

The Economic Viability of International Trade of Organic Honey from Guatemala into the United States of America

F-11: Can design and produce a significant document that gives evidence of advanced competence.

F-12: Can assess the economic viability of international trade of organic honey, and create a business plan to export organic honey from small beekeepers in Guatemala into the United States.

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I. INTRODUCTION

The Research Problem: The United States of America is a rich and vast country with many resources. However, per the Economic Research Unit from the United States Department of Agriculture (USDA), the demand for a variety of foods, tropical agricultural products and spices has increased drastically over the last 10 years. This demand is a result of the growth in diversity and a multicultural population in the United States. As a consequence an increase of import products from all over the world has taken place. In 2013 the total of U.S. food imports including agricultural and non-agricultural products, but excluding liquor, was 109,465.9 millions of dollars (USDA, 2014).

In this Advanced Project, I will focus on the import of honey, which falls into the sweets category by the USDA standards. The intent of this study is to estimate the economic viability of the import of honey from Guatemala into the United States. Nowadays, the major providers of honey to the United States are Canada, Argentina and Mexico, with a total value of sweets import in 2013 of \$589.800.00 millions of dollars; this dollar amount includes honey, maple syrup and molasses (USDA, 2014, www.fas.usda.gov/gats).

Simultaneously, we have seen a drastic decrease in the production of domestic honey. According to a 2013 analysis by the USDA's Economic Research Service (USDA) in 2013, the United States "produced 149.5 millions pounds of honey, down

about 35 percent from levels produced 20 years earlier" they called this a "trending downward" in the domestic production of honey.

Furthermore, the Economic Research Service from the United States Department of Agriculture (USDA) also highlights that the demand for honey is increasing constantly. Consumers have driven the demand to high levels in the last decade, either by purchasing natural honey for consumption or to be used in the food service industry. I believe this trend is a consequence of the power in information consumers have nowadays. It is common knowledge that honey has been used for centuries as a healing ingredient, especially in winter months. Moreover, the National Honey Board (NHB) has been actively promoting honey as a "natural ingredient", and in the present we have a new generation of people trying to eat healthier, increasingly demanding natural and organic foods (Clemons, 2008, p.14). There is also a small amount of honey used by the cosmetic industry. The Economic Research Service of the USDA details that the consumption per capita "has grown from 1 pound to 1.48 pounds between 1989 and 2013...consumers purchased 105.2 million pounds of honey in 2013, up from 57.3 million pounds in 1989" (USDA, 2014, p. 11).

The demand for honey also increased in the food manufacturing industry. Whereas, in 1989 manufactures purchased 190.2 million pounds of honey, by 2013 food manufacturers were buying 340.7million pounds of honey (USDA, 2014). Overall honey import volume has increased, as the USDA states that it is "is 90 percent larger in 2013 than 10 years previously" (USDA, 2014, p.16).

As a consequence, the price of honey has also increased, due to the combination of the decline in domestic honey production and the increase in the

consumption and demand by U.S. consumers. To supply this demand, honey is used from both the United States beekeepers and foreign producers through the import of this product. In 2013 the imports of honey came from 100 different countries. According to the USDA, the United States is increasingly sourcing honey from Argentina, Vietnam, and India countries that are thousands of miles away from United States borders, increasing costs of transportation, just to mention one inconvenience.

To demonstrate the viability of the proposal to carry out a business plan for the development of organic honey production industry, and establish an international trade program from Guatemala into the United States, I will describe the reasons and facts that make this proposal convenient, doable and overall a positive effort with mutual benefits for Guatemala and the United States.

For this purpose, I will describe the actual situation of Guatemala, a small country, located just south of the border of Mexico in Central America, approximately 1,510 miles away from the United States. Because of its geographical location, Guatemala is a country that has all the qualities to provide honeybees with an ideal forage and weather conditions to obtain exceptional nutrition, diversity of crops, spring-like weather conditions year long and a minimum exposure to pesticides. Therefore, reducing honeybee health problems that might weaken the colony strength (MSU, Global Edge, 2014; tropicalforages.info, 2014). On the other hand, Guatemala's economy has long been known as agriculture based, which will benefit from international investment and new opportunities to provide small farmers and beekeepers with exposure and growth. Besides, the proximity of Guatemala will reduce

transportation costs and time for the import of honey into the United States, which might be translated into lower price for this commodity.

