



# WPI

## Building a Database of American Expatriates in the Western Region of Panamá

Sponsored by the Competitiveness Center of the Western Region of  
Panamá and Oteima University

**Authors:**

Caroline Armstrong

Marissa Bennett

Matthew Eaton

Ranier Gran

**Advisors:**

Alex Sphar

Frederick Hart

Aaron Sakulich

James Chiarelli

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## **I. Abstract**

Our project focused on locating and interviewing American expatriates living in the Western Region of Panamá, and then organizing them and their contact information into a secure database for the organization CECOM-RO (El Centro de Competitividad de la Región Occidental). This report contains the techniques we used to communicate with the expatriate community, the research process we went through to build a suitable database, and methods and ideas for continuation of this project.

## **II. Acknowledgements**

Our team would like to thank our sponsors, the Competitiveness Center of the Western Region of Panamá (CECOM-RO) and Dr. Francisco Ugel of Oteima University. CECOM-RO provided us with our project, information about the organization's work, and a list of initial expatriate contacts which made possible the creation of the expatriate network contained in the database. Dr. Francisco Ugel of Oteima University made our two week stay in the Western Region possible by providing the necessary arrangements and resources.

We would also like to thank Penny Barrett, Gerardo Valdés, Felipe Rodriguez, Anabel, Claudia Rios, and Liz Chang. Penny provided us with knowledge and connections which allowed us to reach out to a greater number of potential database participants. Geraldo provided transportation on our informational visit to Petroterminal de Panamá and a cattle farm run by a member of CECOM-RO. Felipe took us on a tour of the indigenous community of Soloy, his family's African palm tree plantation, and Boca Chica. Annmarie guided us through the Sendero Los Quetzales, an incredible hike that we took in order to explore more of the Chiriquí region, and Claudia Rios kindly drove us to and from the pathway. Liz Chang, a member of CECOM-RO's tourism sector, provided us with a boat tour of the mangrove swamp at Puerto Pedregal, just outside of David.

Additionally, we would like to thank several members of the WPI Community for their advice and help throughout our IQP project. We would like to thank Professor Alex Sphar for his teaching and assistance throughout ID2050. We would also like to thank Professor Frederick Hart, our initial project advisor, for his guidance throughout PQP, and Professor James Chiarelli, our project advisor in Panamá, for his encouragement, advice, and feedback. We extend our

gratitude to Laura Robinson, our research librarian, who helped us in the preliminary stages of research, and finally to our site director Aaron Sakulich, for sparking our initial interest in Panamá, and especially for assisting us in establishing contact with our sponsor.

### **III. Executive Summary**

#### **Introduction to Our Project**

Our project team worked with the Competitiveness Center of the Western Region of Panamá, or, in Spanish, el Centro de Competitividad de la Región Occidental (CECOM-RO, n.d.). CECOM-RO, a private non-profit foundation, aims to improve the economic competitiveness of the Western Region of Panamá, which consists of the provinces of Chiriquí and Bocas del Toro, as well as the Ngäbe Buglé Comarca. Currently, economic activity involving the Panamá Canal comprises about 75% of Panamá's gross domestic product (GDP) (Panamá Economy, 2016). This indicates a concentration of Panamá's economic activity in one area. Since its founding in October 2015, CECOM-RO has worked to broaden the geographic range of Panamá's economic activity by promoting development projects in the Western Region.

CECOM-RO assists development projects by providing the tools and resources necessary for their success. In order for successful execution of objectives to occur, these projects require contribution from individuals possessing certain skills, knowledge, and experience. However, the Western Region lacks a sufficient professional network for enabling project managers to connect with these types of individuals. To address this issue, CECOM-RO tasked our team with creating a database of American expatriates living in the Western Region who have an interest in contributing to such projects. In creating this database of expatriates, our team served as the initial contact between CECOM-RO and the expatriates living in the region. By connecting these expatriates with CECOM-RO, and thus providing the organization's partner development projects with skilled and experienced individuals, our team aims to improve economic competitiveness in the Western Region of Panamá.

