

Faculty of Economics

Double Degree in International Management

Master of Science in General Management

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Logistics-Oriented Free Trade Zones as National Competitive Advantage. Analysis of Dominican Republic case as platform for NGOs during Haiti earthquake

Synthesis

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To whom there was yesterday

And will be forever

To whom will be tomorrow

And there was always

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摘要

物流是未來管理的關鍵。隨著全球化和國際化的企業,物流似乎只有這樣,才能克服一切與他們的風險。市場正變得動態和物流是一個國家的國家發展的一個非常重要的課題。

全球化和國際化的新概念,但面對他們所使用的所有工具,沒有新的東西。 免費港口或自由貿易區是過去的概念,但仍然採用了時下。

討論分為兩個主要部分。在第一個是所有經濟特區的用法背後的理論,發展整個國家經濟。這部分分為三章。第一個是所有的形式在歷史的開發區,保稅區為重點,說明。第二章是關於未來發展區的內陸港口。第三個是一個多米尼加共和國和其發展模式,根據經濟區的總體概述。

第二部分代表的做法,通過多米尼加的海地地震期間自由貿易區的作用的描述。這部分被劃分在其他三個篇章。拳頭一個是食品強化創新援助海地和自由貿易區的活動和物流的聯繫技術的一般概述。第二章介紹了海地地震,創造了多米尼加共和國在聯合國的物流集群。雖然最後一章是一個商業案例,描述如何,樂施會的工作為強化食品的供應,向海地孤兒院,多米尼加共和國作為協調和物流平台。

這項工作是一個8個月的經驗領域之間的聖多明各和港口太子港王子的後果,為了描述的非政府組織和多米尼加共和國的國家競爭優勢,為這種特殊情況下的物流的概念。

Abstract

Logistics is the key of the management of the future. With globalization and internationalization of firms, logistics appears the only way to overcome all the risks related to them. Markets are becoming dynamic and logistics is a very important topic for the national development of a country.

Globalization and internationalization are new concepts, but all the tools used to face them, are not something of new. Free Harbors or Free Trade Zones are concepts of the past but still used nowadays.

The discussion is divided in two main parts. In the first one there is all the theory behind the usage of economic zones to develop an entire country economy. This part is divided into three chapters. The first one is a description of all the forms of development zones used in the history, focusing on Free Trade Zones. The second chapter is about Port Hinterlands as development zones of the future. The third one is a general overview of the Dominican Republic and its development model based on economic zones.

The second part represents the practice through the description of the role of Dominican Free Trade Zones during the Haiti earthquake. This part is divided in other three chapters. The fist one is a general overview of food fortification technology as innovative aid to Haiti and its linkage with Free Trade Zones activities and logistics. The second chapter describes the creation of a logistics cluster in the Dominican Republic by United Nations, for the Haiti earthquake. While the last chapter is a business case, describing how Oxfam worked for the supply of fortified food to a Haitian orphanage, using the Dominican Republic as platform for coordination and logistics.

The work is consequence of a eight months experience on the field between Santo Domingo and Port-au-Prince, in order to describe the concept of Logistics for NGOs and the National Competitive Advantages of the Dominican Republic for this particular case.

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A conclusione di questi anni universitari passati fra Roma, Londra, Milano, Shanghai, Santo Domingo e Port-au-Prince, alla fine mi sono deciso di scrivere i ringraziamenti per questa tesi in italiano, altrimenti sarebbe davvero stato troppo complesso tra inglese, cinese, spagnolo, francese, portoghese.

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Grazie

Glossary of Abbreviations and Acronyms

ASCM Agreement of Subsidies or Countervailing Measures

BRICS Brazil, Russia, India, China and South Africa

CAFTA Central American Free Trade Agreement

CARICOM Caribbean Community

CARIFORUM Caribbean Forum

CEI Centro de Exportación e Inversion

CEPI Centro de Exportación y Promoción de las Inversiones

CEPZ Cavite Export Processing Zone

CFS Container Freight Stuffing

CNC Consejo Nacional de Competitividad

CNNC Comisión Nacional de Negocios Comerciales

CNZFE Consejo Nacional de Zona Francas de Exportación

DR Dominican Republic

EPA European Partnership Agreement

EPZ Export Processing Zone

ER Early Recovery

EU European Union

FAO Food and Agriculture Organization

FDI Foreign Direct Investment

FEZ Free Economic Zone

FTZ Free Trade Zone

GATS General Agreement on Trade in Services

GATT General Agreement on Tariffs and Trade

GDP Gross Domestic Product

GLCSC Global Logistics Cluster Support Cell

GMO Genetically Modified Organism

HQ Headquarter

IBESR Institut du Bien Etre Social et de Recherches

ICT Information and Computer Technology

IFAD International Fund for Agricultural Development

ILO International Labor Organization

ILP Integrated Logistics Park

INFOTEP Instituto Nacional de Formación Técnico Profesional

IT Information Technology

KW Kilowatt

LP Logistics Park

MINUSTAH Missions des Nationes Unies pour Stabilisation en Haïti

MNE Multinational Enterprise

MOC Ministry of Commerce

MOT Ministry of Tourism

NAFTA North American Free Trade Agreement

NGO No Governmental Organization

PAM Programme Alimentaire Mondial

PAP Port-au-Prince

PH Port Hinterland

PRC People's Republic of China

R&D Research and Development

RD República Dominicana

SCM Supply Chain Management

SD Santo Domingo

SEZ Special Economic Zone

TRIMS Trade Related to Investment Measures and Supporting

TRIPS Trade Related to Intellectual Property and Supporting

UN United Nations

UNCTAD United Nations Conference on Trade and Development

UNICEF United Nations Children's Fund

VAT Value Added Tax

WB World Bank

WFP World Food Program

WTO World Trade Organization

ZF Zona Franca

ZFE Zona Franca Especial

Introduction

Because of Globalization trends, the dynamics of international business in the last decades are changing a lot. In particular, if in the past the internationalization of a business was something typical of a MNE, today the situation is completely changed. Also small and medium enterprises are facing the concept of internationalization, even if it is just for a step in the supply chain of the product.

The supply chain is the actual driver of internationalization. Deciding to produce some components of a product in an other country (defined host country) sometimes is better than produce it in a home country (as it is generally defined the headquarter).

On the other hand, sometimes appears better selling a product in a market more mature fore that particular product, and that can prefer that typology of good more than an other one.

Internationalization related to production and internationalization related to the customer are two faces of the same medal.

In all this context the role of logistics appears very important. Logistics is important to reduce the productive phase, cutting useless periods of time and reducing costs, increasing the productivity.