This investigation will not only favor exporters and consumers; most importantly it will benefit small farmers and their families in Guatemala. Personally, this issue is important to me because as a Guatemalan citizen and a former employee of the Foreign Service, I was able to see many small farmers leaving their communities and migrate to the United States, looking for a solution to their hunger and poverty. Nowadays, Guatemalan's primary source of income is remittances from Guatemalans leaving abroad (Banguat.org, 2015). Many of these families were torn apart by these decisions, leaving vulnerable children behind, and making many farmers lose their properties to the hands of smugglers. The little money they have is used to cover their travel expenses, increasing the problem of irregular immigration into the United States. I believe this problem has to be solved from its roots and not at the border. Moreover, giving these people the opportunity to advance economically in their own lands and country will strengthen the Guatemalan economy and overall stability of the country. I truly believe that the industry of honey production is an economically viable solution to the problem of small yields of organic farming in developing countries, such as Guatemala.

Finally, one of the purposes of this project is to expand fair trade practices in Guatemala and contribute to the mindset of other exporters, small farmers and beekeepers. The main goal of this study is to investigate whether the production and export organic honey is an economically viable option in Guatemala, based on its ability to provide sufficient income for smallholder farmers and beekeepers.

A. Definitions:

Honey: According to the National Honey Board Honey "is a versatile and natural material, produced and gathered via the combined efforts of honey bees, *Apis Milifera*, and beekeepers. Honey bees first visit flowers and forage to gather nectar, which is then stored in a special "honey stomach" (National Honey Board, 2014).

National Honey Board: A membership-based group funded by the agricultural industry to promote and educate consumers about the benefits and uses of honey. The NHB pair with researchers to produce marketing and promotional programs to benefit this industry. Its main funds come from the assessment of one cent per pound on domestic and imported honey. The NHB Board's is composed of ten members, appointed by the U.S. Secretary of Agriculture, which represents producers (beekeepers), packers, importers and marketers (NHB, 2014).

USDA: United States Department of Agriculture. Its mission is to protect and control the agricultural activity, livestock and food industry in the United States of America.

AMS: The Agricultural Marketing Service, a branch from the USDA. Its main purpose is to support the outreach efforts made by USDA, creating marketing campaigns and conducting research for that purpose (USDA.AMS, 2014).

Producer: Also, known as beekeepers, are the people in charge of taking care of the honey bees, bee hives, and are responsible for the collection, straining and packaging of the honey (NHB, 2014).

Importers: Any person who brings into the U.S. commodities for sale, such as honey. Importers can act as a principal or as an agent, broker, or consignee of any person who produces honey or honey products outside the United States for sale in the United

States, and who is listed in the import records as the importer of record for such honey or honey products. (USDA, 2014)

Exporter: The exporter is the businessperson who takes commodities from its place of origin to another international market.

Colony Collapse Disorder (CCD): Term used to describe the situation in which bee colonies lose their workers without a reasonable explanation. According to Foster et al. (2007) "CCD has resulted in a loss of 50 to 90% of colonies in beekeeping operations across the United States. Honey bees were found deserted by most of the worker bees, leaving the queen and a small number of bees unable to attend to the abundant brood of the colony, that showed plenty of food and pollen, and no dead bees were found outside of the colony" (Cox-Foster et al. 2007, p. 283).

Generic Promotions or Commodity Check offs: "...represent various commodity organization programs to enhance the demand for [honey]. Legislative authority to implement a generic program can be found at both the national and state levels. Nationally, the common element is that the programs cover geographically the nation and imports into the U.S. Producers, suppliers and/or importers are subject to an assessment with the exceptions being specifically defined in the enabling legislation for the industry" (Ward, 2014, p. 5).

