

Interactive Qualifying Project

**Reducing Total Cost of  
Money Spent on  
Hotel Food at the Escuela Agrícola  
San Francisco de Asís**

**Christian Gonzalez, Thiago Tose, Tiana Vasquez, Sonia Zarate**

**Project Advisors:  
Robert Traver  
Dorothy Wolf Burt**

**May 03, 2016**

## TABLE OF CONTENTS

<u>ABSTRACT</u> .....	03
<u>AUTHORSHIP</u> .....	04
<u>ACKNOWLEDGEMENTS</u> .....	05
<u>EXECUTIVE SUMMARY</u> .....	06
<u>CHAPTER 1: INTRODUCTION</u> .....	09
<u>CHAPTER 2: LITERATURE REVIEW</u> .....	11
<u>2.1 ECONOMY OF PARAGUAY</u> .....	11
<u>2.2 PARAGUAYAN SOCIETY</u> .....	11
<u>2.3 POVERTY IN PARAGUAY</u> .....	12
<u>2.4 FUNDACIÓN PARAGUAYA</u> .....	13
<u>2.5 ESCUELA AGRÍCOLA</u> .....	14
<u>2.6 KITCHEN DETAILS</u> .....	15
<u>2.7 HOTEL CERRITO</u> .....	16
<u>2.8 HOTEL DINING SERVICES</u> .....	16
<u>2.9 SALES AND FOOD COSTS</u> .....	17
<u>2.10 INVENTORY MANAGEMENT</u> .....	17
<u>CHAPTER 3: METHODOLOGY</u> .....	19
<u>3.1 CULTURAL UNDERSTANDING</u> .....	19
<u>3.2 DETERMINING NEEDS</u> .....	19
<u>3.3 ASSESSING POTENTIAL AREAS OF IMPROVEMENT</u> .....	21
<u>3.3.1 KITCHEN AND DINING OPERATIONS</u> .....	22

<u>3.3.2 HOTEL INVENTORY SYSTEM</u> .....	22
<u>3.3.3 HOTEL FOOD SPENDING</u> .....	22
<u>3.4 APPROXIMATE TIMELINE</u> .....	23
<u>CHAPTER 4: FINDINGS</u> .....	24
<u>4.1 KITCHEN AND DINING OPERATIONS</u> .....	24
<u>4.2 INVENTORY MANAGEMENT</u> .....	24
<u>4.2.1 FOOD ORDERING AND RECEIVING PROTOCOL</u> .....	24
<u>4.2.2 ACCOUNTING AND SPENDING</u> .....	25
<u>CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS</u> .....	27
<u>5.1 TENTATIVE KITCHEN RECOMMENDATIONS</u> .....	27
<u>5.2 INVENTORY RECOMMENDATIONS</u> .....	27
<u>5.2.1 RECOMMENDATIONS THAT RELATE TO PROTOCOL</u> .....	27
<u>5.2.2 ACCOUNTING</u> .....	28
<u>5.3 RECOMMENDATIONS FOR RESEARCH AT ESCUELA AGRICOLA</u> .....	29
<u>BIBLIOGRAPHY</u> .....	30
<u>APPENDICES</u> .....	33
<u>APPENDIX A: INTERVIEW RECORDS</u> .....	33
<u>APPENDIX B: OBSERVATIONAL NOTES</u> .....	37
<u>APPENDIX C: FLOWCHART</u> .....	38
<u>APPENDIX D: GRAPHS</u> .....	39
<u>APPENDIX E: CLEANING CHECKLIST AND ORDERING PROCESS</u> .....	41

## **ABSTRACT**

The Escuela Agrícola San Francisco de Asís is a school in Paraguay that seeks financial self-sufficiency. To reduce costs, the team sought ways to save money by examining the inventory and accounting system of the hotel food. Through quantitative and qualitative methods, the team researched and identified ways to reduce hotel food cost. Flaws in the record keeping and food storage were discovered. New spreadsheets will address record keeping and training of the staff and students will address the food storage.

## AUTHORSHIP

All team members contributed to the research through interviews and observations. The introduction, literature review, and methodology sections of this report were written collaboratively. Everyone helped to thoroughly edit the report for content, grammar, and structure.

**Christian Gonzalez:** Christian was the primary developer of the two recommended spreadsheets, Documento de Contabilidad Interno and Documento de Control del Inventario. His advanced technical skills designated Christian to conduct the quantitative data analysis of the hotel invoices. In addition, Christian co-wrote the findings chapter.

**Thiago Tose:** Thiago was a primary interviewer for this project. His exceptional Spanish speaking skills helped us to build a solid relationship with the interviewees and gather information effectively. Thiago also helped to acquire the hotel invoices and compile the information for analysis. With Christian, Thiago co-wrote the findings chapter.

**Tiana Vasquez:** With Thiago, Tiana was also a primary interviewer for this project. Her exceptional Spanish speaking skills helped gather information effectively with her expansive Spanish vocabulary. Tiana also helped to acquire the hotel invoices and compile the information for analysis. In addition, Tiana co-wrote the conclusion and recommendations chapter and independently wrote the abstract.

**Sonia Zarate:** Sonia was the primary note taker for the interviews, observations and meetings. Her excellent organizational skills were utilized to draft a detailed outline for the final report. Sonia also helped to acquire the hotel invoices and compile the information for analysis. With Tiana, Sonia co-wrote the conclusion and recommendations chapter and independently wrote the English and Spanish executive summaries.

## ACKNOWLEDGEMENTS

There are many individuals that have contributed to the successful completion of this project that we wish to acknowledge. First, we would like to thank Fundación Paraguaya for providing us the amazing opportunity to work at the Escuela Agrícola San Francisco. Specifically, we would like to thank Doctor Martín Burt for motivating and educating us on the changes that we can all contribute towards a better world.

Additionally, we would like to thank Director Cateura, Profesora Martina Caballero, and Profesora Marysabel Aquino for always being there for us to provide the most important information that helped to define the needs of the school.

A special thanks goes out to Cocinera Rosa Paez, Cocinera Mirian Rojas, and Señora Mirna Diaz for being there for us to provide information, and cooperating with our long observational studies while we worked on our initial goal.

This final report could not have been completed without the help of Señora Nelva Diaz, Señora Liliana Marroco, and Señora Mónica Britos for the efforts to help us acquire all financial documents and invoices for analysis.

We would especially like to thank our project advisors, Professor Traver and Señora Dorothy Wolf Burt for continuously guiding us through our project and help us develop a strong final report.

Finally, we would like to thank Fernando Ostertag and Kelly Jones for helping us adjust to the Paraguayan culture as smoothly as possible and create the most wonderful memories that we'll cherish forever.

## EXECUTIVE SUMMARY

### Introduction

The Escuela Agrícola San Francisco de Asís is a self-sustaining, agricultural school that provides education and entrepreneurial skills to young Paraguayans to lift them from poverty. Initially, the project sought to improve efficiency of the school kitchen by lowering its operating costs. Although there was progress, the focus of the project changed. The new problem became the high cost of food purchased by the hotel. Interviews, observations, and financial analysis served to explore this issue. Poor documentation, casual accounting, insufficient training of students, improper storage, and inaccessibility of relevant documents identify the root of the problem. Recommendations and spreadsheets were designed to improve the hotel's inventory system and reduce the costs of ingredients.

### Literature Review

Maintaining proper control of food costs is important when running a business. According to McDougall and Rose, "the rule of thumb within the fine dining industry is to maintain 30% food cost, or less." The goal is to keep it at this percentage to run a successful business.