In order to achieve this it is important to use some tools, as for example the implementation of developing zones. Free Trade Zone is surely the greatest concept of development zone and it was used also during the Roman Empire to improve the commercialization with economical enemies such as India or Chinese Empire.

For a company, it is important to find a good location for decentralize the supply chain, and internationalize the business. One of the first driver to choose a country is surely the presence of these development zones. An other important driver for choosing an area is surely the geographical location in relation with the business and the target market.

There is no a best practice for choosing a place to decentralize the business. But using a platform (how it is called the process of production and the export of the goods from a host country to the other markets) could be surely positive especially in some particular situations.

Why Logistics-Oriented Free Trade Zones?

The difference between Manufacturing-Oriented Free Trade Zones, and Logistics-Oriented Free Trade Zones, is certainly one of the most important point of our discussion, generally because if the first orientation regards just the production of a good, the second one is more related to all the steps within the supply chain.

Choosing Logistics-Oriented Free Trade Zones, it is possible to:

- Analyzing with a general eye all the steps in the business –
 There is not just the part of the production that has importance but also all the parts related to the relations with the customer or the sustainability of a business
- Observing different kinds of businesses While Manufacturing-Oriented Free Trade Zones are just related to some mechanical businesses, such as the textile or the food industries, Logistics-Oriented Free Trade Zones give the possibility to analyze several innovative businesses, some of them related to the future of the economy directly (or also indirectly, through the linkage to some macroeconomic topics of general interest)
- Understanding the new dynamics of the future According to a
 lot of experts, Manufacturing-Oriented Free Trade Zones are
 destined to die, giving space to logistics activities. Also in
 natural evolution processes for Free Trade Zone, the evidence
 shows that a Manufacturing-Oriented Free Trade Zones, during
 the years, tends to become a Logistics-Oriented one.

Logistics Industry is considered one of the most profitable businesses for the future, because every company in the next years will have to face with logistics problems and challenges. There are some countries naturally powerful in logistics activities, and others that are investing a lot to have a leadership position in the future.

Why the Dominican Republic?

In this discussion, we decided to choose a particular country to describe the idea of platform as a place for producing and exporting of goods to all the other markets. This country has a natural vocation for logistics activities but it is also investing a lot on logistics industry. The Dominican Republic was our choice for different reasons:

- An optimal geographical location for the new international economical dynamics – It represent a good hub for businesses among Europe, United States and South America (with emerging Brazil).
- An optimal economical environment The presence of FTZs is surely an other important driver. Until ten years ago, most of the FTZs in the Dominican Republic were Manufacturing-Oriented. Today, most of them are Logistics-Oriented FTZs because the economic advantages of a manufacturing oriented activities are finished. The Dominican Republic is a developing country with great opportunities for its future economy.
- A particular event as driver of development for the logistics industry in the Dominican Republic The Haiti earthquake of January 2010 in Port-au-Prince, showed Dominican power in terms of logistics activities. Even if it was a tragedy for Haiti, the Dominican Republic could have its first opportunity to become a platform in America for distribute aid in this case. Its system of transportation was improved a lot, as also a lot of companies started to focus on logistics activities, with strong advantages in

terms of network with European and American NGOs or affiliated company.

Studying the dynamics of the distribution of aid to Haiti, using the Dominican Republic as platform, is surely an interesting way to analyze and describe the strengths of Dominican logistics industry, but also its opportunities and spaces for improvements.

Why NGOs' activities?

As described above, the earthquake in Haiti was a catastrophic event that required the intervention of several companies from different countries. The natural position of the Dominican Republic in relation to Haiti, gave to the country a great opportunity of development of its logistics industry. In our discussion, NGO activities were chosen for different reasons:

- Timing in NGOs activities For the first 3 (and then 6 months) there was an early recovery operation. For distributing aid in this phase the most important thing was the timing. For this reason, Dominican infrastructures were exploited at the maximum of their potential to provide aid to Haiti. For this reason, analyzing the activities of NGOs it is possible to understand all the potential of Dominican logistics industry.
- Presence of different kinds of activities No-profit activities regard in general different typologies of industries. Food industry, textile industry, construction industry are the most common, but all of them are related to a same framework, represented by logistics industry. Also the final target is a common thing among all these industries, even if the operational target differs for the single institutions to be helped.
- Example of platform and experience The platform role of the Dominican Republic for the emergency during Haiti earthquake could have a strong 'experience effect' for the Dominican Republic and its logistics industry. All the investments made by

the Government in the last year for new highways and infrastructure is certainly a prove of this.

During the Haiti emergence in 2010, it was the first time when the Dominican Republic was actually used as platform for the production and distribution of a so huge number of goods.

In the area, there are some other countries with more experience, such as Panama or Costa Rica. For this reason, the emergence in Haiti represents a good case to analyze in order to understand how the Dominican Republic could exploit its National Competitive Advantages.

World Food Program had a plan for using the Dominican Republic as platform for all the NGOs affiliated to FAO's plan.

In this discussion will be analyze as real case, the implementation of the World Food Program through the exploitation of Dominican infrastructure and through the utilization of FTZs and PHs for producing and import. As real case we have chosen Oxfam, as example of NGO operating the World Food Program.

Among all the activities we have chosen a real case about the distribution of food. As example the author will describe the supply process of food to a Haitian orphanage with a lot of problem of sustainability and the value chain of the aid, using as distributor NGO Oxfam.

This example appears very important to understand the actual advantages in terms of reduction of costs, using FTZs and the Dominican Republic as platform.

So, there are some question to give an answer:

- Are the Logistics-Oriented FTZs the future of the FTZs?
- Which is Dominican future in logistics industry?
- Was actually positive using the Dominican Republic as platform during Haiti earthquake?

The answers to these questions will be given in the conclusion in the Chapter 8, after all the discussion.

Part I

The Theory. Free Trade Zones for economic development: the role of Logistics Industry for economical growth in the Dominican Republic

The concept of Free Trade Zone: historical background, goals and main features

"L'homme est né libre, et partout il est dans les fers" J.J. Rousseaus

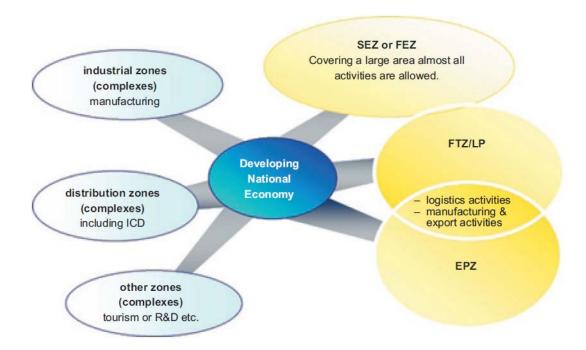
Free Trade Zones are the evolution of an important concept used for a lot of time in the history in order to develop the economy of a country. All over the time the terminology changed a lot. First there were just Free Harbors to represent this instrument. Then, real zones were created, called for a lot of time Free Trade Zones.