First Handler: "...the first person who buys or takes possession of an agricultural commodity [honey] from a producer for marketing. If a producer markets the [honey] directly to consumers, the producer shall be considered to be the first handler with respect to the agricultural commodity produced by the producer" (AMS.USDA, 2014, p.3).

Pollination: Is the process in which pollen grain gets transferred by honeybees in seed plants from the stamens, where they form, to the pistil. According to the USDA at least 30% of agriculture relies directly on pollination. Pollination is required for fertilization and the production of seeds. On the surface of the pistil the pollen grains germinate, and form pollen tubes that grow downward toward the ovules. Insects (especially bees) and wind are the most important pollinators. (NOSB, 2010, p.2; Merriam-Webster, 2015)

Forage: Is described as the grasses and other plants that are eaten by animals. In light of this study, we will use the definition used by the NOSB; a forage zone is a land or bodies of water, within a 1.8 mile (3 km) radius of the edge of the apiary/bee yard which provides bees with water, nectar, honeydew, pollen and propolis (NOSB, 2010, p.5).

Surveillance Zone: Per the NOSB, is a land area of 2.2 mile radius (3.4 km) beyond the forage zone which may contain high risk activities (NOSB, 2010, p.5).

United Nations Global Compact: According to the United Nations Global Compact brochure, this institution was proposed by former UN Secretary Kofi Annan in 1999 during a meeting in Davos, and it was later launched in July 2000. According to the UN Global Compact, it is:

A leadership platform for the development, implementation and disclosure of responsible and sustainable corporate policies and practices... it seeks to align business operations and strategies everywhere with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption. With nearly 8,000 corporate participants in over 140 countries, the UN Global Compact is the world's largest voluntary corporate sustainability initiative (UN Global Compact Office, 2014, p. 2).

Apiculture: The management and production of honey bees, queens and bee products, such as honey, wax, propolis, royal jelly, beeswax, pollen and bee venom or any other product from bees intended for human use or consumption (NOSB, 2010, p.5).

National Organic Standards Board (NOSB): According to the USDA the NOSB is appointed by the Secretary of Agriculture, the NOSB is a Federal Advisory Committee comprised of 7 sectors represented as follows: four farmers/growers, three environmentalists/ resource conservationists, three consumer/public advocates, two handlers/processors, one retailers, one scientist, and one USDA accredited certifying agent. The NOSB serves as an adviser to the USDA, to help determine which substances should be allowed or prohibited in organic farming and processing, also is responsible to review the list of substance allowed in production every 5 years.

National Organic Program (NOP): Is the program in which the USDA created the National Organic Program Final Rule, published in December 21, 2000, to establish the requirements to become USDA organic certified. This suggests that the product labeled USDA organic, went through "approved methods that integrate cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Synthetic fertilizers, sewage sludge, irradiation, and genetic engineering may not be used" (AMS.USDA, 2015).

II. Literature Review

Section One: Historical Background Of The U.S. Organic Industry.

In order to understand the choices that US food consumers have today regarding organic and traditional food commodities, we need to step back and understand the history and trend of the US organic industry.

As explained before, the USDA is the government branch that monitors the rules and regulations of the agricultural food industry, including apiculture. According to Thilmany (2006) from the Department of Agricultural & Resource Economics, at the Colorado State University; the term 'organic' was first introduced in the United States by J.I Rodale in 1940. Rodale was influenced by works of Rudolph Steiner in Germany and Dr. William Albrecht at the University of Missouri. Rodale is the founder of the renowned Rodale Institute, which is the publisher for the *Organic Farming and Gardening* magazine. These scientists developed a common interest and emphasized the importance of organic practices, including the rejection of chemicals fertilizers and pesticides, among other important organic customs (Thilmany, 2006, p.1-2).