In order to accomplish our task, our team had to build and refine a database, collect expatriate information for the database, and establish a framework for continued use, maintenance, promotion, and growth of the database. To start on our first objective, we visited several project sites and partner organizations to get a sense of how the database could contribute to projects. To collect data, we used the technique of snowball sampling and explored the region to connect with various expatriate groups. Lastly, in order to ensure future maintenance of the database, we demonstrated its use to several members of CECOM-RO during our presentation. At the completion of our project, CECOM-RO received all documentation pertaining to the database, as well as the database itself.

### **Findings & Analysis**

Databases require information in order to function, and in order to gather and input data, we needed to find and converse with individuals from the expatriate community. For a number of reasons, certain parts of the Western Region contain large expatriate populations. These reasons range from lower living costs to retirement incentives such as the Panamá Pensionado Program.

To start us off, Dr. Ugel of Oteima University gave us an initial list of expatriates comprised of people who responded to an advertisement in Chiriquí Life, an online newspaper distributed within the Chiriquí region. This list contained basic information needed for the database such as contact information, which we used to get in touch with these expatriates by email to set up in-person interviews. The interviews served to gauge interest, explain the database and the work of CECOM-RO, and encourage participation in the database. Most of our meetings with the expatriates occurred in the town of Boquete in Chiriquí.

## 1. Key Interviews

During our stay, we interviewed eight expatriates in-person. Brief descriptions of several expatriate interviews follow. Note that the names have been changed and some information has been withheld to protect their identity and personal information.

- *Adam*. Our first expatriate interview during our stay in Boquete. He possesses significant experience in marketing, finance and strategic planning. Originally he came off as slightly inquisitive, asking challenging questions to consider for our project on topics such as how the Panamánian people will react to increased influence of government organizations. By the end, it turned out that he actually possessed great interest in participating in the database and helping CECOM-RO in any way possible.
- *Britney*. Met in the BCP (Boquete Community Players) Theater. Her experience involved several entrepreneurial endeavors. Due to her connections and organizational positions, she gave our team access to an email alias containing a large number of expatriates.

## 2. Database Building

When it came to choosing a method for building the database, our team researched various options. These options included constructing a web page to contain the database, using SQL or SQLite to build a computer application for it, or manually inputting information into an Excel document. Our team agreed that the idea of a webpage or the use of SQL/SQLite would be too complicated and unnecessary for our task, as only half of our team has coding experience. We also realized that the use of an Excel document, though simple, would require tedious work in keeping it up to date and could prove difficult to maintain after we left. After further research,

our team found a Google Add-On called AppSheet, which we selected as the best method for us and CECOM-RO to use.

In order to use AppSheet, we had to create a Google Spreadsheet to contain the data used in the app. This spreadsheet served as our database. Then, to collect the data, further expedite the process, and conveniently put everyone's information into our database, our team created a simplistic survey with a Google Form. This allowed us to take the responses from the form and input them directly into the Google Spreadsheet. Also, the use of a Google Form allows sharing the form with expatriates in various ways. Distribution of the link can occur via email or messaging, and the link can be embedded very elegantly into a web page, such as CECOM-RO's website, for anyone to fill out. Finally, we created a user friendly database app with AppSheet, which lays out and organizes the information from the spreadsheet into an appealing interface that can be used on any device. For security purposes, our team made a Gmail account for CECOM-RO. Only this account has access to editing this application, spreadsheet, and form. Limiting access to these items to one email alias provides the assurance that only CECOM-RO can access this information. This also enabled a smooth transfer of the database to CECOM-RO at the end of our project. Currently we have developed the database to the extent intended, and addition of information can occur 24/7.

### **3. Recommendations**

With the database created, we developed several recommendations for future use, maintenance, and growth of the database as follows. Since CECOM-RO assumes ownership of the database after our project, only certain personnel of CECOM-RO may work on it. Potential improvements to what our team has worked on thus far could include:

- *A new way of accessing the database.* Utilizing a different application than AppSheet.



