared based on data from ITC (2016.

With respect to imports, during the period 2004-2015 the Dominican Republic imported an average of USD 880,611,000 in agricultural goods, representing an average annual growth rate of 9.4% and a share of 17.3% with respect to the total goods imported during that period. Despite the implementation of the CAFTA-DR, the average growth of imports after its entry into force has not been as dynamic as expected, since it recorded a growth of just 3.6% in the period 2008-2015 (See Graph 7).

Graph 7. Dominican Republic: Agricultural imports in thousands of USD in 2004-2015.



Source: Taken from ITC 2016.

Among the main agricultural products that the Dominican Republic imports from the United States are:

Table 6. Dominican Republic: Main import products in thousands of USD in 2004-2015.

Code	Description	Average imported 2004-2015	Share %
'100590	Maize (not seed)	141,684.0	14.3
'120810	Broad bean and soybean flour	100,133.2	10.1
'100110	Durum wheat	69,367.0	7.0
'240110	Tobacco, not stemmed	52,906.1	5.4
'150710	Soybean oil (crude), including degummed	49,072.5	5.0

Source: Prepared based on data from ITC 2016.

2.3. Trade opportunities

The CAFTA-DR offers many trade opportunities for both countries, mainly in complementary trade, given the production structure of both countries, whereby the Dominican Republic imports raw materials for free trade zones and finished consumer goods, and exports finished goods under the special regimen of free trade zones, as well as agricultural goods. Given that the United States is the country's main trading partner, the opportunities for generating continued economic benefits in both directions, through trade flows, are accentuated with the entry into force of the Agreement and its benefits.

In order to assess the potential market in both countries, and making use of more technical methods, we calculated the Revealed Comparative Advantage Index (RCAI) of the exports of the Dominican Republic and the United States (to 4 digits) and the Import Intensity Index (III) of Dominican and US imports (to 4 digits). By using this methodology it is possible to determine the relative competitiveness, given that RCAI and III are based on existing trade flows.

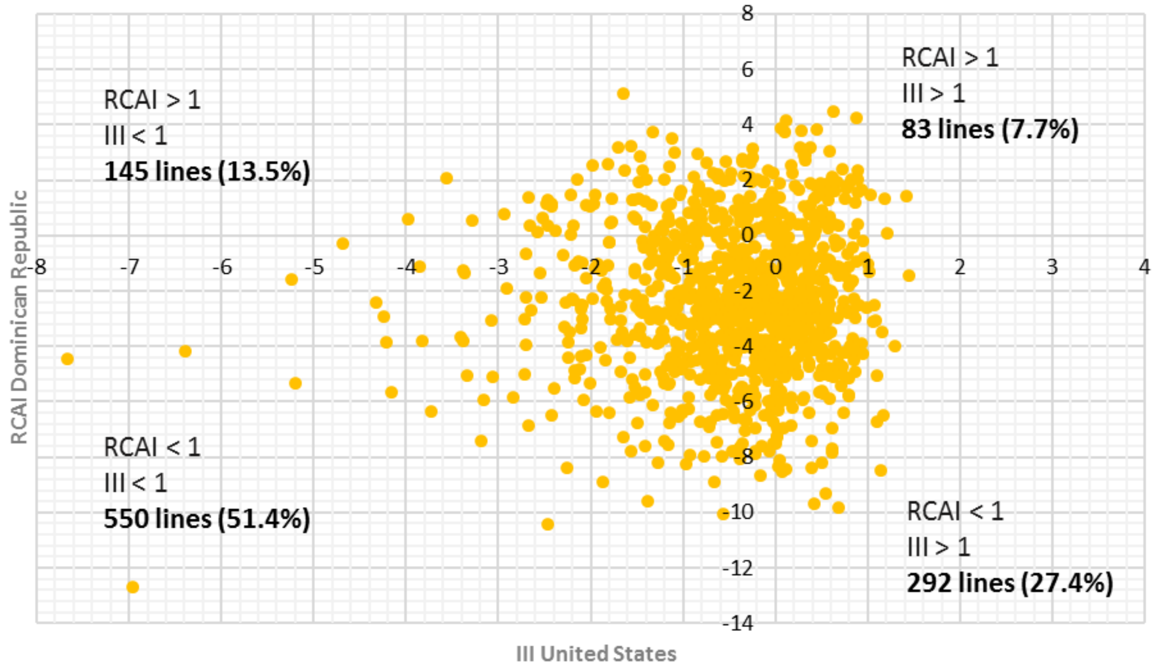
For the application of these indicators, we used the average exported and imported during the period after the implementation of the CAFTA-DR, in other words, 2008-2015.

In the next section, using the aforementioned indicators previously, we ask the following questions: What can the Dominican Republic export to the United States? And, what can the United States export to the Dominican Republic?

2.3.1. What can the Dominican Republic export to the United States?

Of the 1070 tariff lines in which the Dominican Republic reported trade flows during the period 2008-2015, only 228 recorded an RCAI > 1; however, of these 228, the United States trade flows only showed an import-orientation in 83 of them (See Graph 8).

Graph 8. Dominican Republic: Revealed Comparative Advantage Index (RCAI) of the Dominican Republic and Import Intensity Index (III) of the United States*.



*The results of the indicators are expressed in scales to summarize the information graphically. In this case an RCAI and an III higher than or equal to one (1) are equivalent to 0 in the Graph. **Source:** Prepared based on data from ITC 2016.

Of these 83 tariff lines, 23 (27.7%) correspond to agricultural goods, clearly demonstrating the export potential of this sector.

Below is a summary of the five tariff lines with the highest RCAI:

Table 7. Dominican Republic: Five tariff lines with the highest RCAI

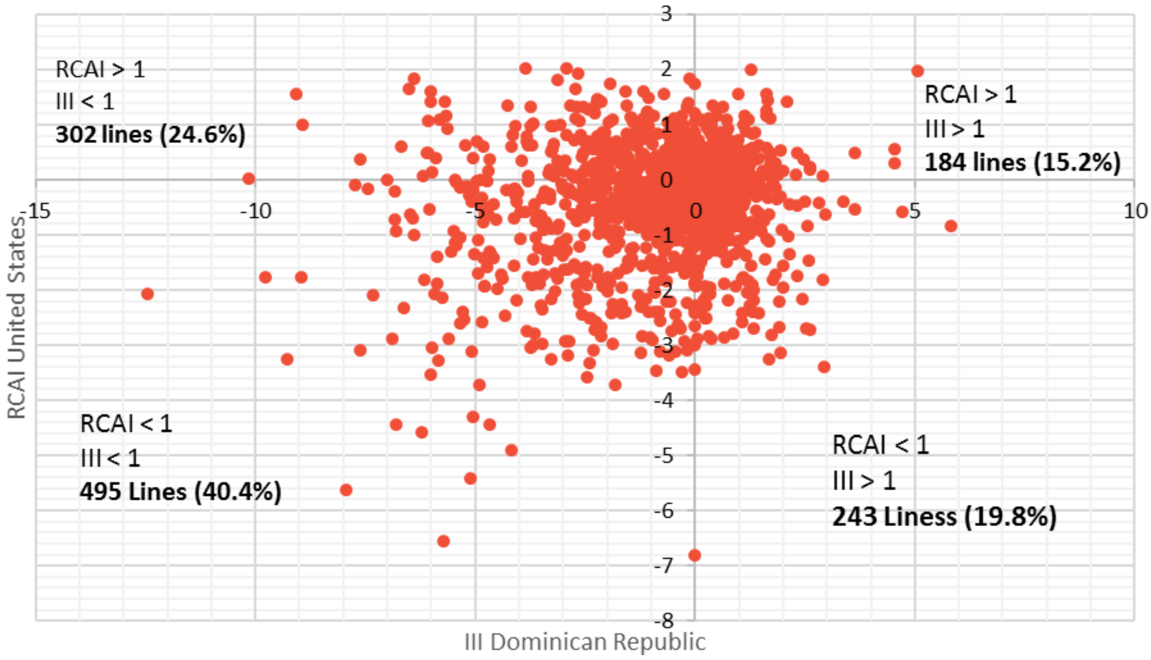
Code	Description	Average trade flow 2008-2015 (in thousands of USD)		RCAI	III
		Exported by DR	Imported by USA		
'6207	Undershirts of all types, underpants, briefs, nightshirts, pajamas	53,204.8	366,656.8	88.6	1.9
'6405	Footwear	155,631.5	1,404,896.6	69.0	2.4
'6310	Rags; articles of twine, rope and cordage of textile material	15,592.3	90,720.8	63.4	1.1
'1801	Cocoa beans, whole or broken, raw or roasted	172,727.1	1,241,232.9	47.8	1.1
'1903	Tapioca and substitutes prepared from starch, in flakes, grains	1,334.8	14,793.6	46.3	1.6

Source: Prepared based on data from ITC 2016.