Thilmany reports that the organic food industry is increasing rapidly due to the growing interest from consumers, producers, farmers, policymakers and anyone who is conscious about the environment. This is paired with the ingenious organic marketing industry and the creation of a national organic certification program, which avails products that follow the National Organic Standard Board (NOSB) requirements. She continues explaining that the National Organic Program, was a result of great pressure created by consumers, in this effort the USDA has been strongly criticized for acting lethargically on establishing rules for the organic food industry. Thilmany reports that the first draft released by the USDA with recommendations for organic farming practices was in 1997, 7 years after first been discussed. Furthermore, Thilmany explains that the

formal adoption of the NOP by the USDA took place in 2000 with a finalized document released in 2005. This resulted in a dramatic increase in USDA activity in organic agriculture in a variety of sectors including apiculture (Thilmany, 2006, p.3). The last version of the Formal Recommendation by the National Organic Standards Board (NOSB) to the National Organic Program (NOP) in relation to apiculture is dated October 18, 2010 (AMS.USDA, 2015).

Thilmany cited in 2005 the Nutrition Business Journal, which estimated a growth in sales of organic commodities at 9 to 16% through the next 10 years, reaching an estimated 3% of the US food market (Thilmany, 2006, p.3). Now that these 10 years have passed (2006-2015), Thilmany was right. Evenmore, the Natural Marketing Institute (NMI) reveals that today almost 7 in 10 consumers use some type of organic product, an increasing trend for the last 9 years. In the U.S. the sales of organic products reached over \$35 Billions in 2013, with organic beverages and food accounting for almost 5% of all U.S. food sales (NMI, 2015). A higher number expected by the Nutrition Business Journal back in 2005.

Even more, the Natural Marketing Institute reports that overall U.S. organic consumers are active, community-involved, highly influential, and information seeking people. The NMI breaks down this group into segments according to their level of usage of organic products and commitment to the environment. Not surprisingly, Millennials are entering this group at a rapid pace, which suggests potential longevity and expansion of organic practices. Among the principal motifs, U.S. organic consumers present are a desire to eat healthy and avoid harmful ingredients, such as pesticides and hormones, mistrust of the food industry practices, desire to promote a better

environment and sustainable customs, and the presence of children in their household (NMI, 2015). All these factors account for a more optimistic and bright future for the organic food industry giving more committed consumers the opportunity to embrace a healthier lifestyle not only for the consumers, but also for the farmer families and their environment.

Section Two: 'Organic' Honey vrs. 'Traditional' Honey

The reduction of honey production:

Among the most valued commodities in the organic food industry is honey. Honey, it is associated with flowers and nature and it is the preferred alternative to refined sugars and sweeteners, which according to the USDA contribute to the development of allergies. In the Formal Recommendation by the National Organic Standards Board (NOSB) to the National Organic Program (NOP) in relation to Apiculture, dated October 18, 2010, honey is described as "the purest and simplest ways to eat as close to nature's intent" (AMS.USDA, 2015, p.3). Since honeybees are considered animals by the USDA, the Livestock Committee of the NOSB is responsible for issuing recommendations for USDA standards to control the production and commerce of honey products. These regulations have to be specific in order to guarantee an organic product, since honeybees fly to surrounding areas looking for forage in order to pollinate and perform their so vital activity for the agricultural sector. According to the USDA, at least 30% of agriculture relies directly on pollination. The process of pollination is necessary to crop diversity and maturity, besides creating honey honeybees also are responsible for biodiversity and food supply (AMS.USDA, 2015).

Additionally, according to the Sugar and Sweeteners Outlook Report of October 17, 2014, in the last 20 years there has been a decline in the production of honey per colony in the US, a decline from 80.2 pounds per colony in 1993 to a record low of 56 pounds in 2012 (USDA, ERS, 2014). Moreover, the USDA cites the work done by Dr. Ronald Ward, Emeritus Professor of the University of Florida. Among his studies, he just completed a 5-year evaluation of the U.S. honey market and quantified the impact of the National Honey Board's (NHB) generic promotion programs. One of Dr. Ward's conclusions was that honey production has been descending periodically for the last 20 years. Several issues have threaded the health and survival of honeybees, not only in the US but worldwide, including Tracheal mites, Varroa mites and Colony Collapse Disorder (AMS, USDA, 2015). The dramatic decline in per colony production of honey might be a result or combination from a variety of factors, in accordance with the research done by Dr. Ward and other scientists. According to Le Conte & Navajas, the first factor is the onset of multiple honey bee health problems, including reduced genetic diversity, poor nutrition, exposure to pesticides, among many others factors that we will develop in detail in the literature review. They continue describing the second factor, which is the kind of crops from which domestic bees gather nectar; consequently, the value and quantity of honey production is directly affected by these crops (Ward, 2014, p.3-5; Le Conte & Navajas, 2008, p. 9).