An inventory system can reduce costs. Proper storage practices can also provide money-saving opportunities by preserving perishable foods, establishing a minimum stock, and implementing a first in, first out (FIFO) policy. Preservation of perishable foods and establishment of a minimum stock will help to utilize all purchased ingredients and provide opportunity to buy in bulk for a lower price. The FIFO policy ensures that older inventory stock is used before the newly purchased stock.

## **Methods**

To select formal research methods with sensitivity, the team conducted a cultural review by reading books, talking with Paraguayans, observing and participating in activities around the school.

After the cultural review, interviews with staff and observations of the kitchen helped identify school needs. After four weeks of research, school administration asked the team to focus on hotel activities and documents (such as hotel costs, purchases, supply lists, inventories, and record keeping protocol). Nonetheless, the interviews continued and observations of the movement of ingredients began. The observations of the movement allowed the team to create a highly detailed flowchart of the entire process. Additionally, hotel financial records were acquired from the school and foundation. Expenditures, income, and sales were investigated.

## **Findings**

The team identified four major issues with the inventory system:

- 1. Stagnant stock**
- 2. Last minute purchases and purchases in small portions**
- 3. Storage problems**
- 4. Food reception**

In addition, the team found four major issues with the accounting system:

- 1. Insufficient documentation of purchased food**
- 2. Inaccessible internal invoice copies**
- 3. Lack of a way to determine current inventory**
- 4. No one maintains a minimum stock of ingredients**



## **Conclusions and Recommendations**

Early kitchen findings resulted in tentative recommendations. These include diversifying the student menu, constructing a separate area for the bakery, and training the students to serve in a more responsive manner.

Relating to the protocol, the team has four major recommendations:

- 1. Use FIFO policy.**
- 2. Maintain a minimum stock of staple ingredients for hotel food.**
- 3. Change the protocol for food storage in three ways; cleaning, inventory keeping, and removal of rotten food.**
- 4. Implement a stricter protocol for receiving food.**

There are four recommendations for accounting inventory:

- 1. Use two spreadsheets, Documento de Contabilidad Interno and Documento de Control del Inventario, to take daily inventory and record details.**
- 2. Utilize Documento de Contabilidad Interno to record exact quantities and prices of ingredients purchased.**
- 3. Make copies of each invoice and recorded on the first spreadsheet.**
- 4. Utilize Documento de Control del Inventario to take daily inventory and maintain a history of the amount purchased annually.**

## CHAPTER 1: INTRODUCTION

Paraguay is a third-world country landlocked by Argentina, Brazil, and Bolivia. Outside of Asuncion, Paraguay's capital, the country is dominated by a rural population of mixed native and Spanish people. As of 2014, Paraguay ranks 112th out of 185 countries on the Human Development Index, a scale that measures a country's relative development (United Nations Development Programme, 2014). The poverty in Paraguay can be attributed to the lack of accessible education (Pan American Health Organization, 2012). The expansion of education to those living in poverty can help families overcome poverty. "A 2003 study sponsored by the National Center for Children in Poverty found that in families whose income falls below 200 percent of the Federal Poverty Line children score far below average on reading, math and general knowledge tests" (Jordan, 2016). One of the approaches taken to improve education for the general public are "Farm Schools". These schools help teach young Paraguayans basic business practices and essential agricultural techniques for farming in the twenty-first century.

One of these schools is the Escuela Agrícola San Francisco de Asís, a self-sustaining agricultural school owned by Fundación Paraguaya. The farm school is located in the small town of Cerrito in the Department Presidente Hayes. Within the premises are fifteen areas of studies where the students have the opportunity to practice hands-on work. Once the students graduate, they will graduate with two degrees, a High School Diploma in Agriculture/Livestock Technician and a Hotel and Tourism Technician Degree (Fundación Paraguaya, 2016).

Due to the school's self-sustainability, reducing expenditures is an important factor. Initially the project goal was to improve the efficiency of the school kitchen. As the most expensive room in the school, the kitchen is a prime location to begin examining how costs can be reduced. The team

used qualitative methods to research information relevant to our goal. The qualitative methods included formal and informal interviews and observations of kitchen operations.

After a few weeks of research and a discussion with school administration, the focus changed to specifically reducing costs of hotel ingredients through inventory management. The team continued to utilize qualitative methods but also began to incorporate quantitative methods. These included formal and informal interviews, observation of the movement of ingredients, and quantitative data analyses.

Despite the change in focus, the team generated tentative recommendations towards improving the overall kitchen efficiency. More importantly, the team generated comprehensive recommendations and developed platforms to help implement the recommendations to improve the hotel inventory system based on qualitative and quantitative data to maximize profits generated by the hotel.

## **CHAPTER 2: LITERATURE REVIEW**

### ***2.1 ECONOMY OF PARAGUAY***

Paraguay's economy can be classified as a market economy, driven by supply and demand, and is heavily reliant on agriculture and labor services. Paraguay's exports account for less than fifty percent of their total economy (Central Intelligence Agency, 2016). As of 2015, approximately nineteen percent of their exports come from industries, nineteen percent from agriculture and sixty-three percent from services (Central Intelligence Agency, 2016). The industries include sugar, cement, and electric power. Some of the most popular exported produce are mandioca, beans, peanuts and maize.

Today, Paraguay has a GDP of twenty-nine billion dollars and a GDP per capita of 4,264 dollars. The United States has a GDP per capita of over 50,000 dollars. This means that, on average, citizens of Paraguay earn less than one-tenth of a typical American's working salary (World Bank Group, 2016). In Paraguay, the weather normally has a significant impact on its economy. The weather is unpredictable and severe droughts occur frequently. During droughts, the country's agricultural exports are greatly reduced and as a result, the economy plummets (Central Intelligence Agency, 2016). As of 2015, the economy is growing, but due to political issues the long-term economic growth has stagnated.

### ***2.2 PARAGUAYAN SOCIETY***

Throughout history, there have been three major social divisions that make up Paraguayan society: rural versus urban, elite versus impoverished, and the Spanish versus the Guarani. For those living in rural areas, there is a major divide between landowners and those who do not own land.

The families that reside in the latter category are generally poorer workers who are considered squatters (Hanratty & Meditz, 1988).

Unlike most other South American countries, Paraguay's indigenous language and culture remains highly influential in everyday society. Guarani is the second official language, alongside Spanish, and ninety-five percent of citizens identify as mestizo, meaning they are descended from indigenous and Spanish people. During colonial times, the Spanish and others from Europe ran plantations as overlords and subjugated the native population to drive production costs down. Since the end of the War of the Triple Alliance, few Spanish overlords remained leaving a homogenous population of mestizo farmers (Coutsoukis, 2004).

### ***2.3 POVERTY IN PARAGUAY***

One of the most prevalent issues in Paraguay today is the substantial number of families living in poverty. As of 2014, about twenty-three percent of the seven million inhabitants live below the poverty line (World Bank Group, 2016). The widespread poverty in Paraguay is an imperative issue because living in poverty has been shown to greatly reduce the quality of life. "The poor are exposed to greater personal and environmental health risks, are less well nourished, have less information and are less able to access health care; they thus have a higher risk of illness and disability" (World Health Organization, 2016).

In recent years, the country has made great strides towards improving their underdeveloped communities. The current twenty-three percent of the Paraguayan population living below the poverty line has dropped from just under forty-four percent in 2006 (World Bank Group, 2016). Additionally, between the years 2006 and 2014 the life expectancy has increased from seventy-one years to seventy-three years (World Bank Group, 2016). Despite these advancements, there is still

plenty of room for improvement. Of those living in poverty, over forty-one percent live in rural areas where their main income is through agricultural activity (Maak & Stoetter, 2012). Such activities include farming produce or caring for cattle. As a result, focusing on these areas will bring the most benefit in the rural areas.