2.3.2. What can the United States export to the Dominican Republic?

Of the 1,224 tariff lines for which the United States reported trade flows during the period 2008-2015, 486 achieved an RCAI equal to or higher than 1, but of these only 184 were reported as import-oriented for the Dominican Republic.

Graph 9. United States: Revealed Comparative Advantage Index (RCAI) of the United States and Import Intensity Index (III) of the Dominican Republic*



*The results of the indicators are expressed in scales to summarize the information graphically. In this case, an RCAI and an III higher than or equal to one (1) are equivalent to 0 in the Graph. **Source:** Prepared based on data from ITC 2016.

Of these 184 tariff lines, 66 (35.8%) correspond to agricultural goods. This means that the United States has, in relative terms, an agricultural trade potential greater than the Dominican Republic.

Below is a summary of the five tariff lines with the highest RCAI:

Table 8. United States: five tariff lines with the highest RCAI *

Code	Description	Average trade flow 2008-2015 (in USD 1000)		RCAI	III
		Exported by USA	Imported by Dom. Rep.		
'9301	Military weapons, except revolvers, pistols and bladed weapons etc.	363,956.4	2,104.1	7.4	3.6
'1208	Flour and meal of oil seed and oleaginous fruits, except mustard flour	887,221.1	119,957.3	7.3	157.4
'4406	Railway sleepers (cross-ties) of wood or similar	119,220.1	790.6	4.7	2.6
'3602	Prepared explosives, except fireworks	285,061.0	4,297.8	4.7	5.1
'1502	Fats, bovine, sheep or goat	554,394.6	7,386.4	4.2	5.2

Source: Prepared based on data from ITC 2016.

III. Administration of CAFTA-DR and the promotion of exports

3.1. General aspects of the administration of CAFTA-DR

In administrative terms, the CAFTA-DR is headed by the Free Trade Commission (FTC), a body comprised of ministerial-level representatives of the seven countries that are parties to the Agreement. The Commission is responsible for overseeing the implementation of the treaty and resolving any disputes that may arise regarding its interpretation and application. To date, the Commission has met on three occasions, most recently in March 2015, in the Dominican Republic.

The effective implementation of the CAFTA-DR is critical to making the economies of its member countries more competitive and creating new opportunities for their businesses, farmers, ranchers, workers and consumers.

The Free Trade Commission, in turn, is composed of various **Committees and Technical Groups,** such as the Committee on Agriculture, the Committee on Sanitary and Phytosanitary Measures (SPS) and the Trade Capacity Building Committee, etc., which are made up of representatives of the CAFTA-DR's member countries.

These committees play an essential role in ensuring that the stakeholders benefit from the opportunities created by the Agreement. For example, among the issues discussed in the Agriculture Committee is the effective monitoring of the administration of tariff quotas and the recognition of the provision of Article 3.17 of the Agreement as it relates to the chicken trade. With respect to the SPS Committee, its work continues to focus on the important task of strengthening science-based sanitary and phytosanitary systems, including national inspection procedures based on international standards.

The Trade Capacity Building Committee analyzes various project activities - both executed and underway - in areas such as agricultural market information systems, trade facilitation, customs modernization, border management, agriculture and SPS, as well as compliance with and promotion of environmental standards and regulations, under the provisions of Chapter 19. The aim of these working groups is to continue strengthening trade capacities in the region's public and private sectors.

The FTC also has an Environmental Affairs Council and a Labor Affairs Council. The first is responsible for ensuring that trade policy promotes environmental management and joint efforts to improve environmental protection and sustainable development standards; the second, focuses on efforts to strengthen labor force capacity and to monitor the commitments related to the implementation of Chapter 16 of CAFTA-DR, emphasizing the importance of collaboration among countries for the effective execution of the Agreement.

At the most recent meeting of the Free Trade Commission (the third since the Agreement's entry into force and implementation by all countries), held in the Dominican Republic in March 2015, the delegates discussed the following topics: i) the economic and commercial impact of the CAFTA-DR, with emphasis on the region's most dynamic export products, imports, the trade balance and flows of US Foreign Direct Investment (FDI) toward the Dominican Republic and Central America; ii) reports on the work of the Committees on Trade in Goods, Agriculture, and Sanitary and Phytosanitary Measures, as well as the Environmental Affairs Council, the Labor Affairs Council and the Trade Capacity Building Committee; iii) changes to the CAFTA-DR rules-of-origin to reflect updates to the 2012 Harmonized Commodity Description and Coding System (HS); and iv) the status of negotiations on various trade agreements outside the CAFTA-DR, e.g. the WTO Trade Facilitation Agreement, the Pacific Alliance, the Trans-Pacific Partnership (TPP), the Trans-Atlantic Trade and Investment Partnership (TTIP), and the Association Agreement between the European Union and Central America.

This Third Meeting of the FTC was preceded by a meeting of the CAFTA-DR Agriculture Committee, held in September 2014, also in the Dominican Republic, which discussed topics such as: i) capacity building assistance for compliance with the US Food Safety Modernization Act (FSMA); ii) harmonization of standards; iii) implementation of SPS and aspects of the Food Safety Modernization Act at Ports of Entry, changes in inspection procedures for agricultural products, and governmental technical assistance programs on SPS issues; iv) agricultural market information systems; and v) rules-of-origin process, trade facilitation and agreements with third parties.

3.2. Promotion of exports

Exports are a central element for the sustained growth and development of countries in the medium and long term. They offer the possibility of creating trade opportunities that complement the activity of domestic markets, generating employment and higher incomes, diversifying the economy, and promoting financial growth and the emergence of more technified companies. The legal framework that underpins this premise in the country is comprised of Law N.˚ 137, of May 21, 1971, which created the Dominican Center for the Promotion of Exports (CEDOPEX) and Decree N.˚ 109- 97, of February 27, 1997, which created the Office for the Promotion of Foreign Investment of the Dominican Republic (OPI-RD). These were subsequently repealed by Law 98-03, which created the Export and Investment Center of the Dominican Republic (CEI-RD), and Decree 178-09, of March 10, 2009, which created the Export Development Group of the Presidency. More recently, the promulgation of Law 126-15 converted the Banco Nacional de Fomento de la Vivienda y la Producción (BNV) (National Housing and Production Bank) into the National Export Development Bank (BANDEX), in order to promote export opportunities and improve the competitiveness of the country's export firms, offering businesses that have not yet completed the required legal, financial and operative processes the possibility of insertion in the export market.

In more general terms, Law 1-12 which establishes the country's National Development Strategy 2030 (NDS), provides crucial support to the promotion of exports, with the overall objective of promoting their development, based on the competitive insertion of national products and services in the global market. Some of the NDS provisions for supporting exports include: measures to assist small and medium-sized business in exporting their products; efforts to increase export products with high value added; and support the development of a quality assurance and innovation culture in the country's manufacturing sector.

The official policy for promoting the country's national exports serves two purposes: first, it convinces local companies that they can export and secondly, it enables the government to offer specific services to exporters and thereby support the trade systems (Martí Gutiérrez 2008)[6].

Thus, as the institution responsible for coordinating policies related to this national objective, the CEI-RD seeks to promote the country's exportable supply to international markets and at the same time provides the necessary assistance for the development and sustainability of Dominican export products.[16] It is the body responsible for implementing Law 84-99, the Law to Promote Exports.

According to recent figures published by the CEI-RD, to date some 6,000 technicians and producers have received training, and are now better prepared to produce and export in accordance with the standards and conditions of the US market and of other countries, and in line with trade provisions, etc. With regard to Dominican exports to the United States, the training activities implemented by the CEI-RD, together with the accompaniment and other

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[16] For further details refer to http://cei-rd.gob.do/es/exportacion/.

measures by institutions such as the Ministry of Agriculture, resulted in a 69.59% reduction in rejections of Dominican products exported to international markets during the period 2012-2015.

Some of the strategic partnerships and promotional efforts to increase Dominican exports to the US market are based on a cooperation agreement signed in 2013 between the CEI-RD and the United States National Supermarket Association (NSA).[17] Similarly, activities such as market studies (e.g. by Agroforsa) and the organization of events to promote Dominican products (e.g. by RD-Exporta) form part of local efforts to send Dominican products to the US market and to other markets.