Is organic honey impossible to produce in the U. S.?

In addition there is a new trend of having honey bees pollinate "monocrops"; which are described as an extended space of land having only one kind of crop or

agricultural commodity, over and over again without rotation and used for commercial purposes (sustainabletable.org, 2015). According to Dr. VanEngelsdorp, beekeepers can stimulate the growth of managed honeybees in preparation of a pollination event, such as monocrops, by feeding artificial diets of sucrose or high fructose corn syrup and artificial protein diets to these colonies. Then these colonies are maintained in standardized equipment which facilitates the transport of colonies over large distances and under harsh weather circumstances to pollination sites (VanEngelsdorp, 2010, p. S81) An example of a monocrops would be almond fields, in where bees do not find diversity of flowers and forage, but are put to work with one purpose only. To add to this problem, the majority of these crops are monitored with excessive pesticides and chemicals, which are blamed for the development of the CCD (LeConte and Navajas, 2008, p.493-494). Undoubtedly the value and quantity of honey production is directly affected by the pollination and nectar gathered from these crops, and bees will eventually get sick or died in their efforts. In order to obtain a pure organic honey product, honeybees need a pesticide free environment and forage to gather nectar from, as well as diversity in crops.

According to the National Organic Standards Board, regulated practices to produce quality organic honey to compete in the international market regulations and requirements are needed, and as a result in December 21, 2000, the National Organic Program Final rule was published. In this publication the government of the United States accepts that there is an urgent need to put in practice regulations to safeguard the integrity of the population of honeybees, colony production and the quality of honey

products. The application of the apiculture practice standard issued by the NOSB is to regulate the production of bee products, which does not require the use of organic bees.

The primary difference between organic and traditional honey is the use of chemicals applied to the hive. According to Schneider, beekeeping experts argue that organic honey is almost impossible to produce in the U.S. and that most hives have traces of at least 5 pesticides. Moreover, forage bees fly to gather nectar, traveling through fields treated with chemicals, gathering harmful particles as well. Beekeepers do not have control over this situation (Schneider, 2008, web). The fact that the USDA has issued Organic Standards for apiculture, does not guarantee that all the honey products showing its label are 100% organic. Furthermore, these recommendations detail the methodology of honey production and handling, including the forage zone within a 1.8 mile (3 km) radius of the edge of the apiary/bee yard which provides bees with water, nectar, honeydew, pollen and propolis. This zone has to be at least 2 miles away from potentially contaminating and dangerous zones, such as landfills and crops sprayed with pesticides and harmful chemicals (NOSB, 2010, p.5).

Even more, Dr. Vaughn Bryant, Professor and Director at the Department of Anthropology from the Texas A&M University, explains that it is very hard to prove that all the information in the label of honey products is accurate, since it is hard to verify the origin and type of honey the retailer is selling. He continues saying that many nations, including the United States do not have strict requirements for truthful labeling of honey products. He also assures that most honey sold in the U.S. no longer comes from a single source, but are blends of different sources. He has extensive experience in testing honey, and after several years studying honey and its components; he

recommends that the best way to go about testing honey is through its pollen. Unfortunately, most of the honey sold in stores has gone through filtering, which removes pollen traces making it hard to track the real source of the product. Dr. Bryant asked some honey producers why they removed the pollen, and the answer he got from them was to "prevent crystallization", which Dr. Bryant completely thinks is absurd, since he claims this is unlikely to happen. He concludes that the solution would be to create a string testing program, in which only honey that has been tested can use certain descriptions in their labels, such as 'organic', 'grade A', 'clover honey', etc. (Bryant, 2014, p.29-33).