Generally to develop a national economy it is possible to recognize three different ideas of zones related to the target complexity, some words are also used for a geographical reason:

- Simple Forms of Zones They are the Free Trade Zones focused just in a kind of business. They are called also complexes. These zones can be in three different ways:
 - <u>Industrial Zones</u> Mainly focused on manufacturing
 - <u>Distribution Zones</u> Focused on logistics activities
 - Other Zones Focused in other activities such as Research & Development or Tourism industry
- Complex Forms of Zones Mostly represented by <u>Special</u>
 <u>Economic Zones</u>, where there are different cluster with several industries and a strong state intervention.
- Mixed Forms of Zones The real Free Trade Zones that are a
 trait d'union between <u>Logistic Parks</u> and <u>Export Processing Zone</u>,
 depending on which countries they are or where the
 government focalizes the investments

A way to see graphically what this classification represents is shown below in the Picture 2.1:

Picture 2.1 Several special zones as alternative policies for economic development



There is a strong evidence that if a country recurs to Free Trade Zones to develop its national economy or a local area economy there are good results, but there is a also a big literature describing its disadvantages.

This theory as background is basic to understand which the strengths and the weakness of this policy are. All along the history, FTZs helped a lot the development of the economy of a country, and nowadays, with all the different forms, continue to achieve this target. In particular, in the Dominican Republic case, FTZs are the most important driver of development.

Free Trade Zones between Manufacturing and Logistics, the importance of Port Hinterlands

> "Πιστ**ο΄** ν γ**ῆ** , **ἄ** πιστον θάλασσα" Pittacus of Mytilene

The double face of FTZs in front of Globalization dynamics is one of the most important concepts to underline. In particular on one side, the manufacturing activity of FTZs, more concentrated on exploiting advantages such as low cost labor. On the other side, the logistics activity of FTZs, more focused on exploiting the geographical advantages or infrastructure systems.

So for this reason it is possible to recognize two different orientations of FTZs, one is a traditional concept while the second one is the most recent and innovative idea of FTZ:

- Manufacturing-Oriented FTZs
- Logistics-Oriented FTZs

Actually, it is common to find mixed FTZs, in the sense that it is possible to find areas where there are concentrated both the activities. In general, in these areas there is also a harbor and for this reason these locations are called Port Hinterlands.

Port Hinterlands (PH) represent an evolution on FTZs, in terms of equilibrium between the two different orientations. PH concept can be considered one of the most innovative developing model. And generally, in Port Hinterlands surroundings it is created an Integrated Logistics Park (ILP), that is just a bit different from a simple LP.

PH and its relative ILP has clear functions inside it, with relative infrastructures and dynamics of management.

But not in all the situations the implementation of PH developing model and the creation of an ILP is optimal. There are situations where a Logistics-Oriented FTZ does not generate advantages. It depends on industries, kinds of activities, know-how and human resources but also on macroeconomics variables.

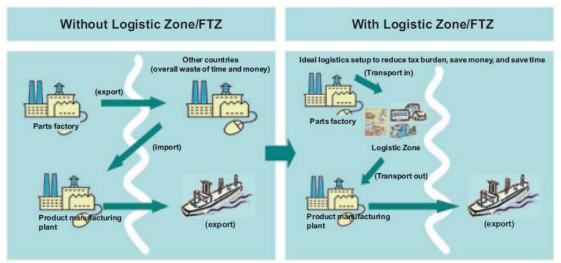
In the complex, Logistics industry in times of Globalization is getting more and more important. An example of this it is not just the creation of special FTZs related to logistics, but also because there are some areas that are naturally becoming logistics clusters (clusters as explained in the first chapter is a natural process). There are places where all the companies are automatically starting to collaborate in order to manage the value chain, focusing on their businesses in a particular industry that is totally related to Logistics.

These clusters are commonly called Umbrella Clusters, because these areas have the natural attitude to gather goods or attract services and then redistribute them, acting like a hub.

This can surely represent a great national competitive advantage as in the case of the Dominican Republic.

The real great advantage of a PH is described into this Picture:

Picture 3.1 The concept of Logistics-Oriented FTZ or Logistic Park (adapted by ESCAP secretariat from MOL Logistics (Japan) Co., Ltd.)



Here it is shown the advantage in terms of reduction of VAT and taxation of Logistics-Oriented FTZs and PHs.

Dominican Republic's National Competitive Advantage. Zonas Francas and Logistics Industries

> "Equivocarse de destino es también un grave error politico" G.G. Márquez

The Dominican Republic is the half part of the island of Hispaniola. In the eastern part of this island is situated the Dominican Republic, and before there was Spanish domination. In the western part of Hispaniola there is the Republic of Haiti, and before there was French domination. Even if the two countries share the same islands the two cultures are very different.

Also the economy is in condition completely different. The Dominican Republic has an economy more dynamic and in a developing phase, Haiti can be considered a poor country.

The Dominican Republic has an other geographical advantage. It is situated in the perfect centre of Caribbean area, in the middle between United States in the north and South America in the south. In the east, on the other part of Atlantic Ocean there is Europe.

This geographical advantage, as well as all the other fiscal, legal, social and political frameworks, contributed to let the Dominican Republic be a perfect hub for different kinds of activities. All the Caribbean region is actually considered like this by all the world. But the Dominican Republic is also the heart of this region, and also the richest economy of this area.

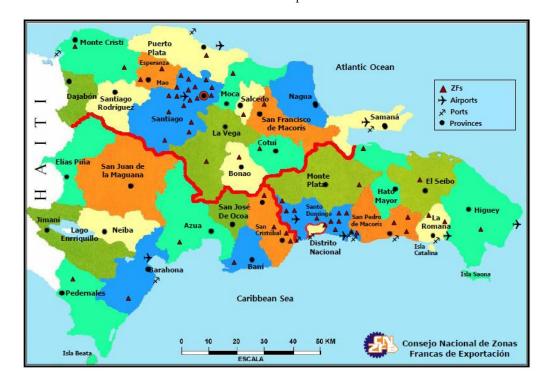
The Dominican Republic became a hub for manufacturing and import/export activities not just for its geographical position or for general political frameworks. The most important driver was the creation in its territory of FTZs. This could favor FDIs to the islands and also the transfer of know-how, useful for the future development of the economy.