- *Other security features.* The purchase of an upgrade in membership of AppSheet allows more options for security. Password protection of the spreadsheet could serve as an alternative solution.
- *Adding Spanish language capability.* Addition of a translate button or translated version.
- *Use of add-ons.* (Specifically Google Add-Ons) Any functionality that cannot be easily met without the help of code.

Application of these improvements can meet new needs of CECOM-RO and enhance the quality and functionality of the database itself. Additionally, we developed suggestions on how to grow the number of database participants. Our suggestions for this center on the importance of building connections through face-to-face communication.

## **Conclusion**

Currently, the lack of professional networks in Western Panamá leaves businesses in the region without access to the human capital needed for economic growth and competitiveness. Essentially, our project involved the creation of a database of American expatriates living in the province of Chiriquí who possess a willingness to assist companies in the region in order to improve economic competitiveness and complete development projects. Our sponsor, CECOM-RO, will own, maintain, and grow the database, which serves the purpose of matching development projects partnered with CECOM-RO to expatriates who possess the skills, knowledge, and experience needed for each project. Providing human capital to development projects enables success of the projects, resulting in improvements to economic competitiveness in the Western Region and the economy of Panamá as a whole.

#### **IV. Authorship**

**Edits to all sections of the paper involved all team members.**

**Abstract:** Marissa Bennett

**Acknowledgements:** Matthew Eaton, Caroline Armstrong

**Executive Summary:** Marissa Bennett, Matthew Eaton

**Authorship:** All

**Figures:** All

**Overview; Goal & Mission:** All

**Introduction:** Caroline Armstrong, Ranier Gran

**Background**

**Panamá's Current State:** Caroline Armstrong

**Nature of the Problem:** Caroline Armstrong

**CECOM-RO and the Specific Problem:** Marissa Bennett

**Tourism:** Ranier Gran

**Agriculture:** Ranier Gran

**Logistics:** Ranier Gran

**Universidad Tecnológica Oteima:** Caroline Armstrong

**Past Approaches to Improving Economic Competitiveness:** Matthew Eaton

**Our Task:** Ranier Gran

**Methodology**

**Methodology Introduction:** Matthew Eaton

**Collect Expatriate Information for the Database:** Marissa Bennett

**Build and Refine the Database:** Marissa Bennett, Ranier Gran

**Establish a Framework for Continued Use:** Ranier Gran, Matthew Eaton

**Findings & Analysis**

**Personal Experiences:** Caroline Armstrong

**Expatriate Interviews:** Matthew Eaton, Ranier Gran

**Interview Challenges:** Ranier Gran

**Boquete:** Caroline Armstrong

**Further Outreach:** Caroline Armstrong

**Project Outcome:** Marissa Bennett

**Conclusion & Recommendations:** Marissa Bennett, Matthew Eaton, Caroline Armstrong

**Appendix**

**Interview Questions for Expatriates:** All

**Survey for Participating Expatriates:** Marissa Bennett

**Example Email to Initial Expatriates:** Caroline Armstrong

**Facebook Post:** Caroline Armstrong

**References:** All

# Table of Contents

<b>I.</b>	<b>Abstract.....</b>	<b>i</b>
<b>II.</b>	<b>Acknowledgements.....</b>	<b>ii-iii</b>
<b>III.</b>	<b>Executive Summary.....</b>	<b>iv-viii</b>
<b>IV.</b>	<b>Authorship.....</b>	<b>ix</b>
<b>V.</b>	<b>Table of Figures.....</b>	<b>xii</b>
<b>VI.</b>	<b>Overview.....</b>	<b>xiii</b>
	<b>A. Goal.....</b>	<b>xiii</b>
	<b>B. Mission.....</b>	<b>xiii</b>
<b>VII.</b>	<b>Introduction.....</b>	<b>1-5</b>
<b>VIII.</b>	<b>Background.....</b>	<b>6-23</b>
	<b>A. Panamá's Current State.....</b>	<b>6-9</b>
	<b>B. Nature of the Problem.....</b>	<b>9</b>
	<b>C. CECOM-RO and the Specific Problem.....</b>	<b>10-15</b>
	<b>1. Tourism.....</b>	<b>15-16</b>
	<b>2. Agriculture.....</b>	<b>16-18</b>