Section Three: Honey Trade in Central America

a) Is Guatemala An Economically Viable Option?

It is clear that the production of honey is not an easy task, and honeybees represent a great asset to the economic development of any country, as well as to the food supply worldwide. As we mentioned above thanks to the labor of honeybees, the production of agricultural products has been the main source of food worldwide. Despite technological advances, nature provides what the human needs in order to survive.

In light of this study, analyzing the history and economic situation of Guatemala is important. Guatemala is located in Central America south of Mexico, with access to the Northern Pacific Ocean and the Caribbean Coast, bordering with El Salvador, Mexico, Honduras, and Belize. Guatemala's topography is mostly mountain terrain with two mountain chains running across the country and plenty of volcanoes, with a small desert, sand dunes, hills and forests in between. Per the Global Edge report from the Michigan State University, Guatemala has a lower middle income in which the private sector accounts for 85% of the country's GDP. As far as trade goes, Guatemala's 3 top

trade partners are the U.S., Mexico and El Salvador. According to the UN Comtrade, the top trade products in 2013 were coffee and spices, bananas, and sugar and confectionary (UN, Comtrade, 2015). Moreover, per MSU's Global Edge report Guatemala's GDP in 2012 was composed by agriculture with 11.31%, services with 59.68%, industry with 29.01 % and manufacturing with 20.24%. Guatemala's exporter rank is 70/123 and importer rank is 68/123, determining that the imports exceed its exports (GlobalEdge.MSU.EDU, 2015). This information is valuable in order to understand the current economic situation and trade market in Guatemala.

According to Crane, the production of honey in Guatemala dates back to 1830, when the first Spaniard settlers brought bees from Europe to Costa Rica, and eventually to Guatemala (Crane, 2013, p.308). According to the Guatemalan Ministry of Agriculture, Livestock and Food (MAGA), the honey industry in Guatemala flourished until 1970, when the apiculture industry in Guatemala was affected by the entrance of the African bee, which resulted in the disappearance of several apiaries. In 2010 there were approximately 2,500 honey growers, gathered in 30 different associations producing over 2,400 tons of honey. The 80% of honey production is exported mostly to Europe, the principal buyers are the U.K. Germany, Spain, Belgium, Switzerland, Holland, Italy and France. However, a lesser amount is exported to the U.S., El Salvador, Costa Rica and Honduras. According to Carlos Caceres, who presides the Honey Division at one of the biggest export companies in Guatemala, the increase in production and import amount is due to the fact that countries importing Guatemalan honey are accepting multi-flower honey, abundant in the Guatemala. At the same time, in October 5, 2012, the Ministry of Agriculture, Livestock and Food, published in the

Journal of Central America a new set of rules for the control of beekeeping, which meets the requirements of the European Union on honey imports. The new guidelines provide an established process that secures a Guatemalan beekeeping registry, issuing operating licenses and health and safety certificates to honey exporters (MAGA, 2013).

b) Competition or Motivation: Costa Rica and Nicaragua

On the other hand, Guatemala is getting overshadowed by its neighbors, Nicaragua and Costa Rica. According to Costa Rica's National beekeeping program, a branch from the National Animal Health Service (SENASA), the production of honey in Costa Rica has improved drastically, increasing from 26,000 hives in 2006 to 45,000 in 2013, reaching a total of 900 tons in 2013. Approximately 1,782 beekeepers engaged in increasing productive capacity by breeding bee queens and promoting sustainable practices (Rodriguez, 2014). At the same time, Nicaragua had 22,600 hives in 2012, with profits of \$20 Million. Felix Linarte Lopez, head of the Nicaraguan Beekeeping Association, explains that there is a potential to reach 300,000 hives if the government creates policies that support and sponsor the beekeeping industry, which he claims has no harm to the environment (LaPrensa.com.ni, 2012).