But for its geographical position, FTZs in the Dominican Republic are more and more becoming Logistics-Oriented. Because of inflations and relatively necessity of high salaries, labor cost is not low as in the past. For this reason the Dominican Republic is reinventing its nature.

From FTZs focalized on textile industries (a lot of MNEs used Dominican FTZs for production and export to United States - for proximity - instead of China, for instance) the nature of them is moving to Logistics-Oriented, exploiting the good Communication System and the optimal geographical area. In this way it was possible in the last years to play on the strengths of the country, minimizing the effects of the weaknesses.

For this reason Logistics Industry in the Dominican Republic case, is the natural evolution of FTZs sectors, that towed the growth of the island for so many years.

Today the presence of FTZs in the Dominican Republic is great as it is shown in the map:



Picture 4.1 Location of ZFs in Dominican Republic

The concentration in different areas is related to the features of local economy. Santiago and Cibao Valley for Agriculture for instance.

Part II

The Practice. Food Fortification and Logistics in the Dominican Republic and their importance for Humanitarian Initiatives in Haiti: Oxfam case as distributor NGO

Food Fortification as core business in Agriculture industry of the Dominican Republic. Role of Logistics and FTZs

> "Morremos de fome, enquanto vemos os ramos carregados da árvore da vida" P.Coelho

In the past Chapter a general overview on the economy of the Dominican Republic was given. The main and most successful industries in the Dominican economy are surely tourism, manufacturing, agriculture and construction.

For this thesis and the business case it is very interesting underline and tell more about the agriculture industry.

As described in the past Chapter, Agriculture and Food industry in the Dominican Republic is based on clusters. In all Cibao province, the most important area for agriculture in all the country, there are different clusters focused on particular products, sometimes typical, sometimes exotic.

The great disadvantage of the Dominican Republic in this sector is related to the dimension of the country. The Dominican Republic cannot even imagine to compete on quantity with bigger countries such as Argentina, Mexico or Brazil, just to list some names in the same region.

In last 10 years, the Dominican Republic fount an other way to exploit its natural features and product, and this strategy is strictly related to FTZs activities. Some of them, the FTZs instituted in the last years, are focused on research and development and especially GMOs and modifications of food.

With this strategy, the Dominican Republic can have food products with different features and with competitive advantages with the similar products of the other competitors.

Also in this case, logistics-oriented FTZs are very important, because with this strong know-how in food biotechnologies, a lot of commodities can

be imported by other countries, and with competitive costs, they can be modified in order to have advantages, as in the case of fortified food.

Among the different supplements in food it is possible to identify:

- Vitamins and Co-Vitamins
- Essential minerals
- Essential fatty acids
- Essential amino acids
- Phytonutrients
- Enzymes

From a scientific point of view, biotechnologies applied on Food have positive and negative arguments. As it is common in the Dominican Republic, there is not a strong ethic debate on common people, so the Dominican Republic appears an interesting place to develop this sector.

FTZs and logistics activities are good drivers, but also NGOs demand. MercaSID is an interesting example of it, specialized on fortification of corn.

In the Appendix 3 there is attached an interesting interview with José Llanos of the department of Marketing and Sales in MercaSID.

MercaSID has different kind of products:

- B2C: Maicera and Mazorca
- B2B: DM Flour, Extrathick F, Semolina FL, Granular, Semolina SK and Semolina SC.

MercaSID is leader in digermination process. Thanks to the digermination process, these flours have a 2-3 months of conservation versus the natural 30 days of simple corn. So, their structure and features are perfect of NGOs aid, that require a strong level of conservation.

A lot of NGOs chose this form of distribution in Haiti, and in the next chapter the WFP strategy will be described.

Puerto Caucedo, Rio Haina and FTZ at Haiti border for humanitarian initiatives

"Give a fish to a man and he will eat for a day.

Teach to him how to fish and he will eat for ever"

Chinese Proverb

Logistics clusters can be related to several industries but with a same final target. For a lot of years the Dominican Republic was focalized on textile industry for instance. All the logistics clusters were basically related to exportimport activities for textile industry, especially to the United States.

After the Haiti earthquake in January 2010, there was a strong increase in different industries of manufacturing. According to the CNZFE report 2010, the importance of Textile industry (considering employment and number of industries) in ZFs decreased of 7.2%, while Pharmaceuticals and Food products increased (respectively 1.2% and 4.1%). Everything happened in just one year.

This is actually the consequence of all Dominican Republic interventions to help Haiti, after the earthquake. The Dominican Republic is the closest country and, after a complete destruction of all the infrastructure in Haiti for the terrible cataclysm, the east side of the island sent to the west side all the first aid of the case (in terms of food and pharmaceuticals essentially).

World Food Programme by UN chose the Dominican Republic as platform for its aid.

The most important thing to underline is the difference among two main concepts:

 <u>Early Recovery cluster</u>: It is considered a provisory cluster (it last in general 3 months). It is related to logistics providing of aid in an area that needs it. Sometimes it can finish its activities

- after 3 months, if the emergence is finished. In other cases there is an evolution and it can become a permanent cluster.
- Humanitarian cluster: It is a form of logistics cluster but with a strong concentration of NGOs and companies related to NGOs activities. It is definitive, and it generally lasts until the complete achievement of its last objectives. In different casse it can have different names, as it will be shown after.

In Dominican Republic case, there was an evolution from an early recovery cluster to a humanitarian cluster, with also a change in the geographical structure of it.

The structure of the final cluster was this one:

Legenda
Roadi HQ
Porau-Prince

Por-au-Prince

Rio Haina PH
Hainanosa Park
La Source

Rome HQ

Atlantic Ocean

Haiti Border ZF

Rio Haina PH
Multimodal Park
Las Americas Airport

Santo Domingo

Dominican Republic

Caribbean Sea

Picture 6.1 Structure of Logistics Cluster of WFP in Hispaniola (made by the author)

The composition has two PHs (with relative FTZ as described in the map) and 1 other border FTZ:

- Hainamosa Park with Rio Haina PH
- Multimodal Park with Puerto Caucedo PH
- Haiti Border FTZ with the Jimaní base at the border

In the last year, Rio Haina PH represented about the 30% of the aid while Puerto Caucedo PH the 70%.

Oxfam case for Haiti earthquake emergence, and its usage of the logistics cluster in distributing fortified corn

> "Non qui parum habet, Sed qui plus cupit, pauper est" Seneca

The earthquake of January 12 in Port-au-Prince, capital of the Republic of Haiti, was a terrible natural event that destroyed a country, already mired in poverty and corruption.