#### **2.4 FUNDACIÓN PARAGUAYA**

Martín Burt is one of the driven individuals that is passionate about eradicating poverty. In 1985, Burt, along with a group of local business leaders, founded Fundación Paraguaya, a nonprofit, development organization that works to eliminate poverty in Latin America and Africa (Burt, 2013). One of the most successful projects by the organization is the Poverty Stoplight. The project enables underprivileged families to self-diagnose their own level of poverty and assist in developing a plan to overcome it. The Poverty Stoplight was successful in helping “16,000 families overcome poverty with respect to their level of income” in the last three years (Fundación Paraguaya, 2016).

Aside from the Poverty Stoplight, the organization’s initial and primary goal was to provide education to the next generation of Paraguayans to help them overcome poverty (Burt, 2013). The expansion of education to prevent the growth of underprivileged communities is a technique that has proven to be effective. This approach is especially relevant to Paraguay because fifty-nine percent of the population is under twenty-four years old, resulting in a population much younger than that of the average middle-income country (Maak & Stoetter, 2012). Unfortunately, providing education to the poor is difficult to maintain - primarily due to lack of funding. Compared with other Latin American countries and the Caribbean, the amount of spending on education by the central government is significantly lower. Only sixteen percent of Paraguay’s GDP contributes to

educational funding. (Maak & Stoetter, 2012). To avoid becoming one of the agricultural schools that have failed in the past, Fundación Paraguaya practices a different approach.

### **2.5 ESCUELA AGRÍCOLA**

In 2003, Fundación Paraguaya took over the San Francisco Agricultural School, also known as Escuela Agrícola (Burt, 2013). They took the previously bankrupt agricultural high school, and transformed it into a self-sustaining, educational institution designed to promote entrepreneurship. The institution provides education to about one hundred and fifty poor Paraguayan students between the ages of fourteen and eighteen (McKinney & Unwin, 2012). The students are able to gain the required technical skills and self-esteem by following the “Learn by Doing, Selling and Earning” methodology supported by the school (Fundación Paraguaya, 2016). On alternating weeks, half the students are in the classroom, learning from books and professors, while the other half are in the fields, hotel, and kitchen practicing hands-on work.

The school administers fifteen micro enterprises for the students to apply the methodology. Subsequently, the earnings from selling different products, like cheese and yogurt, are used to fund the school’s operational costs. By 2007, the school achieved one-hundred percent financial self-sufficiency and generated approximately 400,000 dollars per year (McKinney & Unwin, 2012). Unlike other similar educational programs, Escuela Agrícola did not rely on government funding. This difference is what led to the school’s tremendous success. The school has achieved one-hundred percent employability with their students graduating to work in the agriculture-livestock sector, continuing in their studies, or set up their own rural micro enterprise (Fundación Paraguaya, 2016).

## **2.6 KITCHEN DETAILS**

Escuela Agrícola San Francisco's kitchen feeds the one hundred and sixty students that attend the school and the guests in the hotel, that can range from sixty to two hundred. The students are served the same menu every week. They are given five meals per day; breakfast, "media mañana," lunch, "merienda," and dinner. The two meals between breakfast, lunch, and dinner are small snacks such as "mate" or juice served with bread or a banana. The meals are served from seven seven in the morning to eight thirty at night. Before a meal, the tables are set prior to the student's arrival. The students then take a seat in front of a plate of food (Fundación Paraguaya, 2011). The meals are prepared with the produce, cheese and meat from the school's farm and factory when available (Fundación Paraguaya, 2011). If the necessary ingredients are not available then the school must buy. Most of these meals consist of corn and/or cheese, like the majority of Paraguayan dishes ("Comidas Típicas del Paraguay", 2016).

The kitchen at the school is set in the middle of campus as a separate large room with three doorways. Rosa, the head chef, along with an alternating cast of two students who are in charge of performing kitchen duties and one who is in charge of making the bread, cook all the meals on six stoves powered by electricity and one oven. There is a long steel table in the middle of the room, dividing the room where the food is prepped. Everything is cleaned in two sinks and all the pots, pans and utensils are kept in a small side room, resembling a long walk-in closet. The produce is brought in everyday to be prepared for the day's meals. The chef and the students prepare each meal immediately before it is served, indicating that meals are not made far in advance. Once the meal is ready, the students bring the meal to the nearby cafeteria that is not connected to the kitchen.



## ***2.7 HOTEL CERRITO***

The biggest income of the school is the hotel. The hotel can host up to 220 guest but on average host 60 guest per weekend. From March through June, the weekdays are the busiest and July through November the weekends are busiest. The hotel biggest profit is when they host events. The events can be as small as 10 to as large as 220. They range from business meeting to honoring parties to conventions for children.

## ***2.8 HOTEL DINING SERVICES***

The hotel provides guests with meal packages. The guest can choose to have up to five meals, the normal three plus two snacks in between, with breakfast included with room. The hotel food bill is quite high because they serve high quality food and fruits that have to be imported for the surrounding countries. During times of poor production they must buy all produce to feed the hotel guests. The hotel makes the biggest profit from hosting events. When events are hosted, the first hotel co-manager, must buy very large amounts of food to accommodate for the crowd. She orders for events in advance and receives the food the day of or a couple of days before the guests arrive.

The hotel guests dine in a room in front of the kitchen. The tables are set for the number of guests that are eating that meal. The guest then come in and sit down. When the crowd is small, they are served by plate. For large groups, a buffet style is laid out. The student will bring out either juice in pitchers or a bottle of soda and water when asked. The students are then no longer seen until the end to clean up.

## ***2.9 SALES AND FOOD COSTS***

One of the most important factors to consider when trying to run a successful business is maintaining control of food costs. Food cost is defined as “the percentage of total restaurant sales spent on food product” (McDougall & Rose, 2010). The status of a business food cost can be the deciding factor between solvency and bankruptcy. According to McDougall and Rose, “the rule of thumb within the fine dining industry is to maintain 30% food cost, or less.” There are several methods to lower food costs depending on the type of food being sold. These can include adjusting ingredients, creating competition between vendors, serving dishes with volatile ingredients seasonally, etc (National Restaurant Association, 2015). However, one of the best things that can be done is to analyze historical data to find specific areas that contribute the most to the total cost.

## ***2.10 INVENTORY MANAGEMENT***

A proper inventory system has many parts to it and, under proper management, can reduce a restaurant's food costs by a considerable amount. One of the most important parts of an inventory system is the documentation of available inventory. Saenz and Derewecki state that “In order to fully understand your inventory position, it’s critical that warehouse and [Distribution Center] management know at the stock keeping unit (SKU) level what’s in inventory, how much you have, and where it’s located” (Saenz and Derewecki). Realistically the inventory of the hotel food at the school is not sophisticated enough to implement a fully digital system including a stock keeping unit. However, a custom inventory tracking system can be created to keep track of the inventory present.

Another aspect of inventory management that can end up saving money, especially in restaurant inventory, is proper storage practices. These storage practices include preserving perishable foods, establishing a minimum stock, and using a first in, first out (FIFO) policy. Preserving perishable foods allows for all the food that is purchased to be used without losing

potential profits in throwing out rotten food. Furthermore, a minimum stock of ingredients that are needed to cook staple foods tells what ingredients need to be purchased and reduce the amount of high cost last minute orders. A FIFO policy will ensure that when new inventory is purchased it is not used until the old inventory has been used.