IV. Main constraints to taking greater advantage of agricultural trade in general

The entry into force of CAFTA-DR opens up major opportunities related to trade and the generation of wealth both for the Dominican Republic and for the United States. But it also implies significant challenges for the Dominican Republic, if it wishes to take full advantage of the benefits of the Agreement. The constraints it faces affect not only agricultural exports, but all national exports.

This document summarizes the constraints facing the Dominican Republic in two key aspects: 1) competitiveness and 2) the institutional framework.

In terms of **competitiveness**, the Dominican Republic needs to make a concerted effort to improve its export levels to the United States, both in terms of quantity and quality, in order to take full advantage of CAFTA-DR. The World Bank's *Doing Business* platform analyzes and compares various key indicators that the Dominican Republic must address in order to improve its international trade (World Bank 2016).

The data included in Table 9, which contains key performance indicators for exports, shows that the Dominican Republic is in a privileged position, in relation to Latin America and the Caribbean as a whole, for taking advantage of cross-border trade. However, when comparing the data with the world's most developed countries grouped in the Organization for Economic Cooperation and Development (OECD), its performance different greatly from theirs. Nevertheless, the OECD countries' consolidated results represent best export practices in logistical terms and, therefore, bearing in mind that the Dominican Republic has a Free Trade Agreement with the United States, it must make an effort to improve its procedures and take advantage of the trade opportunities afforded by this Agreement (CAFTA-DR).

Table 9. Dominican Republic: Results of the *Doing Business* Trading Across Borders Report 2016.

Indicator	Variable	Results		
		Dominican Republic	Latin America and the Caribbean	OCDE
Export time	Border compliance (hours)	16	86	15
Export cost	Border compliance (USD)	488	493	160
Export time	Documentary compliance (hours)	10	68	5
Export cost	Documentary compliance (USD)	15	134	36

Source: Taken from World Bank 2016.

[17] For further details refer to https://www.latintrends.com/gobierno-dominicano-firma-acuerdo-para-incrementar-exportaciones-hacia-eeuu/.

In the agricultural sphere, two major constraints related to competitiveness and comparative advantage prevent the country from taking full advantage of the CAFTA-DR:

1. Lack of support, development and financing of the country's agricultural and agroindustrial production; [18]and
2. Inadequate use of good agricultural and agroindustrial production practices, which hinders the country's compliance with the technical, phytozoosanitary and food safety requirements and good practices demanded by the US market.

Consequently, for Dominican products to compete successfully in the US and other markets, the country must pay attention to the constraints mentioned and design national policies that help overcome those challenges in the context of the CAFTA-DR.

[18] This includes facilitating and encouraging the adoption of advanced and efficient production technologies that improve yields and reduce the unit costs of production. It also involves promoting associativity, market intelligence and agricultural trade processes.

V. The case of the cassava chain in the Dominican Republic

This section analyzes the main aspects of the cassava value chain in the Dominican Republic. It examines its structure and its production dynamics, the position of Dominican cassava in the world, its trade with the world and with the United States, and the trade obstacles that prevent cassava exports from taking advantage of the opportunities offered by the CAFTA-DR.

5.1. Description of the chain

5.1.1. The economic and social importance of cassava

Cassava (*Manihot esculenta*) is recognized around the world as an important food source and generator of income, particularly in the rural economies of Africa, South America, Central America and the Caribbean (UN Radio 2013). The Foundation for Agricultural Development (1997) describes cassava as the world's fourth source of calories, while IICA (2008) highlights the importance of this crop for the food security of countries such as the Dominican Republic.

Cassava plays a very important economic and social role in the Dominican Republic, given its contribution to national food security and the benefits it offers rural economies in terms of employment and agricultural and agroindustrial growth. It is also a product that is readily accessible to the population. Below is a brief description of some of the most important economic and social aspects of cassava.

- **Nutritional Composition.** Cassava contains the highest level of calories compared with other roots and tubers, such as potato, sweet potato, yam and taro (Foundation for Agricultural Development, 1997). Every 100 grams of cassava provides 160 kcal (See Table 10).

Table 10. Cassava: nutritional composition per 100 grams

Nutrients	Unit	Value
Water	g	59.68
Energy	kcal	160
Energy	kJ	667
Proteins	g	1.36
Fats	g	0.28
Carbohydrates	g	38

Source: Taken from USDA 2016.

- **Share of agricultural gross domestic product (AGDP).** In the period 2002-2006, cassava production represented on average 2.14% of the country's AGDP[19], equivalent to 891,000,000 Dominican pesos. This is the highest share of AGDP of all crops in the category of roots, bulbs and tubers.

- **Employment.** According to IICA (2008), there are around 15,000 cassava producers in the Dominican Republic, who together generate some 180,000 direct and indirect jobs. Another 5,325 workers are employed in the cassava agroindustry, specifically in the production of *casabe* (a crispy flat bread made from cassava).

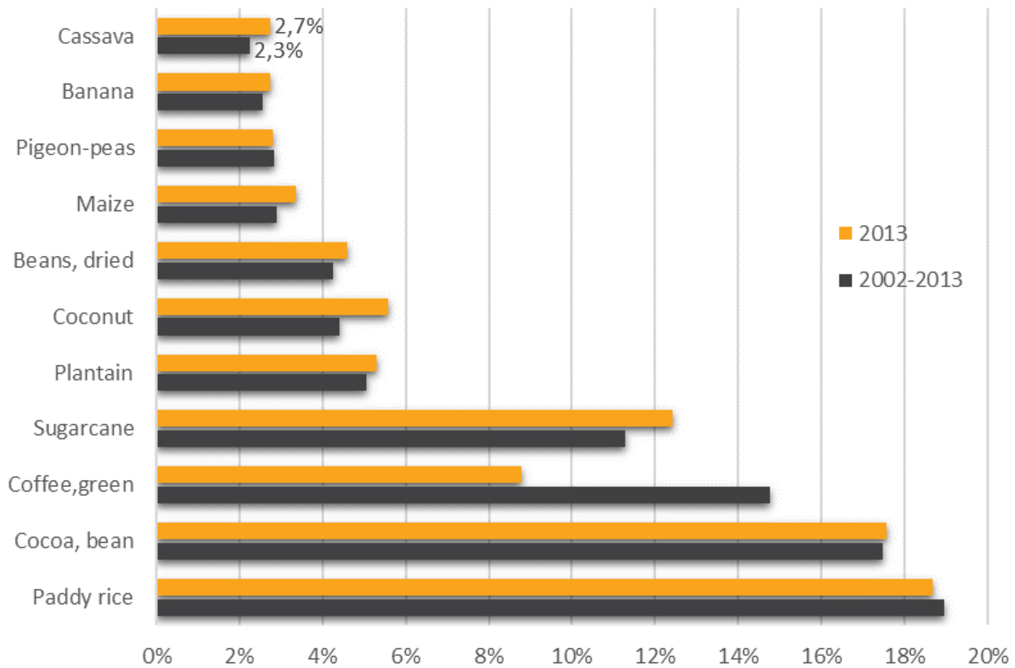
[19] From 2007, the official statistics of the Ministry of Agriculture do not disaggregate the category of roots, bulbs and tubers by crop, for which reason only the period 2002-2006 is included in the analysis.

- **Family and subsistence agriculture.** According to the Foundation for Agricultural Development (1997), cassava is mainly produced on small farms, with areas ranging from 15.9 to 32 *tareas* (15.9 *tareas* are equivalent to one hectare), and therefore has a major impact on the growth of family agriculture. It is a reliable and profitable crop, which grows throughout the national territory and does not require sophisticated technologies for its production. Consequently, production costs are relatively low.

- **Consumer prices.** One of the reasons for the high domestic consumption of cassava in the Dominican Republic is the consumer price: cassava is the second cheapest product among the country's other roots and tubers, barely exceeding the price of sweet potato. It is also up to 80 % cheaper than other carbohydrate-rich food sources, such as rice (MAG 2016). One factor that influences prices considerably is seasonality; in the case of the Dominican Republic, this is not very marked, which enables the population to buy the product at a relatively stable price throughout the year.

- **Harvested area.** Based on the land factor and taking into account the harvested area, cassava is the country's eleventh most important crop. In the period 2002-2013, it represented 2.3% of the *tareas* harvested in the country in 37 crops[20] and in 2013, it increased its share by 0.4 percentage points with respect to the period 2002-2013 (See Graph 10). Moreover, cassava is the only crop in the roots and tubers category that enjoys a share greater than 1%.