The first country that actually helped Haiti, in the first days after the earthquake was the Dominican Republic, situated on the other part of the island of Hispaniola. But it was not simple to help Haiti. Historically, the two countries were in conflict for a lot of years, for different reasons. After its independence, Haiti started to make a war against the Dominican Republic, in order to conquer all the island. The result was the relegation of Haitian in a small territory of the island but very densely populated.

The Dominican Republic started to have a constant economic growth, especially in the last decades, thanks to its national competitive advantages (the Spanish language first of all), while the Republic of Haiti continued to remain a poor country, the poorest in the Latin America, and one of the poorest of the world.

The majority of the aid came from the Dominican Republic, during the first three months of the earthquake, but officially through UN army. Dominican government put away from the port regulation, all the taxes on goods destined to Haiti, for the first 3 months (than 6 months), and a lot of companies started to use FTZs to import aid or produce them.

Oxfam was one of the first NGOs operating in the Dominican Republic for helping Haiti. They signed about one hundred contracts with Dominican suppliers of aid (from food to building material, passing through clothes, and in general everything was needed). It was one of the most operative NGOs in Dominican/Haitian first early recovery cluster and then in in the second phase as well.

In the typical supply chain of an aid, it is possible to find several steps that they can be summarized like this:

- Producer (With all the entire value chain of the product)
- Distributer (NGOs, such as Oxfam for instance)
- Costumer (Generally an institution operating in the area)

It is interesting to analyze all this supply chain. In order to be clear and simple, it needs to consider an orphanage as customer. This orphanage was helped by Oxfam in the first emergency phase. Oxfam is the distributor and it is using the typical structure of the early recovery cluster (during the first 6 months) and the logistics cluster (after the first 6 months). The producer can be a Chinese producer of corn, operating also in the Dominican Republic through the Multimodal Caucedo as FTZ, for instance.

Table 7.1 Increasing of price of corn, all along the Supply Chain (WFP, 2011)

Company	Country	Price	Charge
Farm	China	0,22€	-
Qingdao Imp. Exp.	China	0,29€	30%
China Shipping	China	0,36€	25%
Ageport (FTZ)	Dominican Rep.	0,36€	Free of Charge
Coopsmuca	Dominican Rep.	0,46€	30%
MercaSID	Dominican Rep.	0,96€	Adding factors
Oxfam	Haiti	0,96€	Free of Charge
Edv	Haiti	0,96€	Free of Charge
Final Orphanage	Haiti	0,96€	-

But now, in July 2011, after one year and half since the earthquake, it is anymore an emergency period, and for this reason the orphanage is starting to find some problems of sustainability. There are not anymore some kinds of advantages related to the supply chain of the aid. Dominican ports do not have special priorities and policies for Haitian aid anymore. And it is interesting to analyze the other opportunities to make sustainable the activity of the orphanage.

Conclusion

During the introduction to this thesis, in the last part we made some questions to give an answer, and now, after a long trip through Development Zones, Caribbean countries and NGOs' activities, it is time to answer these questions. The questions were:

- Are the Logistics-Oriented FTZs the future of the FTZs?
- Which is Dominican future in logistics industry?
- Was actually positive using the Dominican Republic as platform during Haiti earthquake?

There is not a unique and sure answer to this question, but after this thesis it is certainly possible to give a serious opinion.

The future of FTZs is Logistics

There is a strong economical literature that affirms FTZs are destined to die. Its usage will be soon abandoned by the Government because there is a strong disadvantage in them, that it is difficult to be overcome.

FTZs have the feature to develop just an area of the country leaving in misery all the other areas.

Implementing Logistics-Oriented FTZs this disadvantages is avoided because the positive effect of a FTZ is not just on the companies inside the FTZ but also in all the companies related to the business. And in a Logistics-Oriented FTZ there are a lot of companies related to the final good because of the nature of the logistics industry.

In this situation, all the companies related to the supply chain of the product have advantages. So, it is not just something that is linked to the local environment of the FTZ but also outside.

For importing for example an aid to Haiti through Multimodal Caucedo Park, it will be not used just companies that are part of the FTZ but also companies outside it. All the transportation companies, or the accommodation structures are not part of the FTZ but just linked to it.

In developed countries the usage of Manufacturing-Oriented FTZ is obsolete. According to the evidence, the new FTZs created in developed countries are Logistics-Oriented. And all the FTZs in the developing countries that are becoming developed, tend to become Logistics-Oriented.

In BRICS countries for instance, most of the FTZs are becoming complex (with the creation of specialized FTZs) or are becoming Logistics-Oriented. But there are no FTZs that, following the evolution of the country economy, they remain just Manufacturing-Oriented.

So, it is true that FTZs can become obsolete, not giving more advantages to the area where they are implemented, but it is also true that to avoid this risk, it is possible to change their nature, starting to implement logistics activities.

It cannot happen always, but it depends on local or macroeconomic variables, such as the geographical position or the labor cost. Natural or social features of the country are very important to start logistics activities and develop logistics industry.

Future scenarios for Dominican economy

The Dominican Republic has all the requirements to become a rich economy in the future, especially for the strong intervention of the Government in important and crucial businesses for the country.

There are some typical industries that will continue to be strong, for natural reasons of national competitive advantage. Some of them are:

> Tourism – There are no developing Latin American countries that are not still strong in tourism. For example Costa Rica continues to be strong in tourism even if now there are more important business such as renewable energies.

- Agriculture It is difficult to imagine the Dominican Republic without strong agricultural clusters, also because actually the Government invests a lot on them, implementing and developing them.
- Construction Speaking to every Dominican, they affirm that is
 impossible to see Santo Domingo without no workers in the
 streets. This is totally true, because every Government of
 Dominican political history invested a lot in public
 infrastructures, such as buildings or highways.

But among these strong industries, destined to be strong also in the future of Dominican economy, there are surely other industries, destined to have a great role in the future. These industries are all the industries logistics related. Among this, it is possible to remark:

- Transportation The creation of new highways and the strong increase in the number of transportation companies in the last decades is a prove of how the Dominican Republic is investing a lot in the logistics industry. Dominican Government is understanding how the Dominican Republic has a great national competitive advantage in logistics activities.
- Telecommunications While transportation represents the
 physical face of logistics industry, telecommunications are the
 virtual face. The improvement in telecommunications'
 technologies is a prove of the strong concentration of
 investments by the Government in this industry. In last years, it
 had low results, essentially because of an immature market, but
 in the future there are surely good margins of development of
 this industry and success.