## **CHAPTER 3: METHODOLOGY**

The methodology of the project reviewed Paraguayan culture and the organization of inventory in the hotel kitchen by utilizing qualitative and quantitative methods to gather reliable and relevant information. The project applied these methods according to the type of information that was sought.

### ***3.1 CULTURAL UNDERSTANDING***

Paraguayan culture is different from that of America. To learn this, the team read books, talked with Paraguayans, observed the school and kitchen hotel in particular, and participated in the roles that were relevant to the students and staff. In the course of all of these the team kept in mind the questions: what is Paraguayan culture like? What do people do here? How do people think? What kinds of methods should we use to gain a better understanding of these things? Sometimes the team worked independently reviewing documents and then came together to compare notes. Other times the team worked collectively to have a shared experience as much as possible. Often, the team talked with Paraguayans in an informal way. The primary place for this discovery was the kitchen and hotel, but there were soccer games, sing alongs, trips to historic and cultural sites, and four days of TECHO (A habitat for humanity type of activity). Rigorous research methodology may find this approach informal, but such human to human interaction is necessary to gain the nuance and sense the depth of cultural difference.

### ***3.2 DETERMINING NEEDS***

The cultural review made it possible to select formal research methods with cultural sensitivity so that the food needs of the school could be accurately identified. Qualitative methods work best for this kind of research. Specifically, interviews of key staff elicited their perspectives. At

the same time observations of staff and students engaged in daily activities indicated issues and areas of concern.

The first interviews were formal. A structured interview (see Appendix A) with the first co-manager of the hotel utilized eight questions that asked how the kitchen operates, who it serves and when, and what is its budget. Another formal interview asked the student food inventory manager what are the food sources, food amounts, food use cycles, and food allocation within the kitchen. Subsequent interviews with these two staff and others were less formal because the team had been working with them daily for several weeks. Additionally, it was evident that due to the culture, it was necessary to ask a question multiple times before arriving at the complete answer. Nevertheless, the interviews continued to gather and refine information about the food needs of the school. Additional interviewees included the director of the school, second co-manager of the hotel, the head chef, and the students. Notes were taken during all meetings and later reviewed for accuracy and content.

Notes from early interviews helped pinpoint school needs and refine the questions for subsequent interviews. In the course of gathering information, the focus changed from an emphasis on the kitchen to an emphasis on the hotel and from a concern about behavior and activity to one about cost, supplies, and record keeping. Nonetheless, the team continued to employ interviews and observations. Once again, formal interviews came first. The school accountant provided information about the procedures for the documentation process regarding food requests, deliveries, consumption, and charges. The first and second co-managers of the hotel provided details about this documentation including the food needs of hotel guests, assessment of current inventory, available funds, and purchase orders. An interview with the foundation accountant produced even more

details because many of the records are kept at foundation headquarters. Students, particularly monitors, were also a valuable source of information. Conversations with them were not formal interviews, but the focus remained on school food needs, and their statements were recorded and later analyzed. All these interviews took place over the course of two and a half weeks. During this time and continuing throughout the project, interviews became less structured and ultimately information was exchanged informally on a day by day basis. Similar to the early interviews, notes from all meetings were recorded and later reviewed for accuracy and content related to hotel costs, supplies, and record keeping.

Alongside the interviews, the team observed the kitchen. This observational period took place over the course of two weeks. To avoid an overbearing presence in a kitchen that operates all day, the team split the observation schedule to a first week of mornings and early afternoons and a second week of late afternoons and early evenings. To further ensure a natural work routine half the team helped with cooking while the other half focused on observing and taking notes. At the end of each day, the team reviewed notes and identified potential improvements within the kitchen. These improvements included diversifying the student menu, reorganizing the kitchen space, and professionalizing the dining service.

The team would have continued this work, but school administration asked that they look instead at hotel activities and documents such as hotel costs, purchases, supply lists, inventories, and record keeping protocol. The observations focused on the movement of ingredients starting from the decision to place an order all the way to the disposal of food waste. A description of this process resulted from shadowing relevant hotel personnel and related student monitors. Other personnel included the school director and school accountant. Informal interviews with each verified their

roles in the process and ensured the accuracy of the information gathered. Taken together the rich description allowed the team to create a highly detailed flowchart (see Appendix C) of the entire hotel food procurement, storage, handling, distribution, and waste disposal process. With such a detailed illustration the team easily identified areas of concern and improvement.

### ***3.3 ASSESSING POTENTIAL AREAS OF IMPROVEMENT***

#### ***3.3.1 KITCHEN AND DINING OPERATIONS***

As noted in the previous chapter, the project changed focus. Prior to the change, the team interviewed staff and student monitors that worked with the kitchen and observed three major areas involved with kitchen operations: the kitchen space, baking process, and hotel dining services. However, after an assessment of needs with the school administration, improving the current inventory system and spending habits of the hotel became the project's final two goals.

#### ***3.3.2 HOTEL INVENTORY SYSTEM***

To go beyond the information gathered in the flowchart the team conducted further interviews and made additional observations about the hotel's inventory system. Informal interviews and casual conversations were employed because the research could gather information that could be used to evaluate staff and student work. This was not the team's purpose, yet the team needed a detailed view of the ordering and storing protocol and how best to study it.

#### ***3.3.3 HOTEL FOOD SPENDING***

To analyze the annual spending of the hotel's kitchen, the team reviewed all invoices relating to hotel purchases for the fiscal year 2015. These invoices included quantities, total cost, and dates for individual food items. The analysis utilized a spreadsheet to sort and tally food statistics in order to compare spending across time, vendors, and types of food. Twenty-two hundred individual food

purchases were recorded from three hundred and sixty invoices. Each of the 2,200 food purchases was labeled according to one of ten food-types: Meat, Chicken and Eggs, Dairy, Grain, Fruit, Vegetables, Desserts, Beverages, Cooking Oil, Flour, and Miscellaneous. This classification was used to sum and compare spending trends by month, item, and vendor. To have a better overall understanding of how the costs relate to the revenue that the hotel produces the team performed approximate calculations. The results of the approximate food sales were compared to the numbers of the total food costs. These results can be seen on the graph in Appendix D.

### 3.4 APPROXIMATE TIMELINE

A timeline guided the team by listing nine key research activities and their weeks of initiation and conclusion.

WEEKLY TIMELINE	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Site Assessment	Blue	Blue	Blue	Blue			
Unstructured Interviews	Green	Green	Green	Green	Green		
Participant Observations	Blue	Blue	Blue				
Shadowing					Green	Green	
Naturalistic Observations					Blue	Blue	
Qualitative Data Analysis			Blue	Blue	Blue	Blue	
Quantitative Data Analysis				Green	Green	Green	
Generating Recommendations				Blue	Blue	Blue	Blue
Updating Inventory System					Green	Green	Green



## **CHAPTER 4: FINDINGS**

### ***4.1 KITCHEN AND DINING OPERATIONS***

Before the project's change in focus, the team found a lack of diversity in student's meals, a shortage of preparation space, and a poorly delivered dining service.

By reviewing documents and interviewing kitchen staff, the team found that the students' meals do not change from week to week. Students are aware of this and try to address it by augmenting their dull fare with the better food that is left over from hotel meals.

Breadmaking and other kitchen preparations take place side by side. Within inches of each other meat is butchered and dough is kneaded. The opportunity for cross recipe contamination is large and even unsanitary conditions may exist. There does not seem to be sufficient room with the current configuration to adequately separate these.

The delivery of dining service does not match expected restaurant standards. There is minimum communication between servers and guests and an overall sense that the serving staff is not paying attention. Furthermore, it seems like long periods pass between the appearance and exit of servers. Had the team stayed with these focus areas there would have been further investigation.