Graph 10. Crops: harvested area of the most important crops*



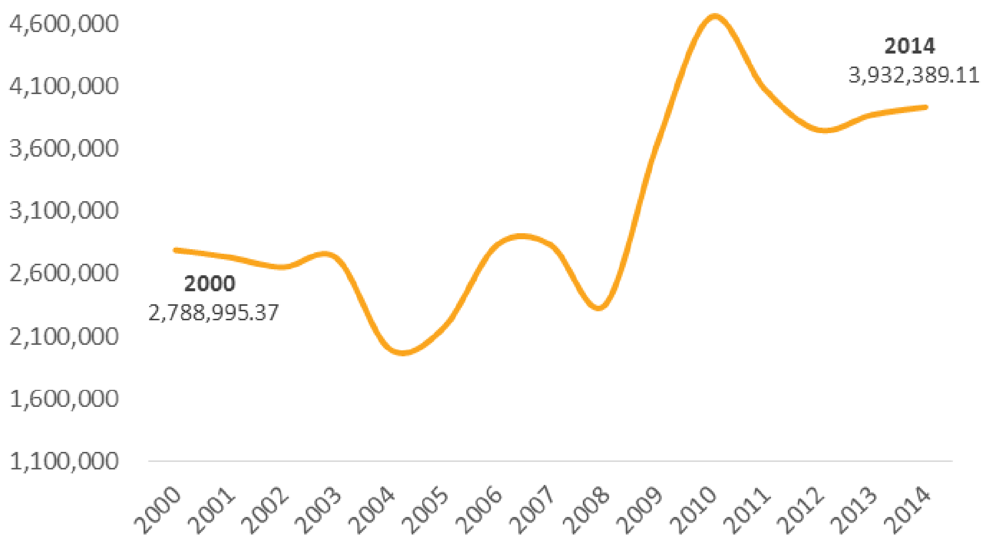
*** The** average of *tareas* harvested in the period 2002-2013 was 13 309 858.2 *tareas*, while in 2013 it was 13 652 471.4 *tareas*.
Source: Taken from FAO 2016.

[20] Paddy rice; cocoa beans; green coffee; sugarcane; plantain, coconut, beans, dried; maize, pigeon peas, banana, cassava, papaya, raw tobacco, tropical pineapple; pumpkin, squash, winter squash; avocado, oranges; mango, mangosteen and guava; bell peppers, hot peppers, peppers (green); lemon and lime; tomato, fresh; sweet potato, white sweet potato, coco yam, eggplant, yam; onions, dried, peanuts with cascara; grapefruit and pomelo; potato, sweet potato; carrot and radish, sorghum; melon, other (incl. cantaloupe); cucumber, gherkins; lettuce and chicory, garlic; and cabbage and other crucifers

5.1.2. Structure and production dynamics of cassava in the Dominican Republic

In 2014, national production of cassava reached 3,932,389.11 quintals (1 quintal= 100kg), as a result of a 4% average annual growth in production during the period 2000-2014. During that same period, the production average was 3,132,821.84 quintals[21] (See Graph 11).

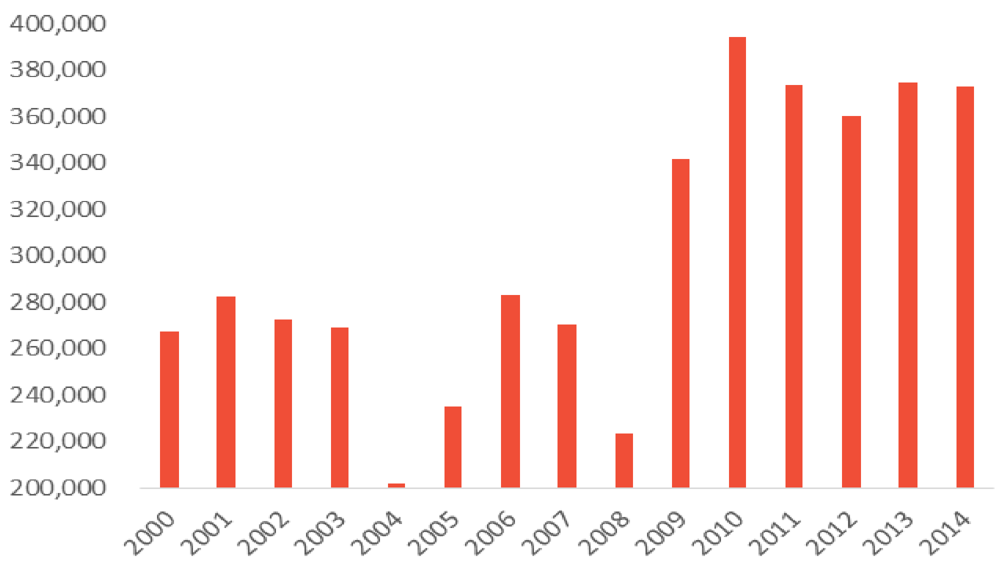
Graph 11. Cassava: production in quintals in 2000-2014.



Source: Prepared based on data from FAOSTAT 2014.

The performance of the harvested area was similar to that of production, with an annual average growth of 3.3% and an average harvested area of 301,314.54 tareas[22] for the period 2000-2014. In 2014, the harvested area increased to 372,727.80 *tareas* (See Graph 12).

Graph 12. Cassava: harvested area in *tareas* in 2000-2014.

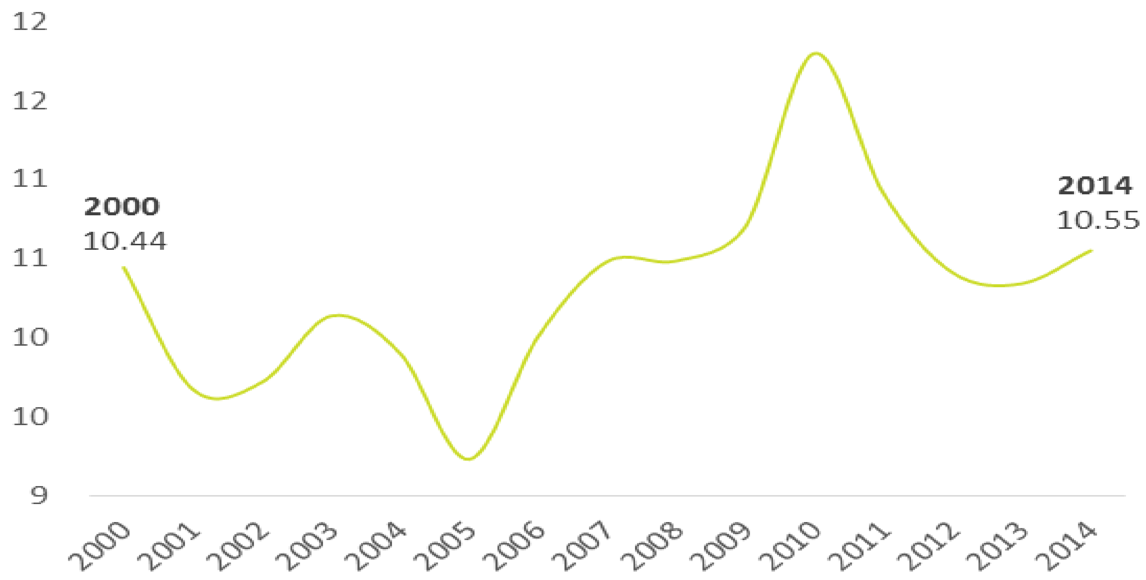


Source: Prepared based on data from FAOSTAT 2014.

[21] 22.046 *quintals* are equivalent to one metric ton.
[22] 15.9 *tareas* are equivalent to one hectare.

During the period 2000-2014 cassava yields were relatively stable, ranging from 9.2 to 11.8 quintals per *tarea*. The average for the period in question was 10.3 quintals per *tarea* (see Graph 13).

Graph 13. Cassava: production yields in quintals per *tarea* in 2000-2014.



Source: Prepared based on data from FAO 2016.

5.1.3. General characteristics of the production dynamics and structure

The structure and the production dynamics of cassava in the Dominican Republic are characterized by the following general aspects:

- **Variety of cassava crops.** The country has numerous varieties of cassava which are produced for different purposes (local consumption, export and industrial use), according to their specific characteristics. Among the best known varieties are: *verdecita, seis meses, machetazo, americanita, bilin, sonera, valenciana, mocana, negrita mocana* and *brujita*. The *valenciana* or Valencia variety is usually coated in paraffin wax for export.

- **Low production costs and heavy dependence on labor**. In comparison with the country's other roots and tubers, cassava has the lowest production costs per *tarea* (see Table 11).

Table 11. Roots and tubers: production costs in Dominican pesos per tarea.