	<b>3. Logistics.....</b>	<b>18-19</b>
	<b>D. Universidad Tecnológica Oteima.....</b>	<b>19</b>
	<b>E. Past Approaches to Improving Economic Competitiveness.....</b>	<b>19-21</b>
	<b>F. Our Task.....</b>	<b>21-23</b>
<b>IX.</b>	<b>Methodology.....</b>	<b>24-28</b>
	<b>A. Methodology Introduction.....</b>	<b>24-26</b>
	<b>1. Collect Expatriate Information .....</b>	<b>26-27</b>
	<b>2. Build and Refine the Database .....</b>	<b>27-28</b>
	<b>3. Establish a Framework for Continued Use.....</b>	<b>28</b>
<b>X.</b>	<b>Findings &amp; Analysis.....</b>	<b>29-39</b>
	<b>A. Personal Experiences.....</b>	<b>29-30</b>
	<b>B. Expatriate Interviews.....</b>	<b>30-33</b>
	<b>C. Interview Challenges.....</b>	<b>33</b>
	<b>D. Boquete.....</b>	<b>34-35</b>

	E. Further Outreach.....	35
	F. Project Outcome.....	35-39
XI.	Conclusion & Recommendations.....	40-44
XII.	Appendix.....	45-50
	A. Interview Questions for Expatriates.....	45
	B. Survey for Participating Expatriates.....	45-46
	C. Example Email to Initial Expatriates.....	47
	D. Facebook Post.....	48-50
	1. Expat Group 1.....	48
	2. Expat Group 2.....	49
	3. Post.....	50
XIII.	References.....	51-53

**V. Table of Figures**

**Figure 1** - Panamá (Google Maps, 2016) ..... 2

**Figure 2** - The Province of Chiriquí (Google Maps, 2016)..... 2

**Figure 3** - The province of Bocas del Toro (Google Maps, 2016)..... 3

**Figure 4** - The region of Ngäbe Buglé (Google Maps, 2016)..... 3

**Figure 5** - Chiriquí Projects page 1 of 4.....11

**Figure 6** - Chiriquí Projects page 2 of 4..... 12

**Figure 7** - Chiriquí Projects page 3 of 4.....13

**Figure 8** - Chiriquí Projects page 4 of 4.....14

**Figure 9** - Our Google Survey..... 38

**Figure 10** - Google Sheet (Database)..... 38

**Figure 11** - The editors’ view of our app on AppSheet..... 39

**Figure 12** - Organization of Sectors..... 39

**Figure 13** - Expat Responses..... 39

## **VI. Overview**

### **A. Goal**

Overall, our group aims to promote economic competitiveness within the Western Region of Panamá, and thus Panamá as a whole.

### **B. Mission**

Our IQP team worked with the Competitiveness Center of the Western Region of Panamá (CECOM-RO, in Spanish) to improve regional economic competitiveness. CECOM-RO has started working in the provinces of Chiriquí and Bocas del Toro, as well as the Ngäbe Buglé Comarca, over the past year to promote economic growth by providing tools and services to development projects. Our team connected the organization with American expatriates who are willing to contribute their guidance and knowledge, gained from their experience in industry, to entrepreneurs and projects in the region. To do this, our team created a database of these expatriates, with the hope that these individuals will help to build a stronger and more competitive economy, resulting in improvements to society and quality of life.

## **VII. Introduction**

Throughout the world, countries constantly seek to create and sustain economic growth. Growth in the economy can result from a number of changes, such as an increase in tourism or development in international financial relations. At the most general level, the metrics of size and growth rate describe the state of economies. Ideally, an economy should have both an appropriately large size and high growth rate. According to four scholars, Huggins, Izushi, Prokop, and Thompson, regional economic competitiveness plays a large role in economic performance (2014). These four state that regional competitiveness, based on the work of Begg and Huggins, involves “the presence of conditions that both enable firms to compete in their chosen markets and for the value these firms generate to be captured within a particular region” (Begg, 1999; Huggins, 2003). Measurement of competitiveness, according to Huggins, Izushi, Prokop, and Thompson, can involve an assessment of assets such as human capital, innovative capacity, and infrastructure quality (2014).