Summing up, considering that logistics industry is strictly related to these two activities, the transportation and the telecommunications, and considering the positive margins of development of the two industries, it is possible to affirm that the future of Dominican economy is strictly related to its performance in logistics industry. Logistics Industry represents the higher opportunity for its National Competitive Advantages, observing also its direct National Competitors in the same geographical area.

If the Government will be able to focus its incentives and investments for improving this sector the Dominican Republic will have great results.

The Dominican Republic as platform for NGOs

As largely described in the Chapter 7, the advantage of using the Dominican Republic as platform for aid by NGOs during Haiti earthquake emergence is surely clear and without doubts. The advantages are generally in two different faces:

- Costs Avoiding the payment of VAT or other import taxes, it
 is possible to have a lower costs for the aid, if this is imported in
 the Dominican Republic from abroad. If this is produced in the
 Dominican Republic it is possible to exploit the manufacturing
 advantages of local Manufacturing-Oriented FTZs.
- Safety Avoiding the storage phase in Haiti, with higher risks in terms of criminality or corruption, and exploiting the better social background of the Dominican Republic with almost the same advantages in terms of geographical proximity.

Considering these two important advantages it is possible to describe a best practice in Dominican umbrella cluster.

It is possible to recognize two different kinds of aid:

• Dominican Aid – The domestic one, in general manufactured in the Dominican Republic in Hainamosa Parks, more Manufacturing-Oriented. This is the reason why Rio Haina PH, counts just the 30% of the total aid imported for Haiti. All the local fruit or food aid, coming from the Dominican Republic clusters (Cibao Valley for agriculture for instance), pass through Rio Haina and Hainamosa Park and no through Puerto Caucedo and the Multimodal Park.

 Foreign Aid – The foreign one, in general imported through Multimodal Caucedo Park, a typical example of Logistics-Oriented FTZ. This is the reason why Puerto Caucedo PH counts more than the 70% of the total aid destined to Haiti. Most of them are from foreign countries, and they pass through Multimodal Caucedo Park and Puerto Caucedo PH, to avoid import taxes or VAT.

Considering the reduction of costs using the Dominican Republic as platform both in producing in a Manufacturing-Oriented FTZ or importing through a Logistics-Oriented FTZ, it is possible to affirm how was positive the decentralization of NGOs activities in the Dominican Republic.

Thanks to the experience of the humanitarian cluster in the Dominican Republic, the principle of the platform for aid, could be used also for other kinds of businesses.

Foreign textile companies for instance, could be based in the Dominican Republic and use the country as platform to export in United States or other nearby countries.

The only problems remains the number of Logistics-Oriented FTZs in the Dominican Republic. The only one that can be considered totally Logistics-Oriented is the Multimodal Caucedo Park, that was actually created with this objective.

All the others are mixed, hybrids in the world of FTZs that are trying to improve their status abandoning manufacturing activities.

Logistics Industry is a difficult challenge but it is one of the best way to face the internationalization of the activities and the globalization. Winning in this industry means winning in the entire economy.

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Appendix 1

No NGOs Companies in the Logistics Cluster

Fuel

Coastal Petroleum Dominicano Nativa Tropigas

Transporters

Coopsemuca Y/O Conrado Vargas Sindicato de Camiones y Furgones de SD Transporte Marreo Transporte Guzman Lopez

Vehicle Rental

Dollar Rent a Car Honda Rent a Car SA Mc Auto Rent a Car SA Thrifty Car Rental

Taxi Companies

Apolo Taxi
Exito Taxi
Nacional Taxi
Delta Taxi
Millenium Taxi
Taxi Imperial
Taxi Monumental I
Taxi Monumental II

Freight Forwarding Agents

Hispaniola Freight Services Maersk Logistics Adam Servis

Handling Equipment

Grúas Hino CxA Liftring Dominicana SA Servicio de Monta Carga y Transporte CM SA T&S Transportes y Servicios SA

Electricity & Power

CDEEE
EGEHID
ETED
UERS-PRA
EDENORTE
EDESUR

Telecommunications

Tricom SA Claro Orange Dominicana Viva One Max Wind Telecom

Food

MercaSID

Cesar Iglesias C Por A

Factoria de Arroz y Pastas Alimenticias J. Rafael Nuñez

Feliciano Peñalba

Procesadora Sánchez Ramírez

Factoría Agromolino de Moya

Factoría Bija

Factoría de Arroz Bisono

Font Gamundi y Co.

Arroz Hermanos Jerez

Factoría Hermanos Hernandez

Granos Nacionales

Comercial Agricola Sanz

Comercial Ramírez

Almacenes Castillo

Asociación de Comerciantes de Productos Agropecuarios

Casa Rodriguez

Almacenes de Granos Dominicanos

Accomodation

Apart-Hotel Atalaya

Clarion Hotel

Occidental El Embajador Hotel & Casino

Barcelo Gran Hotel Lina

Reinaissance Jaragua Hotel & Casino

Hispaniola Hotel

Hotel Colonial

Hotel Matum

Hotel Ambar

Hotel Platino

Hotel Mountain View

Hotel Victoriano

Hotel Villa Taina

Chic Hotel

Hotel El Libano

D'Angel Hotel

Hotel Maguana

Hotel Deysi Hns

Hotel Jimaní

Hotel Costa Larimar

Gran Hotel Barahona

Hotel Luxor

Hotel River View

Various

Casa Otero – Calderos

Cilindros Nacionales

Inoxida

Agrobiotek

SGS

Baltic Control

Fersan

Agro-Arrocersa SA

Sacos Nuevos y Usados José Gomez

Comercial Lijo

Gomas y Plasticos

Envases Dominicanos

Imprende la Unión

Mediabyte

Amigo del Hogar

Imprenta Original

Hiper Mercados Olé

Ferreteria Americana

Farmaconal

Bio-Medica

Bio-Nuclear

Serviamed

Serclamed

UNICEF Supply Division

Ferquido

Fertilizantes SD

Rinconadas

Bio-Agro

Agro Insumos Roswill

Solares & CIA Dominicana

Ferreteria Dominicana

Centro Commercial Lama

Ferreteria Casa Mejia

Cepror Villa Tapia

Delta Commercial

Editora Corripio SA

Industrias Nigua SA

Papeleria CCC

Suplidora Alonzo

Seguros Universal

Cecomsa

Soluciones Ambientales y Diseño

Video AAA

Viova SA

Productive Business Solutions

Delissa SA

Interauto SA

Compuaxess

Computadoras Dominicanas SA

Grupo Ramos

Cimple Publicidad

Appendix 2

NGOs companies in WFP in Haiti

Action Contre la Faim

Agence d'Aide a la Cooperation Technique at au Developpement

Ananda Marga Universal Relief Team International

Care International

Caritas Internationals

Initiative Developpement

Medicins du Monde

Médicins Sans Frontières

Oxfam International

Sos Enfants Sans Frontières

Save the Children International

Terre des Hommes

Welthungerhilfe German Agro Action

Appendix 3

Interview with José Llanos of MercaSID

Good morning José Llanos, we are going to start this interview with a simple question, but important to describe the point of view of this interview. Which is your position in the company?