Crop	Years		Average	Average annual growth (%)
	2002	2014		
Potato	5786.3	26,184.2	16,216.3	12.0
Cassava	966.8	4,871.7	3,055.4	12.3
Taro	1995.0	9,106.0	5,562.1	11.3
Yam	2751.2	9,418.5	6,510.5	8.8
Ginger	1182.2	6,259.3	3,853.0	10.4
Sweet potato	945.9	5,243.9	3,482.4	12.3

Source: Prepared based on data from the Ministry of Agriculture (2014).

With regard to the cost structure, in 2014 labor costs accounted for a large share of cassava production costs. In fact, that year labor costs exceeded 50% of cassava production costs, both in rainfed and irrigated crops (See Table 12).

Table 12. Cassava: cost structure by type of production in 2014.

Type of production	Inputs	Land preparation	Labor	Seed	Other
Rainfed	18.3%	18.7%	52.1%	0.0%	10.9%
Irrigated	20.6%	19.2%	51.8%	0.0%	8.4%

Source: Prepared with data from the Ministry of Agriculture (2014).

- **Production concentrated in small plots.** Cassava production is concentrated in the hands of smallholders with plots ranging from 1 to 50 *tareas* (SEA and IICA 2008). This hinders the creation of economies of scale in production, at least, individually.

5.1.4. Apparent consumption

In the Dominican Republic, apparent consumption remained relatively stable during the period 2002-2015, ranging from 2,642,162 quintals (year 2002) to 3,509,105.5 quintals (2015). This relative stability takes into account the significant variations in export levels of this product (See Table 13).

Table 13. Cassava: apparent national and per capita consumption in 2002-2015.

Years	Production	Imports	Exports	Estimated consumption	Per capita consumption
	Quintals				Pounds
2002	2,650,910.0		8,748.0	2,642,162.0	30.9
2003	2,725,205.0		14,784.0	2,710,421.0	31.1
2004	1,995,476.0		8,849.0	1,986,627.0	22.4
2005	2,166,401.0		5,595.3	2,160,805.7	23.9
2006	2,830,026.0		5,150.0	2,824,876.0	30.7
2007	2,831,928.0		2,758.0	2,829,170.0	30.2
2008	2,343,294.0		652.4	2,342,641.6	24.6
2009	3,652,756.0		2,346.0	3,650,410.0	37.7
2010	4,517,677.0		3,168.0	4,514,509.0	47.8
2011	4,073,937.0		1,898.0	4,072,039.0	42.6
2012	3,747,889.0		6,867.5	3,741,021.5	38.7
2013	3,870,693.0		4,913.8	3,865,779.2	39.5
2014	3,932,393.0		14,291.2	3,918,101.8	39.5
2015	3,514,296.0		5,190.5	3,509,105.5	35.0
Statistics					
Average	3,203,777.2		6,086.5	3,197,690.7	33.9
Standard deviation	791,418.3		4,316.7	792,014.4	7.5

Source: Prepared based on data from the Ministry of Agriculture (2015).

With respect to apparent consumption per capita, consumption levels have been far more stable than the total estimated, which means that despite population growth, the estimated consumption per capita has not been affected. This is mainly due to increases in cassava production, given that no imports are reported and therefore all domestic consumption comes from local production.

5.2. Global context: comparative analysis of the national situation

According to FAOSTAT data, in 2014 world production of cassava reached 270,293,801 metric tons in a harvested area of 24,221,971 hectares. Cassava is produced in four of the planet's five continents, though in a very concentrated manner (Table 14).

Table 14. Cassava: production by continent in 2000-2014.

Continent	Years		Average	World Total	
	2000	2014	2000-2014	2014	
				Harvested Area	Production
Africa					
Harvested area*	11,013,774	17,523,640	13,198,846		
Production**	95,409,742	146,824,969	120,709,673		
Yield***	8.66	8.38	9.15		
America					
Harvested area	2,522,755	2,542,062	2,624,805		
Production	31,086,806	32,844,935	33,241,790		
Yield	12.3	12.92	12.664	24,221,971	270,293,801
Asia					
Harvested area	3,404,538	4,134,373	3,758,679		
Production	49,458,533	90,372,457	69,621,195		
Yield	14.53	21.86	18.52		
Oceania					
Harvested area	16,554	21,896	20,293		
Production	187,040	251,440	225,166		
Yield	11.30	11.48	11.10		

*In hectares, **in metric tons, ***in metric tons per hectare. **Source:** Prepared based on data from FAOSTAT 2014.

As can be seen in Table 14 above, the African continent accounts for 54% of world production, on average, and also has the highest yields per hectare harvested. It is followed in descending order by Asia, the American continent and Oceania. Asia, despite being the world's second largest cassava producer, obtains lower yields than those from the American continent.

If we compare world production of cassava by country, the concentration is even more significant. In 2014, 72.4% of world production was concentrated in just ten countries, and of these only one country (Nigeria) accounted for 20% of world production (See Table 15).

Table 15.Cassava: leading producer countries in metric tons in 2000-2014.

Position	Country	Years		
		2000	2014	Average
1	Nigeria	32,010,000.0	54,831,600.0	41,823,956.0
2	Brazil	23,335,974.0	23,242,064.0	24,207,532.6
3	Thailand	19,064,284.0	30,022,052.0	23,412,311.0
4	Indonesia	16,089,100.0	23,436,384.0	20,696,401.6
5	Democratic Republic of the Congo	15,959,000.0	16,608,900.0	15,360,166.1
6	Ghana	8,106,800.0	16,524,000.0	11,639,508.9
7	Angola	4,433,026.0	7,638,880.0	9,677,782.4
8	India	6,014,100.0	8,139,430.0	7,544,102.0
9	Vietnam	1,986,300.0	10,209,882.0	7,319,453.3
10	Mozambique	5,361,974.0	5,114,750.0	5,874,655.3

Source: Prepared based on data from FAOSTAT 2014.

The leading cassava producer on the American continent is Brazil, which is also the world's second largest producer. The Dominican Republic ranks tenth among the continent's leading producers, based on its average production during the period 2000-2014 (Table 16).

Table 16. Cassava: leading producer countries in the American continent (Average 2000-2014).

Country	Production (t*)	Harvested area (ha)	Yield (t/ha)	Producer Prices (US/t**)
	Average 2000-2014			Average 2010-2014
Brazil	24,207,532.6	1,740,298.0	13.91	133.16
Paraguay	3,514,907.0	227,994.7	15.42	76.41
Colombia	1,946,940.0	186,916.5	10.42	255.51
Peru	1,066,911.8	93,667.5	11.39	189.21
Venezuela (Bolivarian Republic of)	483,667.4	38,932.9	12.42	941.88
Cuba	481,407.1	81,129.1	5.93	-
Haiti	410,772.3	106,936.1	3.84	-
Bolivia (Plurinational State of)	314,629.5	33,437.7	9.41	212.06
Argentina	176,704.7	28,192.7	6.27	-
Dominican Republic	142,103.9	18,950.6	7.50	319.6

* Metric tons. ** In international dollars. **Source:** Prepared based on FAOSTAT data 2014**.**

The figures in Table 16 above, clearly show the Dominican Republic's low average productivity compared with the region's leading producers, namely Brazil and Paraguay, whose production yields are nearly double those of the Dominican Republic. Similarly, the Dominican Republic's producer prices are higher than those observed in other countries, except Venezuela. If we assume that this variable explains the cost levels, we may conclude that the country has higher production costs than the region's leading producer countries.

In the Dominican Republic, the main use of cassava for **agroindustrial** purposes is to make *casabe*. *Casabe* is a flat bread made from cassava and because it contains no cholesterol or gluten it is regarded as a healthy food with great commercial potential.

According to IICA estimates (2008), *casabe* production totaled 10,540,400 units, with a value of USD 3,969,720. The *casabe* industry in the Dominican Republic is largely artisanal, both in terms of the processing methods and the machinery used. About 93% of the country's *casabe* industries rely on traditional infrastructure, with 75% using gas for cooking cassava. This situation continues virtually unchanged. In compiling information for this document, the work team confirmed that those conditions continue and that issues such as the use of firewood as fuel remain a subject of debate.