### ***4.2 INVENTORY MANAGEMENT***

#### ***4.2.1 FOOD ORDERING AND RECEIVING PROTOCOL***

The shadowing process and analysis of the flowchart identified that the current food ordering and receiving protocol had problems with stagnant stock, last minute purchases, inventory storage, and food reception. During our observation of the storage room the team noticed a

plethora of unused stock. For instance, a stack of refreshments had a thick layer of dust accumulated on top. Secondly, the team shadowed the first hotel co-manager ordering food and noticed a high frequency of last minute purchases and purchases of ingredients in small quantities. Thirdly, the team noticed quick spoilage of ingredients due to lack of basic food storage practices. This includes an initial observation of the storage space that identified an unclean space that was, at best, slightly organized based on food and supplies. Furthermore, cleaning supplies stored next to the food as well as plates and utensils stored on the top shelves posed a potential safety risk. Within the food organization, there was very little attention given to perishable foods. The older perishables were left outside of a refrigerator and eventually started to mold. Additionally, when ingredients began to mold, they were left with the food that was still in good condition. This process of food spoilage was accelerated by the very hot temperatures in the storage room. Fourthly, the team noticed areas of concern while shadowing the process of receiving ingredients. We noticed that the student monitors did not check to make sure that the amount of food received matched with the amount ordered. Even more importantly, spoiled food was delivered and the student monitors accepted and stored the food. It was clear that the food ordering and receiving protocols at the school are not met to typical restaurant standards.

---

#### ***4.2.2 ACCOUNTING AND SPENDING***

Interviews with staff revealed that all hotel food is accounted for on a budget sheet and a list of invoices. The budget sheet estimates food spending throughout the year by predicting the cost and needed quantity of each food item on a weekly basis. The hotel co-manager estimates these figures based on prior purchases and with a distributor pricing comparison spreadsheet. The invoices are then sent to Fundación Paraguaya headquarters where they are recorded and sorted with

all of the foundation's files. The list of invoices spreadsheet records the invoice number, the date the invoice was received, the vendor, and the total cost of each order. With this spreadsheet the team was able to find out the total cost, approximately two hundred fifty three million guarani, of hotel food purchases for the year 2015. Nonetheless, details about individual food purchases are not recorded. Due to limited information, it is currently impossible for the school to establish a minimum stock or make any analysis to help reduce costs.

According to the analysis of all 360 invoices sixty three percent of the hotel's expenses in 2015 went to food (see Appendix D). Within food, beverages and meat are the two largest areas of spending. Beverages totaled twenty one percent and meat totaled eighteen percent. Of the twenty one percent in beverages, soda represents thirty nine percent. This is equivalent to eight percent of all food expenditures.

Another analysis of the 360 invoices showed that the hotel's food costs amount to forty five percent of its total food revenue (see Appendix D). This ratio exceeds industry standards by fifty percent. Allowing for the more informal methods of the school it is still clear that they are not using and purchasing food at an efficient rate.

## CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

### *5.1 TENTATIVE KITCHEN RECOMMENDATIONS*

Although the team did not finish the kitchen research, the findings suggest three recommendations.

1. **Diversify the student menu,**
2. **Construct a separate space for the bakery**
3. **Train students to serve in a more responsive manner.**

### *5.2 INVENTORY RECOMMENDATIONS*

#### *5.2.1 RECOMMENDATIONS THAT RELATE TO PROTOCOL*

**FIFO policy should be used.** FIFO stands for 'First in, First out'. This policy means that new ingredients in stock are not used until the old ingredients have been used first.

**Minimum stock of staple ingredients for hotel food should be maintained at all times.** The maintenance of minimum stock will reduce the number of last minute purchases and allow bulk orders. This recommendation requires the adoption of an advised inventory system (See Below).

**Change the protocol for food storage in three ways.** The storage room must be arranged to preserve food and order related items. The room and its contents need to be clean. No more than cups and plates should be stored with the food. Breakable items placed on the top shelf pose a safety hazard. Ingredients need to be inspected daily. When produce goes old it can adversely affect new produce. Either refrigerate or throw out. Rotten food should be removed immediately. Food

spoilage can be retarded with cooler temperatures. A checklist, created to assist this efforts, appears in Appendix E.

**Stricter protocol for receiving food should be implemented.** A suggested stricter protocol appears in Appendix E.

---

### ***5.2.2 ACCOUNTING***

**Two spreadsheets, Documento de Contabilidad Interno and Documento de Control del Inventario, should be used for accounting.** These spreadsheets utilize two documents already maintained by the school, Controlador de Gastos and Egresos Hotel 2015. The combination of these four documents will aid the analysis for yearly spending and help find ways to reduce spending.aid the analysis for yearly spending and help find ways to reduce spending.

**The school needs to keep copies of invoices in addition to those kept at the foundation headquarters.** Copies of invoices kept at the school will facilitate all accounting activities, improve accounting analysis, and related efforts to reduce costs.

**A Documento de Control del Inventario should be adopted.** A control del inventario document records daily inventory and the amount of ingredients purchased and used throughout the year. A daily inventory saves money by utilizing current stock, recording what ingredients and their quantities are wasted, and to establish a minimum stock. The two spreadsheets, Documento de Contabilidad Interno and the Documento de Control del Inventario, make it possible to identify purchase and use trends so that food is used and bought in the best way possible.

The school has already begun implementing some of these recommendations.

### ***5.3 RECOMMENDATIONS FOR RESEARCH AT ESCUELA AGRICOLA***

In the course of this study the team found that some approaches to gathering information work better than others. The first finding is that time must be spent “getting to know you.” Paraguayans interact differently than Americans. As visitors who are there to describe, and in some ways evaluate their work, trust must be built. As part of the “getting to know you,” the team learned that yes or no questions are too confrontational, therefore don’t elicit the responses that are sought. More open ended questions, even indirect questions, are almost always more productive. In what was a surprise to the team, repetition of the same question over time gathers, not only more in depth answers, but different answers. In other words, Paraguayans don’t tell everything they know when you first ask.

## **BIBLIOGRAPHY**

Baggins, & Blunden. (2008). Ta. Retrieved February 12, 2016, from <https://www.marists.org/glossary/people/t/a.htm#taylor>

Berg, B.L., & Lune, H. (2012). *Qualitative research methods for the social sciences*. Upper Saddle, NJ: Pearson Education

Burt, M. (2013). The “Poverty Stoplight” Approach to Eliminating Multidimensional Poverty: Business, Civil Society, and Government Working Together in Paraguay ( Innovations Case Narrative: Fundación Paraguaya). *Innovations: Technology, Governance, Globalization*, 8(1-2), 47-67.

Central Intelligence Agency. (n.d). The World Factbook. Retrieved February 4, 2016, from <https://www.cia.gov/library/publications/the-world-factbook/geos/pa.html>

CIBSE. (2009). *Energy Efficiency in Commercial Kitchens - CIBSE TM50*. London: Chartered Inst. of Building Services Engineers.