I am José Llanos, manager of the Department of Marketing and Sales in MercaSID. I am also responsible for the Social Corporate Responsibility plan of the company and for this reason I am related a lot to the World Food Program activity in Haiti.

Which are the activities of MercaSID?

MercaSID is a distributor of food. Officially we provide food to restaurants, bars, supermarkets, schools all around Santo Domingo. Our activity is more focused on Districto Nacional but there are some affiliates operating also in Santiago. The activity in Santiago is completely different, because MercaSID is purchaser of food from the farms of Cibao that is the richest area in terms of agriculture and plants.

Considering that Santiago is the richest city of the Dominican Republic, why is MercaSID not a strong distributor in Santiago?

It is difficult to explain a reason. MercaSID is a company of the Capital and for this reason we developed a lot here. But I can offer to you a simple explanation. In Santiago food activities are in general more difficult. Cibao is very close to Santiago and all the local companies have a strong bargaining power in the local colmados¹ or for bars and restaurant. For the supermarkets is just a bit different because the rules for great distribution are completely different, but Santiago has a great tradition of small retailers.

-

¹ A typical local minimarket

Now, focusing on the aim of this interview, I know MercaSID is strong in Food Fortification processes. So, how can we define and describe Food Fortification?

MercaSID is the leader in Food Fortification in the Dominican Republic. Food Fortification is a chemical process that allows to add some healthy components for the organism to a particular food, without changing the taste of the product. The most common example there is all around the world is the iodated salt. In theory it is not a difficult process but in practice it requires a good knowledge in chemistry because, different quantities of these components could be dangerous for the health or change the taste of the food.

So, is there a real risk for the health in consuming fortified food?

It is not 100% out of risk but as everything in the nature. Also a natural product can have the same problems because the abuse of every ingredient can be dangerous. A person that has problems of high blood pressure, and uses a lot of salt (not iodated), is using a risky product. So I cannot affirm that fortified foods are seriously risky, or at least more than a natural product.

Which are the 'fortified products' of MercaSID?

The majority of the products of MercaSID are fortified. We have products B2C as flours, oils, milks and all the other products that are considered basic ingredients to cook. And then we have the products B2B, that we generally sell in large scale to big companies producing other goods as cookies for instance. All of this products are fortified because in the Dominican Republic is useful to give a better nutrition because there are some situations of malnutrition. I can give to you an example. In Villa Mella², in all the slum there are terrible situations of poverty and in this area the only way

² A famous slum of Santo Domingo

to buy food is generally in street markets. If a person that makes empanadas³ used our flour, the food a person is going to eat will be fortified and more nutrient than a normal product. The Government in the last decades is giving a lot of incentives to companies like us to improve the nutrition in poor areas such as Villa Mella or the small villages all around the country. On the other end they can give to agriculture and food industries a particular mark, related to the production of special foods, more competitive on the market. With fortified foods, our company can survive in the globalization.

I checked all the prices of MercaSID, why B2B products costs are lower than B2C ones?

This is quite normal because with an other business in B2B, we work on bigger quantities. Let's have as example Mazorca corn flour that I am sure is the product of you interest. Mazorca corn flour is sold at 10 pesos⁴ to a supermarket, that generally sells it at 14,95 pesos⁵. Every package is 14 oz⁶. Mazorca represents our standard receipt for corn fortified flour. The name of the equal product B2B is called Granular Flour and it is sold in bags of 50 or 100 lbs⁷ at a price between 395 and 622 pesos⁸. But the price has a strong volatility because there are a lot of variables to consider in B2B. One of them is the risk or the transportation.

Talking in European measures, that could be clearer for everyone. Fortified corn is sold to the consumer at $0.68 \in$ for kilo, while to an other company at $0.31 \in$ for kilo, so why is it sold to Oxfam in Port-au-Prince at $0.96 \in$ for kilo? This is a WFP data...

The reason is simple. It is not Dominican corn and there are not incentives by the Government for selling corn abroad. For law we have the

5 0.27€

³ Typical Latin American fried food with corn mass

⁴ 0,18€

⁶ 396.9g for a price of 0.68€ for kilo

⁷ 22,68kg or 45,36kg

⁸ 7,17€and 11,30€at a price between 0,24€and 0,31€for kilo, according to the quantities

priority to the domestic market and for this reason we cannot sustain the sales to Haiti at the same price. Here in the Dominican Republic there are limits of price that we have to respect for the commodities, and corn is the form of carbohydrate more used in all the country. For balance sheet, we generally increase the price of other products such as margarines. The majority of the corn for Haiti comes from other country, especially in Asia, where corn is not so used and they can sell to us at a lower price than other countries such as Argentina or Brazil where is more used. In the end, you have to know that for the World Food Program we are 'particular' distributors. The business that we have with Oxfam for instance is a typical B2B. But Oxfam does not work in food industry but it is an other distributor of food, more specialized. So, if we are sure that the payment from a local restaurant or bar is quite instantaneous, from Oxfam or other organizations in Haiti, there are different timings. And sometimes we do not have a lot of warranties.

MercaSID is officially in the list of the Dominican Logistics Cluster created by Word Food Program for providing food to Haiti. As manager of the Department of Marketing and Sales in MercaSID, I am sure in these last month after the earthquake, World Food Program has been an important player in your activity. Which is MercaSID role in the Logistics Cluster of World Food Program?

As I said to you before we are officially listed as distributors of food among the Dominican companies and our task is the provision of fortified corn flour called Mazorca and fortified soy oil, called Crisol. These are the two main products exported to Haiti and sold to NGOs through the Logistics Cluster.

Beside the economical advantages, why did you decide to create this link with the World Food Program?

It was not our decision. We were contacted by the UN in 2008, before the earthquake in the meanwhile we were preparing a plan of Social Corporate Responsibility. We decided to start this plan because our business was starting to enter US market especially in Hispanic areas such as Miami and Los Angeles, for the huge number of Latinos there. Our idea of Social Corporate Responsibility was more related to nature, biologic products or respect of the environment. When UN was looking for us we had a great occasion of implementing a social plan without high costs and with a great sustainability. We do not have a lot of economical advantages, maybe just on local visibility.