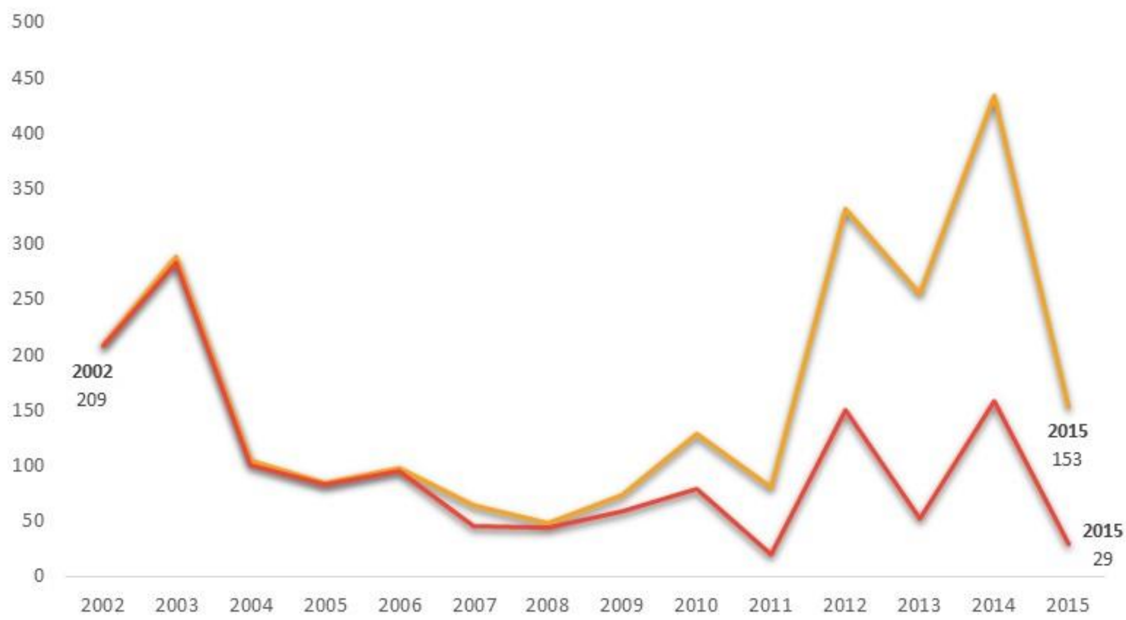
For this reason, and because much of the equipment used to make *casabe* is manufactured locally, and given the problems in obtaining financing to develop this agroindustrial sector, the CAFTA-DR does not offer significant opportunities for the import of machinery for producing *casaba* in the immediate term —although it may in the future.

5.3. The cassava trade with the United States

Dominican cassava exports (Tariff Code 07.14.10) to the world grew at an average annual rate of 4.3% during the period 2002-2015. In 2015, specifically, the exported value was USD 153,000. In relative terms, however, average exports of cassava during that same period (2002-2015) represented barely 0.014% of the country's agricultural exports (See Graph 14).

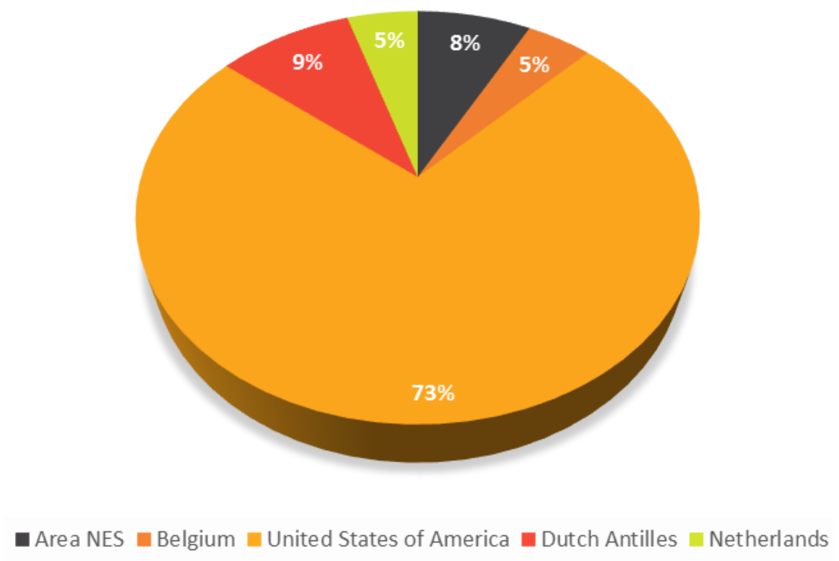
The main destination of Dominican cassava exports is the United States, which receives 73% of its exported production, and which reported an average growth of 2.3% in the period 2002-2015. The rest of the exports are distributed in countries such as the Dutch Antilles, Belgium and the Netherlands, etc. (See Graph 15).

Graph 14. Cassava: Dominican exports to the world and to the United States in thousands of USD in 2002-2015.



Source: Prepared based on data from ITC 2016.

Graph 15. Cassava: destination of cassava exports from the Dominican Republic in 2002-2015.



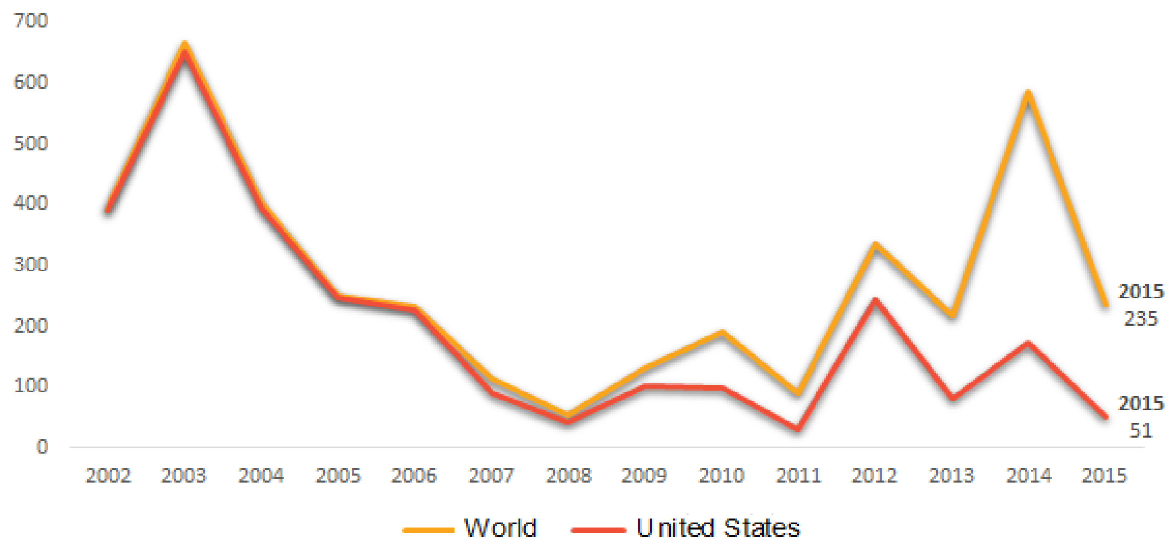
Source: Prepared based on data from ITC 2016.

It is clear that from 2008, following the entry into force of the CAFTA-DR, that the country's exports to the world have recovered and have achieved higher levels with respect to previous years.[23] However, this is not necessarily due to an increase in national exports to the United States following implementation of the CAFTA-DR, but rather due to the fact that from 2008 the destinations of Dominican cassava exports have diversified. In any case, it should be recognized that Dominican cassava exports to the United States have recovered since the implementation of the Agreement. In the period 2002-2015, the average annual growth rate was -31.5%, whereas in the period 2008-2015 it was 3.3%.

[23] The average annual growth rate during the period 2002-2007 was -26.8%, while the average annual growth rate for the period 2008-2015 was 24.3%.

In terms of volume, the average annual growth in the period 2002-2015 was -3% for the world and -14% for the United States. In 2015, 235 metric tons were exported to the world and 51 metric tons to the United States (See Graph 16).

Graph 16. Cassava: Dominican exports to the world and to the United States in metric tons in 2002-2015.



Source: Prepared based on data from ITC 2016.