Nonetheless, these two countries have demonstrated that with persistence and determination an increase in honey production is not only possible in a few years, but also a profitable endeavor worth pursuing. Guatemala has all the conditions to produce more and better quality of honey that can be sold not only in Europe, but also in North America, including the U.S. and Canada. The weather conditions provide a perfect place to have a constant production of honey. The next step would be to implement

strategies to increase the honey hive production in a sustainable way, and at the same time improve the quality of life of small beekeepers and honey merchants in Guatemala.

III) The Artifact: Grupo Fontanali Business Plan

As stated above, the purpose of this Advanced Project is to assess the viability of exporting organic honey from Guatemala into the United States, taking advantage of the present honey market circumstances described in detail in the previous sections. At the same time, the main goal of this project is to promote responsible and sustainable fair trade processes that will enhance the lives of men and women that are part of Grupo Fontanali, which is the company embracing this business project. Grupo Fontanali would be taking into consideration human rights, labor rights, environmental sustainability and anti-corruption principles.

Grupo Fontanali has been registered as a Limited Liability Corporation in Guatemala, obtaining its export license in January 2015; established as an export-import company with operations in both Guatemala and the United States of America. The company's main goal is to promote responsible and sustainable fair trade processes, taking into consideration the principles established by the United Nations Global Compact. The United Nations Global Compact, which comprehends a voluntary strategic policy for the private sector (corporations, academic institutions, non-government organizations, governments and business) that are committed to fall into line with the ten universally accepted principles, that comprise four categories, including

human rights, labor rights, environment protection, and anti-corruption (United Nations, 2014, p. 2).

Grupo Fontanali has a vision of growth and productivity, rewarding its partners and suppliers with respect, recognition and fairness. Moreover, Grupo Fontanali has the goal of helping agricultural families in Guatemala to find a self-sufficient and profitable way of selling its agricultural products internationally, creating revenue for them and the country. In order to create a profitable business we need to take into consideration the weaknesses and strengths not only faced by Grupo Fontanali, but also the country's economic status. According to the Global Edge report from the Michigan State University and the United States Embassy in Guatemala, the country has the following strengths and weaknesses:

Strengths:

- Prudent economic policies: low public deficit and debt.
- Support from the USA and multilateral lenders.
- Free-trade agreement with the United States and the European Union.
- Geographic proximity of the United States and Mexico.
- Strong tourism, agricultural, mining, hydro-electric and geothermal potential.

Weaknesses:

- Weak long-term growth.
- Vulnerability to external shocks (natural disasters, such as earthquakes).
- American economic situation, raw materials prices - coffee, sugar, bananas, gold, silver).
- Weak government revenues and institutions.

- Social tensions (poverty, inequalities, low education standards, ethnic divisions).
- Deficient infrastructures.
- Drug-related criminality.
- Weak investment (MSU, Global Edge report, 2013; Export.gov, 2014).

Considering these factors we can assess the viability of creating a successful and economically viable business in Guatemala. However, Grupo Fontanali has the advantage of having a Board of Directors composed by Guatemalan nationals, including two lawyers and one business administrative manager. All of them have extensive experience handling local laws and government institutions that oversee exports and agricultural products, such as honey. We have to consider in our business plan all the costs involved in the start-up of the operations, which ascend to approximately \$50,000.00.

Furthermore, taking advantage of the above mentioned market conditions of organic commodities in the United States, our company might be able to take advantage to promote and successfully sell our honey.