Comidas Típicas del Paraguay. (n.d). Retrieved January 25, 2016, from <http://comidastipicasparaguay.blogspot.com/>

Coutsoukis, P. (2004, November 10). Paraguay - Social Relations. Retrieved February 12, 2016, from [http://www.photius.com/countries/paraguay/society/paraguay\\_society\\_social\\_relations.html](http://www.photius.com/countries/paraguay/society/paraguay_society_social_relations.html)

Covering poverty and education. Retrieved May 03, 2016, from <http://www.coveringpoverty.org/tutorials/education/>

Enock. (2006). *Basic Management Models and Theories Associated with Motivation and Leadership and Be Able to Apply Them to Practical Situations and Problems*. Retrieved February 15, 2016, from [http://www.healthknowledge.org.uk/public-health-textbook/organisation-management/5c-management-change/basic-management-models#F W Taylor - \(1856 - 1915\), USA- The Scientific Management School](http://www.healthknowledge.org.uk/public-health-textbook/organisation-management/5c-management-change/basic-management-models#F W Taylor - (1856 - 1915), USA- The Scientific Management School)

Fundación Paraguaya. (n.d). Retrieved January 27, 2016, from <http://www.fundacionparaguaya.org.py/?lang=en>

Fundación Paraguaya. (2016, January, 19). *Cerrito: Hotel y Escuela*. [video file] <https://www.youtube.com/watch?v=WTjWG5wGUYA>

Fundación Paraguaya. (2011, January, 11). *Escuela Agrícola San Francisco*. [video file] <https://www.youtube.com/watch?v=GIQ2QtdjU0>

Fundación Paraguaya. (2015, March, 18). *Reportaje Escuela Agrícola San Francisco – Segunda Parte*. [video file] <https://www.youtube.com/watch?v=igqCa9BGRRM>

Hanratty, D. M., & Meditz, S. W. (1988). Paraguay - The Society. Retrieved February 12, 2016, from <http://countrystudies.us/paraguay/25.htm>

Is it time to raise your prices?. Retrieved May 03, 2016, from <http://www.restaurant.org/Manage-My-Restaurant/Marketing-Sales/Food/Is-it-time-to-raise-your-prices>

Lesperance, J. P. (1953). *Economics and Techniques of Motion and Time Study*. Dubuque: W.C. Brown.

Maak, T., & Stoetter, N. (2012). Social Entrepreneurs as Responsible Leaders: 'Fundación Paraguaya' and the Case of Martin Burt. *J Bus Ethics Journal of Business Ethics*, 111(3), 413-430.

McKinney, M., & Unwin, T. (2012, April). *Fundación Paraguaya - Pioneering a New Model in Education* (Rep.). Retrieved February 10, 2016 from [http://www.fundacionparaguaya.org.py/wp-content/uploads/2014/06/fundacion\\_paraguaya\\_-\\_pioneering\\_a\\_new\\_model\\_for\\_education\\_-\\_clearlyso.pdf](http://www.fundacionparaguaya.org.py/wp-content/uploads/2014/06/fundacion_paraguaya_-_pioneering_a_new_model_for_education_-_clearlyso.pdf)

Pan American Health Organization. (2012). *Health in the Americas: Regional Outlook and Country Profiles*. Washington, DC: PAHO.

PR Newswire Association LLC. (2010). Kitchen Contingency Plans are a Must. *Pr Newswire Europe Including UK Disclose*. Retrieved January 27, 2016, from <http://www.prnewswire.com/>

Saenz, Norm, & Derwecki. (2014, January). Logistics Management. *Inventory Management 101: Time to Revisit the Principles.* EH Publishing Inc.

South America Mission. (2016). Paraguay. Retrieved February 10, 2016, from <http://southamericamission.org/about/where-we-serve/paraguay/>

Tips and Tools for Controlling Your Food Cost | StarChefs.com. Retrieved May 03, 2016, from <http://www.starchefs.com/cook/business-tips/controlling-restaurant-food-cost>



United Nations Development Programme. (2014). Human Development Reports - Paraguay. Retrieved February 10, 2016, from <http://hdr.undp.org/en/countries/profiles/PRY>

United States Department of Agriculture. (2013, June 15). Leftovers and Food Safety. Retrieved February 16, 2016, from [http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling/leftovers-and-food-safety/ct\\_index](http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling/leftovers-and-food-safety/ct_index)

World Bank Group. (2016). Data - Paraguay. Retrieved February 18, 2016, from <http://data.worldbank.org/country/paraguay>

World Bank Group. (2016). Doing Business in Paraguay. Retrieved February 18, 2016, from <http://www.doingbusiness.org/data/exploreconomies/paraguay/>

World Health Organization. (2016). Poverty. Retrieved February 10, 2016, from <http://www.who.int/topics/poverty/en/>

## APPENDICES

## APPENDIX A: INTERVIEW RECORDS

### MARTINA CABALLERO 1<sup>st</sup> FORMAL INTERVIEW

#### 1. Where is the kitchen?

- a. Is it in the hotel or its own building?

Donde queda la cocina? Queda dentro del hotel o en su propio edificio?

*Rta: La edificación de la cocina queda fuera del hotel, distante a unos 50 metros del mismo, tiene su propio edificio.*

#### 2. How many people work in the kitchen?

Cuántas personas trabajan en la cocina?

*Rta: La cocina funciona con una cocinera contratada (colaboradora), 2 estudiantes pasantes y eventualmente 1 persona para ayudante de cocina, en casos mucha demanda.*

#### 3. What source of energy do they use for cooking the food?

Que fuente de energía(s) usan para cocinar?

*Rta: Energía eléctrica*

- a. We know they have the bio digester for 2 hours per day? Is that all they use?

Entendemos que se usa el gas del biodigestor 2 horas al día para cocinar. Es así? Solo usan el gas del biodigestor 2 horas al día?

*Rta: Actualmente no estamos usando el biogás, pero cuando lo habíamos usado en forma experimental, el abastecimiento duraba solo 2 horas.*

#### 4. How many meal do they serve a day?

Cuántas comidas sirven al día?

*Rta: En el comedor estudiantil, 5 comidas ,(desayuno, media mañana, almuerzo, merienda, cena).*

*En el hotel, 5 servicios.*

Cuántos desayunos, cuántos almuerzo, cuántas meriendas, cuántas cenas?

*Rta: para el comedor estudiantil una cantidad fija, para 170 personas, todas las comidas o servicios.*

*En el hotel, es más inestable, un promedio de 20 platos por día, los fines de semana aumenta entre 40 y 60, incluso 100.*

#### 5. When do they start/end cooking?

A que hora empiezan a cocinar? A que hora terminan de cocinar?

*Rta: la labor empieza a las 06:00 y culmina a las 20 hs normalmente.*

#### 6. Do they feed just the students or other people?

Dan de comer solo a los estudiantes, o dan de comer a otras personas también?

*Rta: La cocina cumple dos funciones, proveer servicios al comedor estudiantil y al comedor o restaurant del Hotel, ya sea huéspedes o visitantes en el día.*

## 7. What's the budget and where would they like it to be?

Cual es el total de gastos en la cocina al año ahora? A que monto querrian bajar este total en el 2016?

*Rta: La respuesta a esta pregunta aún no la tengo, estaré respondiendo dentro de las 48 hs*

## 8. Who cleans the kitchen?

Quien limpia la cocina?

*Rta: De la limpieza se encarga los estudiantes, que están como ayudante en el marco de pasantía de Hotelería y Turismo, con la supervisión de la cocinara.*

---

### **MARTINA CABALLERO 2<sup>nd</sup> FORMAL INTERVIEW**

First Hotel Co-Manager

Professora Martina

March 29<sup>th</sup>, 2016

Context: General information for Hotel

- What is the max amount of people that can stay in the hotel? What is the average and when are the busiest times?
  - ◆ Have no more than 220 people for events, usually 150
  - ◆ Usually 60 guests for a normal weekend
  - ◆ March - June : busiest during the weekends
  - ◆ July - November : busiest during the weekdays
- How many meals do they serve?
  - ◆ 3-5 meals
    - Breakfast is included with logging
- What do you have to buy?
  - ◆ Fruits (whatever is in season)
  - ◆ Meat
  - ◆ Sandwich bread
  - ◆ potatoes , cabbage and carrots
- What do you use from the school?
  - ◆ Onions
  - ◆ Peppers
  - ◆ Tomatoes
- When are the best months for production?
  - ◆ April, May, June
- When will the chickens be back?
  - ◆ 90 days
- Who do you get your ingredients from?
  - ◆ Local vendors, but we would prefer getting them ourselves but we don't have time nor a vehicle.