Isn't there also an inventory matter? In the sense that World Food Program is also an occasion to reduce inventories and in consequence the inventory circle...

We never had problems of inventory. We never had more than 32 days of inventory circle in last 10 years, when MercaSID changed the administration. Considering that for example the fortified corn flour has 3 months of storage, we are largely quite for inventories. Our products are generally recent and fresh. And we do not need any alternative occasions to dispose of inventories.

So, the core business of MercaSID is the distribution of corn flour. Which is the typical supply chain of the corn?

It is not the core business. We have also other business but certainly Mazorca fortified corn flour is one of the most profitable products for us. Regarding the supply chain for about the 60% of the flour the corn used is Dominican. The production is in Cibao district, where there are a lot of farms specialized on corn. The local price is very volatile but we generally purchase local corn at about 28 – 30 pesos for lb⁹, just a bit more than foreign corn. The advantage of foreign corn is represented by the quantities and for this reason we cannot sustain all our activity with local corn. The problem is the cost of transportation that from abroad is certainly higher but it is still affordable thanks to the advantageous fiscal regimes in some ports as Puerto

⁹ About 0,25€ for kilo

Caucedo. All the other corn comes from Asia, or China or Thailand where until one year ago the price was about 50% cheaper than here. In the last month the price is increasing a lot and it is reaching local prices.

So isn't corn just Dominican? But MercaSID has a Dominican image brand...

You know, the brand is Dominican but nowadays is difficult in small countries like the Dominican Republic surviving just with own strength. But we do not cheat the customer because the technology of fortification, the monitoring, the features of the corn and also the manufacturing systems are all made in the Dominican Republic. For example the cut of the sour is perfect for Dominican food. For this reason the customer is generally happy and satisfied.

The DR is usually considered a tax heaven by a lot of foreign companies, thanks to the large number of FTZs and PHs. Which is the role of FTZs system in MercaSID business?

I can sum up two different roles of Free Trade Zones in our activity. One is the import export phase for that part of commodities that is imported from abroad. We can import them at better prices than other countries. Our competitors in US have a lot of problems for importing rice from China for instance because there is a strong taxation. Here it is a real paradise for this. We do not pay any additional costs in some ports as Puerto Caucedo that is surely the more important. We are not part of any Free Trade Zone so we have to pay a part of the taxation, but it is common here to have an affiliated company for transportation that generally is part of a Free Trade Zone and avoid costs that in other countries are common. Puerto Caucedo is excellent for this because there is always a company from a different country that can be used as referent for a particular import. There is a Brazilian referent, that we use for example for palm oil, or a Chinese one, for rice or corn. The second role is given by the research and development activity. For us GMO

technology is very important. Here it is not like in Europe where people is afraid of GMOs. Here, GMOs are the solution for productivity and improvement in technology. The collaboration inside the FTZs operating in research and development among the different companies, it is very useful to give to our country a knowhow that we naturally do not have.

In your opinion, how much the government is improving the FTZs system in the country?

In the last decade, the only great improvement was given by the creation of Puerto Caucedo. Everything in the Dominican Republic is imported through Puerto Caucedo. I think the Government could create other ports or airports with the same fiscal regime of Puerto Caucedo to improve the status of the Free Trade Zones industry.

Coming back to the World Food Program activities, which NGOs do you provide?

Oxfam is our main consumer. But there are also Action contre la Faim, Caritas International, Médecins Sans Frontières and Save the Children International. But there are also other NGOs that prefer to purchase other products from other companies.

According to NGOs, this is not an emergence period anymore. The emergence operation finishes after 6 months. Now it is a development operations and also the logistics structure of the World Food Program cluster in the DR is changed. How long are you able to sustain the distribution of aid to NGOs in Haiti?

We do not have a real limit related to our balance status. The only problem is related to the increase of the price of the commodities. All the commodities are increasing all around the world, and the real problem is China. China was for all of us a good referent for low cost commodities but in the last year corn, rice and wheal increased a lot and if the price overcome the

local price, it could become not more sustainable. In that case the solution could be selling it without fortification as a lot of our competitors already do.

Are there other competitors in the DR are doing the same program of SCR?

Yes, there are. Especially there is very active and famous local company called Granos Nacionales also this with the headquarter in Santo Domingo but they do not do fortified food. Their activity is more related to commercialization of rice and beans, that is also a typical source of carbohydrates in local diet. But for this reasons there are a lot of competitors in Haiti because rice and beans is a very common business, especially after the earthquake. It is a cheap and without risks business.

And now some questions that I can ask just to a Dominican. What do you think about the difficult relations between DR and Haiti?

Eh, I know it is difficult to understand our relations. You know we fought for a lot of centuries, first of all during the French – Spanish period and then with the independence. They tried to conquer us. But now we are richer than them. I really think that this period after the earthquake will be the end of our bad relations. I remember that the day after the earthquake the first aid was given by the Dominican Republic, but Dominicans were not allowed to enter Haitian territory because Haitian people did not want to be helped by Dominicans. All the aid given by the Dominican government in the first days were distributed through UN. Now, after one year and half there are a lot of Dominican working over there. A lot of companies like the ours, have partners there and this is surely something of unthinkable two years ago.

And which is the future of the DR economy?

Costs are increasing a lot, inflation is very high and this is the most important problem for our economy. And the problem is especially for a

social point of view. There is not a good system of redistribution of richness. And without purchasing power is difficult for a company goes on. In our case for instance, we have more advantages because our activity is basic. Every Dominican consumes corn flour or oils but for the other business this could be a great problem.

And what about the future of agriculture and agro industrial industries?

In all the years of my life I do not remember any crisis of agriculture. This industry is basic in our culture. The only real competitor for us is Cuba, but it does not have a free system like the ours, that maybe economically is too free. And the investment on agro industrial are very positive for the future of this industry, waiting for the fall of the Cuban regime that can give a great sprint to their economy, also in agriculture.

Considering the great critics to United States for the management of the operations in Haiti, which is the future of Haiti and especially of its agricultural industry?

After the earthquake Haitian government had a great opportunity to exploit all the foreign investment, in form of aid, to build a new Port-au-Prince, in an other area like a planned city on the model of Washington for instance. People there is still in tents and they are building alone their houses in the same areas and just with sand and water. They are loosing a great occasion after a terrible tragedy. Regarding the agriculture I do not know any real competitor in Haiti. Ten years ago, when I started to work for MercaSID, there was a company in Haiti called Hasco, operating in sugarcane business. A lot of people were working there, now are working in the Dominican Republic or in the US. Everything is blocked by the system and people is eating tree soups. It is very difficult to solve a problem like this, considering that all the world is working there, without results.