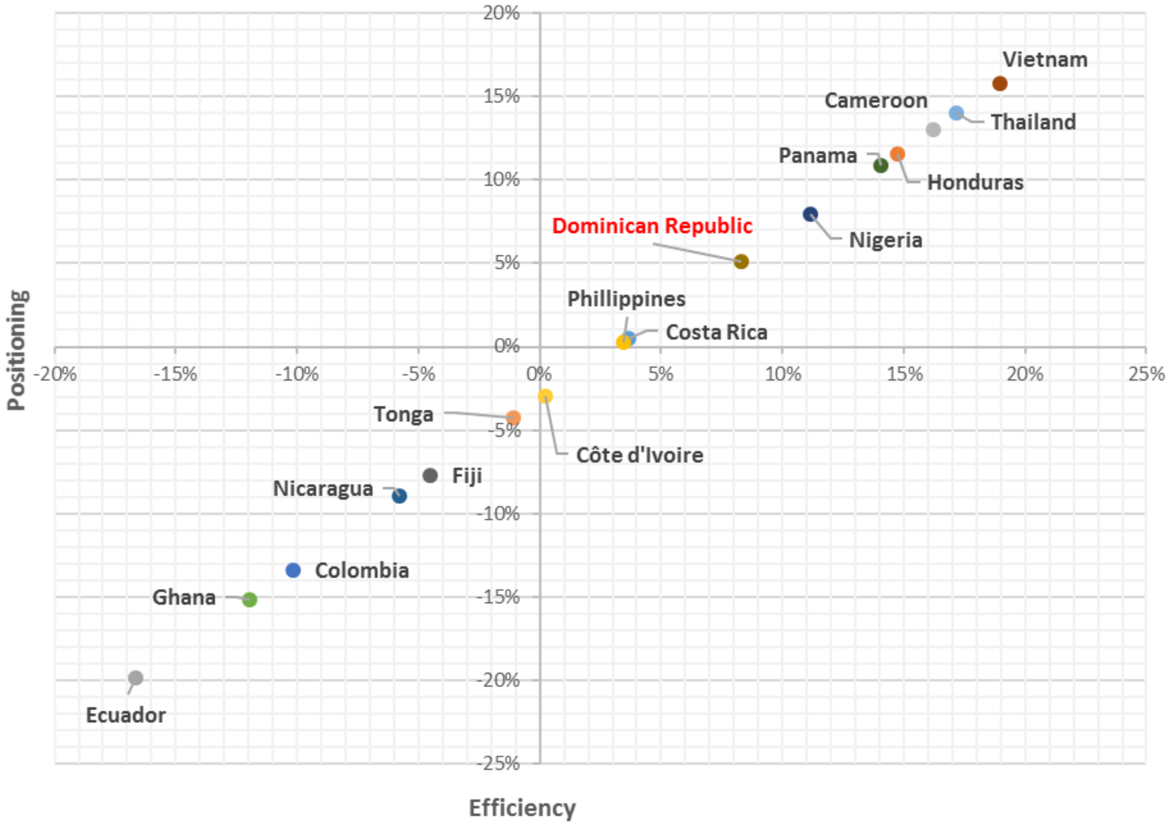
Although in recent years the trade pattern for Dominican cassava reflects a diversification of its export markets, the United States remains its most important market, offering relative advantages with respect to other destinations, due to the FTA.

Therefore, it is important to assess the relative adaptability and competitiveness of cassava in the US market, following the entry into force of the CAFTA-DR. This objective can be achieved by using a matrix showing the **"Mode of insertion in international markets,[24]"** which considers two basic variables – cassava's positioning in the US market and its efficiency in that market. To complement this analysis and determine the Dominican Republic's position with respect to its competitors, a comparison is made between its model of market insertion and those of other countries that export cassava to the United States.[25]

As shown in Graph 17, the Dominican Republic has achieved a positive model of insertion in the US market, positioned above the Philippines and even Costa Rica (the main exporter of cassava to the United States).

[24] This matrix consists of two variables: positioning (P), measured by the average annual growth rate of cassava imports, and efficiency (E), calculated as the average annual growth rate of that product's share with respect to global cassava imports in the US market. Depending of the results obtained, there are four possible scenarios: positive insertion (P+ and E+), with lost opportunities (P+ and E-), with vulnerability (P- and E+) and retreat (P- and E-).
[25] The countries selected for the analysis are those that presented a constant trade flow in the period 2008-2015.

Graph 17. United States: model of insertion of cassava in international import markets, by country



Source: Prepared based on data from ITC 2016.

However, despite its positive insertion in the US market following implementation of the CAFTA-DR, the Dominican Republic still lags behind potential competitors with high production capacity, such as Vietnam, Nigeria and Thailand.

The Dominican Republic produces nearly three times the US market's demand for cassava and receives an average of 10 cents more per metric ton than other countries that export to that nation. However, the Dominican Republic exports less than 1% of its production and its export levels are uneven which, in the short term, could affect its model of insertion in the US market.

5.4. Main constraints to taking greater advantage of the cassava trade with the United States

There are several reasons why the Dominican Republic has not been able to take full advantage of the benefits afforded by the US market in relation to the cassava trade. Although very diverse, these constraints may be grouped into three major categories:

1. **Cultural constraints.** Directly related to lack of knowledge of the relative and absolute advantages offered by international trade.
2. **Institutional constraints.** Related to the role of public and private institutions in the cassava export value chain.
3. **Production constraints.** Production obstacles that prevent producers from gaining comparative advantages to fully benefit from international trade.

The following section describes the main constraints identified, using a cause and effect system:

Causes	Constraints	Effects
Large domestic market, profitable and stable in terms of prices. Limited export-oriented culture among producers.	**National production not geared to external markets.**	Average US imports of Dominican cassava represented just 0.19% of the average amount imported during the period 2004-2014.
Production technology inadequate for producing large volumes, with quality and at low cost. Incipient level of organization (cooperatives) among producers, which hinders the creation of economies of scale, limits their access to credit, and restricts the sharing and adoption of successful production and integrated pest management experiences.	**High production costs in comparison with the main competitors in the US market.**	The average price of US cassava imports during the period 2004-2014 was USD 0.58 per kilogram, while in the same period, the average price of imports from the Dominican Republic was USD 0.76 per kilogram (Agroforsa 2005).
The State, via the Ministry of Agriculture, has not provided the necessary means to help producers form cooperatives. Little initiative among cassava producers in organizing themselves, mainly due to lack of awareness of the benefits of association.	**Low levels of business organization and production among exporters and cassava producers.**	Export supply is uneven, both in terms of quantity and quality. Lack of production planning for domestic and external markets.
Absence of a plan for processing and packing cassava. Inefficient manufacturing practices	**The industrial postharvest process (coating cassava with paraffin wax) increases the price of exports.**	In addition to the DR's high production costs in relation to its main competitors in the US market, the coating of cassava with paraffin wax for export further reduces the producers' profit margins, making the US market less attractive for local suppliers.
Public agricultural policies are focused on products that do not necessarily have export potential e.g. rice. Agricultural credit and extension policies focus on other products.	**Limited institutional support for improving and reorienting cassava production.**	Limited government help has meant that production focuses on the domestic market and on the production of casabe. This results in a low level of cassava exports to the United States.
Limited exchange of experiences. Little or no knowledge of the US market.	**Limited export culture among producers.**	Lack of knowledge of capabilities, processes, costs and other factors to be considered to take advantage of the US market. Producers are not interested in exporting.
Limited dissemination of market studies and market analyses to take full advantage of the US market	**Insufficient intervention by the institutions responsible for the promotion and analysis of international trade**	Low levels of exports. Low exploitation of trade advantages with the United States.

VI. Relevant experiences for improving the administration, implementation and use of the CAFTA-DR in the cassava trade

In line with the objectives of this paper, we systematized experiences related to market access together with the administration and implementation of the Agreement. This information was then shared with the three countries included in the project by means of a virtual (online) seminar. The purpose of the seminar was to learn more about how the CAFTA-DR was being used, analyzing the scenarios before and after its implementation, and placing emphasis on aspects related to the administration of the Agreement and the access of each of the products studied to the U.S. market.

In the case of the Dominican Republic, the following experiences were shared:

6.1. Administration and implementation of the Agreement

6.1.1. Office for Agricultural Trade Agreements (OTCA)[26], of the Ministry of Agriculture

This office was created on October 27, 2005, through Resolution 54-2005 of the Ministry of Agriculture, in response to the need to adapt or, where necessary, create agricultural sector institutions with the required capacity to meet the challenges and opportunities offered by trade liberalization for the country's economic development. This was based on the premise that the ability to take advantage of trade agreements depends on the capacity to implement and manage those agreements, and on consolidating the management of trade negotiations.

The creation of OTCA was intended to strengthen and modernize the country's agricultural institutions linked to international trade, in order to meet the needs of national agribusiness entrepreneurs and help them improve their competitiveness.

The OTCA's main challenge is to provide better support to producers—i.e. relevant information on trade in agricultural products, market access, value chains, marketing options, etc.—, and serve as liaison among producers of the country's agricultural sector, and between them and other trade-related bodies. In other words, its function is to offer producers the necessary assistance, guidance and information tools to enable them to keep abreast of the country's provisions and commitments on matters of international agricultural trade.

6.1.2. Export Acceleration Program (PAE) of the CEI-RD

This program was established in 2008 for the purpose of transferring knowledge and developing international trade capabilities, through the implementation of a specific process of acceleration, culminating with an export-oriented business plan.