### ***ROSA PAEZ INFORMAL INTERVIEW***

Head Chef

Rosa Paez

March 16<sup>th</sup>, 2016

Context: general questions about the kitchen

Background info on Rosa

- Has worked here for 5 years
- Has every tuesday off, unless there is a large event
  - ◆ When she is out, a help from the town takes her place
- Needs about 2 hours of prep
- Has two main student helper a day
  - ◆ Recruits more if it is a big event
- Prepares 5 meals a day for about 180-200 people daily
- Time table for meal serving time

Meal	Time
Breakfast	7:00 AM
“Medio Mañana”	9:00 AM
Lunch	11:30 AM -12:00 PM
“Merienda”	4:00 PM
Dinner	8:00 PM

- Out of school purchase
  - ◆ Rice
  - ◆ Maze
  - ◆ Pasta
- When vegetables are bought
  - ◆ For hotel 23,000,000.00 G or \$4250.00
  - ◆ For school 8,000,000 G or \$1480.00
- The little store sells
  - ◆ Juice
  - ◆ Empanadas
  - ◆ Bread
  - ◆ Hamburgers
  - ◆ Pizza

### ***MIRNA DIAZ INFORMAL INTERVIEW***

Student Inventory Manager

Mirna Diaz

March 24th, 2016

Context: general information about the camera (the food storage room for the students food)

- What is the camera?
  - ◆ Where all the food is sent to that the school produces, and everything that is bought for the students
- What do you buy for the students?
  - ◆ Pasta
  - ◆ Vegetables
  - ◆ Sugar
  - ◆ Flour
  - ◆ Salt
  - ◆ Yeast
  - ◆ Fruit (mostly bananas)
- When is the produce from the school slow?
  - ◆ December - March because it is winter here
- What would you change if you could?
  - ◆ Change up the menu of the students because it's always the same every week
- How do you give food out?
  - ◆ All day the kitchen is asking for food. When they need something, we separate it and write down what is given out.
  - ◆

---

### ***MARTINA CABALLERO INFORMAL INTERVIEW***

First Hotel Co-manager

Profesora Martina

4/13

Context: what happens to waste?

- Students eat and work at the same time,(they're not suppose to)
- Food they use to bring the leftover food is given to the pigs
  - ◆ But i plate broke so it's no longer done
- If there is a lot of leftovers it's given to the children if not then it is sent to compost.
- The food leftover from all meals is deposited in one location outside of the kitchen. This waste is separated as organic and inorganic waste. The organic waste is then brought to a section of the vegetable garden where it is composted and used as a fertilizer for planting banana trees. The inorganic waste is deposited into the appropriate barrel and then it is disposed at a specific place on camps where they bring all trash.

Context: notes on food delivery

- Food is delivered straight to the deposit signature is only required for some distributors but not all the time
- When there is a bad merchandize, the students need to have the confidence to refuse the order  
When food goes bad, it must be disposed of right away, and not like it help the surrounding produce rot

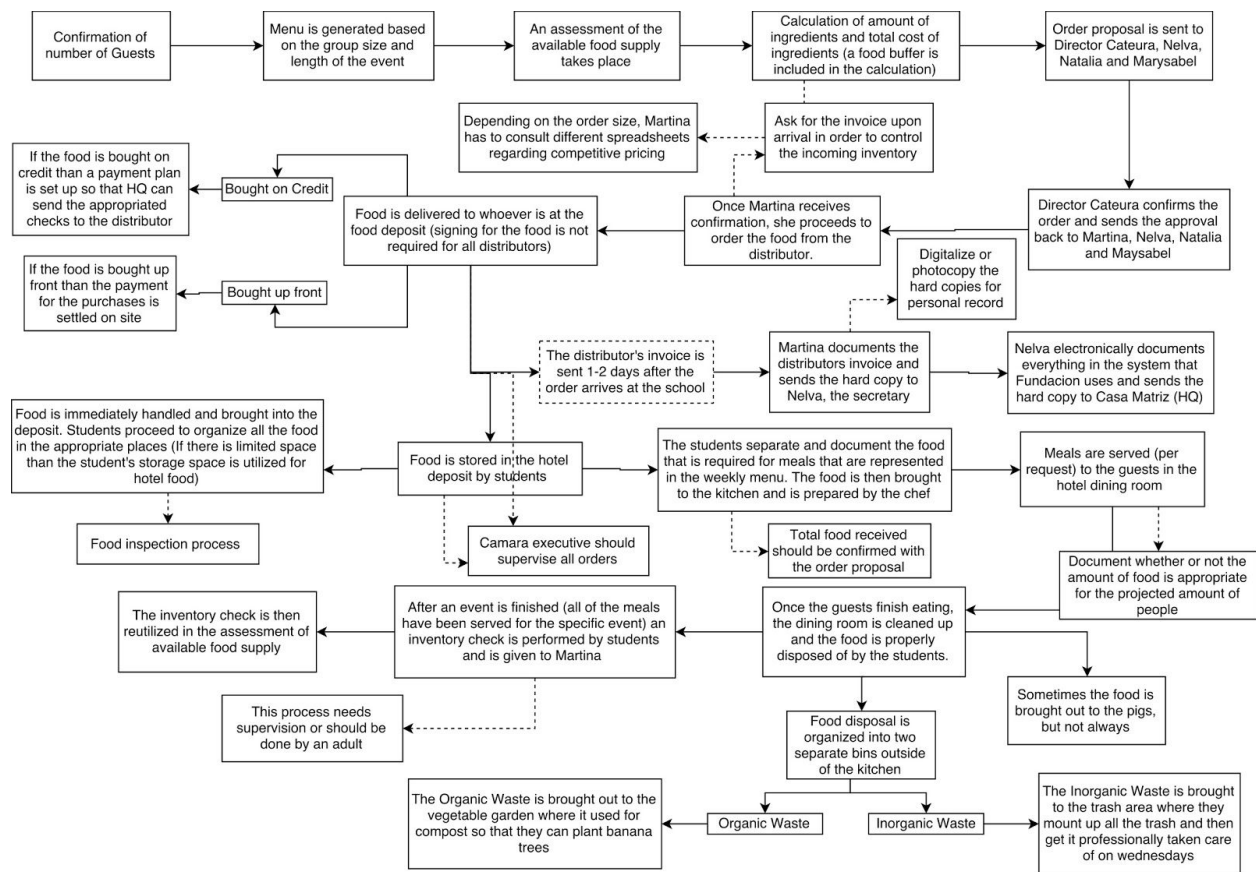
## ***APPENDIX B: OBSERVATIONAL NOTES***