Based on these facts, Grupo Fontanali has developed a well rounded marketing strategy and plan, which will target environmental conscious consumers, committed to sustainability and aiming for a healthier lifestyle, based on the research provided by the Natural Marketing Institute, in addition to the feedback and interviews done to the Guatemalan Trade Commissioners assigned to the offices in Los Angeles and Miami (NMI, 2014). To target our well informed and tech savvy consumers, we have created a

website www.GrupoFontanali.com, and a Facebook Business page: <https://www.facebook.com/GrupoFontanali> to help us in our outreach efforts, providing them with information and background to support our credibility. Moreover, we have a list of contacts and potential costumers, including companies and small importers, that were referred to our company by a friend who is an active exporter of livestock from United States into Guatemala. We have also a customer relation management (CRM) system, in which we have input all our databases to start an email marketing campaign, in addition to personal notes, personal visitations and presentations. We have also consider participating in Trade Fairs, where we can target industry professionals interested in organic and natural products. As an example, we can mention the Natural Products Expo East, taking place in Maryland in September 2015.

In our marketing efforts, we have also consider our competition, not only from our region, such as our neighbors Nicaragua, El Salvador and Costa Rica, but also local importers who are currently buying honey from other countries such as Argentina, Vietnam and India. We have in our favor the DR-CAFTA Trade Agreement, which allow imports of honey from Guatemala paying zero duty fess. However, we need to take into consideration that there are other costs involved, including but not limited to the cost of honey, fees to the NHB, payroll and professional fees, licenses and permits, custom broker fees, shipment from door to door, import duties among others. Our company is certain that it can exceed the expectations of sales, with proper management and an aggressive marketing campaign to reach out our potential customers and network.

We have in our favor the climate in Guatemala, as previously stated. According to Ron Phipps, President of CNPA International Ltd. and Co-Chairman of the

Committee for the Promotion of Honey and Health, from the American Honey producers Association "The shortages and high prices of [honey] in 2013 are finding more acute expression in 2014. But the shortage of honey in 2014 is also rapidly and substantially narrowing the traditional price gaps among white, extra light amber, light amber and amber honey. Behind these shortages and escalating prices are negative climate events, especially the droughts in Argentina and Brazil. These droughts are affecting honey..." (AHPA, 2014). Let's take into consideration that Argentina is one of the major suppliers of honey to the U.S. import market, which indirectly benefits other countries supplying honey to the United States. In addition, the price of honey in Guatemala is approximately \$1.74 per pound. If we fill a 20" container to capacity, 67,200 pounds, to take advantage of all the shipping and processing costs, we are taking about a total cost of approximately \$40,000.00. The price of honey has spiked, per Phipps declarations, and we could sell the pound of honey between \$1.94 and \$2.10, it could be higher if we provide a seal of organic certification. By deduction costs to the approximate sales of \$310,000.00 we could make a profit between \$87,000.00 to \$150,000.00 per year.

Our goals is to become the preferred supplier of organic, natural and raw honey for U.S. importers, based on the superb quality of our product and the service we would provide, exceeding their expectations and creating last long relationships that will guarantee a rebound in sales.

Finally, we are committed to our environment and want to actively participate as members of the United Nations Global Compact, which will allow us to voice our values not only in Guatemala, but worldwide. In that sense we will use our experience to expand our market share and also share our knowledge and business mindset to other

exporters in the regions. We will continue looking for commodities that can create a source of growth and income to small farmers in Guatemala and Latin America, in order to create new adventures and enterprise opportunities for them and our company.

Conclusions and Recommendations

As a conclusion, we want to make sure this project is put into action and small beekeepers, agricultural families and honey merchants in Guatemala are rewarded by all the efforts made. Moreover, Grupo Fontanali wants to share the findings of this research with our fellow exporters in Guatemala. At the same time we would like to make a call and encourage the government of Guatemala to support sustainable apiculture practices, which are proven to generate income for small farmers, beekeepers, promote diversity in agriculture and provide natural resources of income. Policies that support and protect the populations of bees are needed worldwide. The abolition of the use of harmful pesticides and chemicals is a must, and the education of agricultural families goes hand in hand with the enhancement of the honey industry. Honey is liquid gold, and has been regarded as a great commodity for thousands of years.

Guatemala has all the potential and resources to increase its honeybee production and capacity of exportation. Moreover, programs that provide economical support and grants to small farmers are needed. With the proper support, education and guidance. Guatemala could become the primary honey supplier to its top trade partners, including the United States.

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