The program's pilot phase worked with black pepper cooperatives of the Yamasá region and with two MIPYME (micro, small and medium-sized businesses) of the industrial sector, which received all the available technical support to improve, adapt and relaunch their export supply, as well as machinery and equipment to improve their productivity. Another pilot program was subsequently launched with funding from FAO, which provided agricultural micro-entrepreneurs in the province of Azua with technical assistance in foreign trade, thereby adding value to their knowledge of external trade, productivity and business models.

This program owes its success to the fact that, in addition to training and technical assistance, the participants have access to market studies and trends, institutional and financial links, and strategic business connections. Once the business model has been

[26] For further details: www.otcasea.gob.do

defined and the beneficiaries are ready to launch themselves into the market, they are sent to the management of Dominica Exporta to put their knowledge into practice and launch their business model.

The greatest challenge facing the program is securing financing to strengthen and improve its accompaniment to the producers' groups that it works with.

6.1.3. National Committee for the Application of Sanitary and Phytosanitary Measures (CNMSF)

This mechanism was established via Decree 505-05, of September 20, 2005, to provide a practical and efficient response to the need to adopt strategies and rapid actions in accordance with the requirements of trade processes for animals, plants and agricultural products and by-products. The Committee is regarded as one of the Dominican Republic's major achievement in the context of CAFTA-DR.

The CNMSF is responsible for overseeing general compliance with the legislation and policies of the Dominican State in relation to sanitary and phytosanitary measures and food safety. It is comprised of a group of government institutions, private sector institutions and international organizations.

It faces the challenge of securing a budget allocation for its activities in order to provide better follow-up of those initiatives.

6.1.4. Department of Agrifood Safety (DIA)

The DIA, attached to the Ministry of Agriculture, was created in response to the need for a comprehensive and effective food safety monitoring and oversight system, in order to guarantee safe foods to local and international consumers, through the implementation of good practices in agriculture, livestock production and manufacturing, and the supervision of residue monitoring and inspection plan. The DIA's work covers all information sources and inspection bodies; zoonosis and residue monitoring plans; early warning systems; agricultural and environmental information systems and research activities.

Thanks to the DIA's work, the country has drafted and implemented protocols for good agricultural practices (GAP), good livestock practices (GLP) and good manufacturing practices (GMP). Producers have learned to apply for and obtain certifications related to those protocols; they have received training on the official standards governing BAP and BLP certification processes in the country, and on the national and international entities that certify those protocols. The department has also prepared guidelines and manuals on good practices.

One element worth emphasizing, which reflects the success of the DIA, is the recognition on the part of the authorities of institutions linked to agrifood safety (Ministries of Agriculture, Public Health, Industry and Trade, Environment) of the need for quality assurance in the production and processing of food products, and the fact that this is essential to ensure the competitiveness of those products in international markets such as the United States, following the signing of the CAFTA-DR in 2004.

Its main challenge at the national level is to ensure that increasing numbers of agribusinesses and small and medium producers' organizations implement quality and safety assurance programs, such as the program of good agricultural practices, in an integrated and sustainable manner.

6.2. Market access

6.2.1. Agricultural and Multi- Service Cooperative of Cassava Producers (COOPEYUCA)

This non-profit cooperative firm was founded in the city of La Vega, on August 30, 2014, under Law 127-64 which governs Dominican cooperatives. COOPEYUCA has over 200 associates, distributed in the provinces of La Vega, Duarte, Espaillat, Hermanas Mirabal, Monseñor Nouel, Sánchez Ramírez and Santiago de los Caballeros.

Since its founding, it has received technical assistance from the Dominican Institute of Agricultural and Forestry Research (IDIAF), in the province of La Vega, for its program of selection of cassava varieties. Several work groups or committees were also formed to give added impetus to the cooperative: reproduction of planting material, implementation of agroindustrial processes, business organization, education for members and financial development.

The main challenge facing COOPEYUCA is to position Dominican cassava in the markets of Puerto Rico, Miami and New York. COOPEYUCA's technical team has already visited and "surveyed" these markets, in search of potential niche markets for frozen products derived from cassava (at present there is a project to install a cassava processing and freezing plant).

VII. Conclusions and recommendations

The Dominican Republic has achieved commendable results since the CAFTA-DR entered into force, particularly in relation to strengthening the institutional and legal frameworks for conducting processes of negotiation, investment, marketing and signing of agreements.

As regards commercial exchange, there are still challenges to be overcome and there is a need to create advantages where disadvantages persist. Nevertheless, since the implementation of the CAFTA-DR, the Dominican Republic has been one of the most successful countries of the group, in relative terms, as regards improving the business climate. Indeed, Guatemala and the Dominican Republic have shown the most significant improvements in the *Doing Business* ranking of the World Bank even though, as many note, it would have been desirable to see an improvement in the Dominican Republic's levels of competitiveness with respect to other member countries of the CAFTA-DR.

There is no doubt that the Central American member countries of the CAFTA-DR have taken greater advantage of the benefits it offers in terms of trade access to the US market. In fact, between 2005 and 2013, the average annual growth rate of exports from the CAFTA-DR countries to the United States was 8.3%, led by Costa Rica with 16% and Nicaragua with 11%. These were followed by Guatemala with 3.7%, El Salvador with 2.6% and Honduras with 2.5%. The growth rate of the Dominican Republic, however, was negative: -0.9%.

This is the moment, then, for the Dominican Republic to define which plans, programs and strategies it should promote to optimize the benefits stemming from the CAFTA-DR, before the phase-out period for the elimination of tariffs on sensitive products, such as those of the agricultural sector. However, any measure adopted must be conceived as part of a competitive and intelligent insertion strategy that encompasses both intra-regional and extra-regional trade.

Improving the manner in which the CAFTA-DR has been administered can certainly help the country, given that it would minimize future risks and threats that the Agreement may have caused to the trade balance with respect to the United States and the Central American countries. However, this requires the public and private sectors to develop coordinated policies that will create the desired competitiveness and help the country to take better advantage of this Agreement and other FTAs.

The country has a specialized financial entity for exports that can play a crucial role in supporting sectors and products that have already been identified as strategic and that have great potential in the US market. It is sufficient that these comply with the basic requirements and adhere to established processes of good agricultural practices and good manufacturing practices, and they will already have a guaranteed market niche. But it is also necessary to support and follow-up on the establishment of producers' associations, clusters, cooperatives, export consortia and other arrangements that facilitate economies of scale, and establish quality improvement programs for the exportable production. These actions are essential to achieve one of the most basic objectives of trade, which is to be competitive.

The Dominican Republic undoubtedly has agricultural and agroindustrial export products that are already considered competitive. However, their market share could be substantially increased through appropriate support and inclusion in public-private strategies that contribute to enhance their development. This is the case of fruits and vegetables, banana and cocoa, footwear, cigarettes and cassava, among many others.

The main purpose of this document has been to explore the market potential of cassava in the US market. It is clear that the cassava value chain must make substantial changes in its structure to improve the production dynamics, so that it responds to the requirements of the internal market (domestic and industrial consumption) and to external demand (current and potential). In this way, cassava can eventually form part of the group of crops that not only constitute a pillar of the country's food security, but also a pillar in the growth and development of the agricultural sector as a whole.

In relation to the external market, specifically the US market, with the necessary adjustments it is possible to develop an export system that enables producers to continue to take advantage, in a sustainable way, of the positive market insertion model of cassava exports, not only as a commodity for a Dominican sector in that country, but also as a product with value added.

To achieve these objectives, the project's consultancy team makes the following recommendations:

1. Design a public policy to strengthen the cassava crop, so that it is no longer regarded as a supplementary crop but is considered an essential crop with national priority, like rice. In the short and medium term, this policy should be accompanied by technical assistance and subsidies for inputs and land preparation; the introduction of new varieties; and favorable credit policies, both for production and for postharvest processes.
2. The Ministry of Agriculture authorities should make a commitment to support, monitor and approve the development of producers' cooperatives and associations so that they can take advantage of economies of scale, reduce costs, increase productivity, and effectively plan national production for local consumption and export.
3. The institutions responsible for promotion (CEI-RD), research and monitoring of trade Agreements related to agriculture (OTCA), should unite efforts to conduct specific studies on cassava in the US market and disseminate the results of these studies at workshops, forums, etc. These activities should form part of a comprehensive accompaniment program to support exports of cassava, both fresh and processed, to the US market, promoting and supporting value added and satisfying the demand of niche markets in the United States.
4. Finally, but no less important, it is crucial to obtain the advisory services and support of international organizations linked to the agricultural sector in the Dominican Republic, Central America and South America, such as IICA. Their role as facilitators and coordinators between public and private institutions is indisputable, as is their support to all stakeholders involved in efforts to promote policies for the production and marketing of commodities with export potential, specifically to the United States, in the context of the CAFTA-DR.

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