Date 4/14/2015

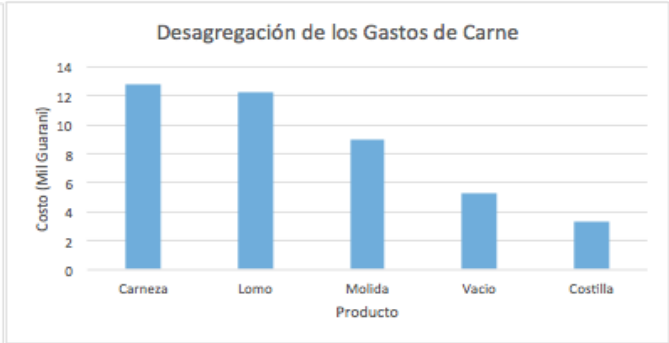
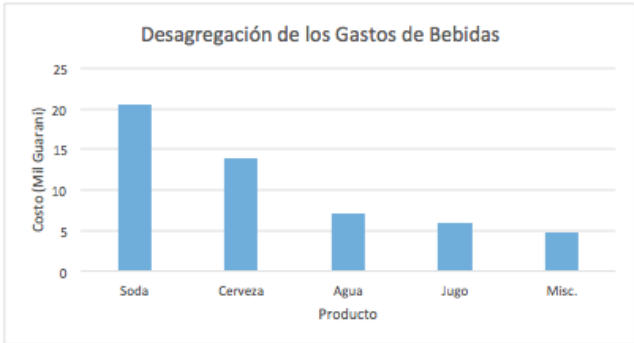
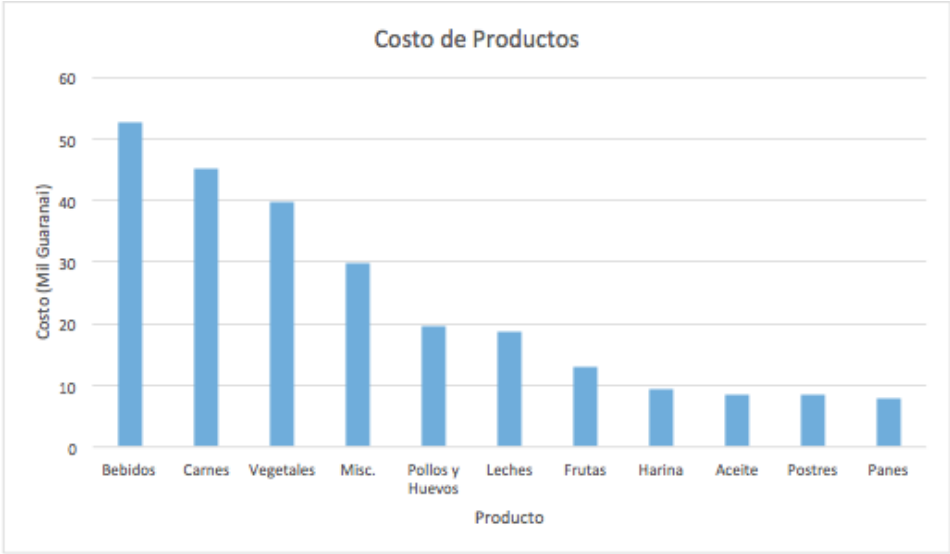
Context: Observation of food delivery

- Distributor arrives at 9:33 AM
- Food is immediately handled and brought into the storage room
- All the food is dropped in
- Food is not inspected upon arrival, just taken out of a regular pick up truck
- No invoice or inventory check (the invoice comes in a couple of day later)
- Truck leave right away, with no confirmation of delivery
- As soon as the food comes, the student starts to separate the food needed for the next meal, without an inventory check.
- The room is way too hot to store food.
- Things need to be put in a cooler
- Other facts
- Breakfast is the only included meal for the guest, every other meal, they have to ask for and pay for.
- They need to work on food storage
- Need a labeling system for the freezer.

## ***APPENDIX C: FLOWCHART***

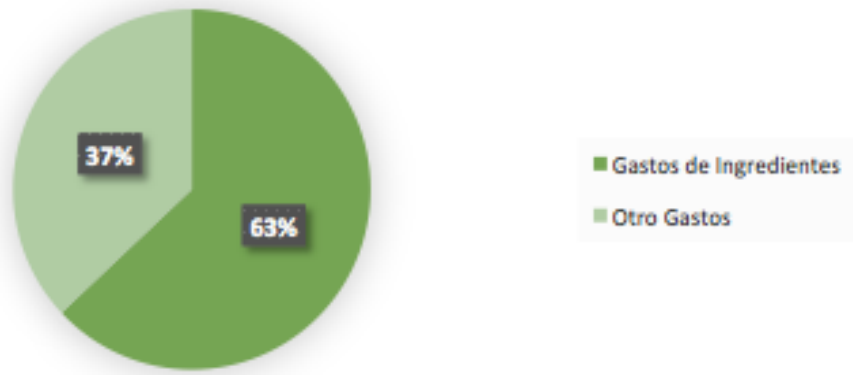


**APPENDIX D: GRAPHS**

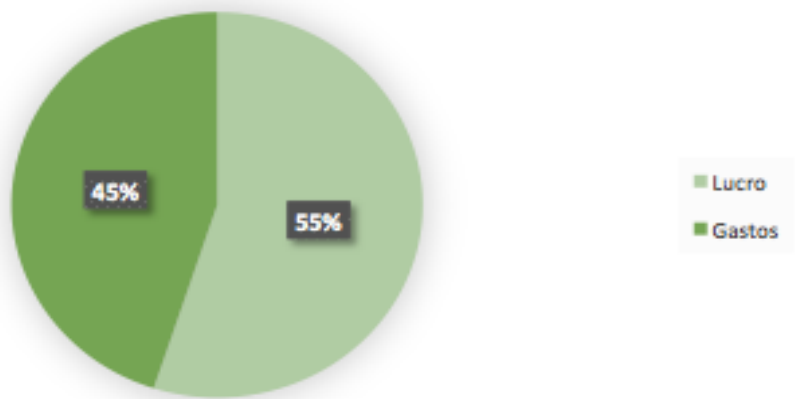




### Gastos de Ingredientes vs Gastos del Hotel



### Ingresos vs Gastos



**APPENDIX E: CLEANING CHECKLIST AND ORDERING PROCESS**

**Daily Storage Room Checklist**

Chore	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Dust							
Wipe down the shelves							
Wipe down the fridges							
Check for rotten produce							
Broom the floors							
Mop the floors							
Do inventory							

**Diario storage room Lista de Control**

Faena	Lunes	Martes	Miércoles	Jueves	Viernes	Sabado	Domingo
Des polvar							
Limpie los estantes							
Limpie la Nevera							
Saca comida podrido							
Barrer							
Trapear							
Hice el inventario							

### *Ordering Process*

1. Record Distributor arrival time
2. Make sure that there is an adult (Student Inventory Manager or another adult) present outside of the storage room with the bill of goods.
3. Adult then checks off the food from the bill of goods as students begin to move it from the distributor's truck into the storage room.
4. During the checking of food process, revise that all perishable items (Vegetables, Fruits, Dairy, etc.) are in good condition. If ingredients are rotten or look past due, politely reject the order and ask that another shipment is sent. Record what was not received and whether or not the distributor's quality of food has been inconsistent.
5. Finish receiving food and begin to organize the food in the storage room by moving all previously received ingredients to the front and placing newly received inventory in the back (FIFO policy).
6. Students must then confirm with the adult that the amount of food ordered is the amount of food received by weighing or counting.
7. Adult confirms the food on the bill of goods and inputs the amount present.
8. Once the initial incoming inventory has been accounted for, the students must then figure out what ingredients will be needed for the next meal, separate the food, and deliver it to the kitchen.
9. Adult confirms how much food has left the storage deposit and calculates the total amount of food present in the storage room.

10. Perishable foods are then put into the storage room fridge. If there is no space in the storage room than it is moved to the camara fridge and placed in a section separated solely for hotel food.

11. Students have to make sure to use the FIFO policy with the perishable foods as well.