In Panamá, recent efforts, such as the Panamá Canal Expansion, have sought to improve the country’s overall economy. Currently, economic activity involving the canal makes up about 75% of Panamá’s gross domestic product (GDP) (Panamá Economy, 2016). The future expansion will widen the canal, allowing larger ships to pass through. While predictions suggest that improvements to the canal will result in economic gains, stability requires strong economic performance in a number of diverse industries. In Panamá, many of these other industries operate in relative obscurity, in locations far from the canal.

According to our sponsor, The Competitiveness Center of the Western Region of Panamá (CECOM-RO in Spanish), the Western Region of Panamá currently requires improved access to

human capital in order to complete projects, such as infrastructure development, aimed at furthering economic growth. This region, as defined on CECOM-RO’s website, includes the provinces of Chiriquí, Bocas del Toro, and Ngábe Buglé, as shown in figures 1-4 below (n.d.).



**Figure 1 - Panamá Source:** Google Maps, 2016.



**Figure 2 - The Province of Chiriquí Source:** Google Maps, 2016.





**Figure 3** - The province of Bocas del Toro **Source:** Google Maps, 2016.



**Figure 4** - The region of Ngäbe Buglé **Source:** Google Maps, 2016.

One of our contacts, Guillermo Castro, the Vice President of the City of Knowledge, has noted that the region contains a significant number of American expatriate retirees who could serve as valuable human capital to companies in the region (personal communication, April 20, 2016). According to Castro, many of these American expatriates live within the communities of Boquete and Volcán, located near the city of David in the Province of Chiriquí. Information from CECOM-RO's website supports this statement, as 70% of the population of Boquete consists of foreign residents (CECOM-RO, n.d.).

In order to supply human capital in the form of American expatriates to projects in the region, CECOM-RO needs a means of connecting with these expatriates. Through our research, we have found no examples of such direct expatriate integration into regional projects. From Bodirsky's *Culture for Competitiveness: Valuing Diversity in EU-Europe and the 'Creative City' of Berlin*, we know the importance of expatriates to the economy: an increased pool of knowledge and experience (2012). However, no established method for connecting with expatriates in the Western Region of Panamá exists. In order to address this issue, CECOM-RO wants to have a database containing the contact and professional information of American expatriates living in the Province of Chiriquí who have an interest in contributing to development initiatives in the region. Our team, then, worked to both build this database and obtain the information stored in it.

Creation of the database required multiple steps in order to ensure that the resulting product will effectively enable CECOM-RO to connect expatriates with economic development projects. Initial construction of the database involved discussion with CECOM-RO officials as to

the requirements for the database and the specific information that it contains. This communication helped to ensure that the database would include the necessary information and meets the needs of CECOM-RO. After this, we connected with several initial expatriate contacts in the village of Boquete. Throughout our project, we worked closely with Oteima University, a partner organization of CECOM-RO. In order to assist us, Oteima provided the list of initial expatriate contacts to us. The contacts on this list served as our gateway into the expatriate community. We used these initial expatriate contacts as a means to grow our sample size by asking these individuals if they know others who may have interest in participating in the database. Once we received information from several expatriates, we organized the information within the database. Finally, we established a framework for database use and maintenance, wrote documentation on how to use the database, and handed ownership over to CECOM-RO at the completion of our project. Our team hopes that by connecting development projects with expatriates, the projects will lead to economic gains for the Western Region and Panamá as a whole.

## **VIII. Background Section**

### **A. Panamá's Current State**

Panamá, located in Central America, has undergone various changes, both economically and governmentally, since it broke away from Spain in 1821 with the help of Colombia (Galeano, 1997). In 1903, Panamá successfully seceded from Colombia with military and monetary aid from the United States. In return for the support, the U.S. gained influence over Panamánian affairs (Infoplease, 2016). This influence gave the U.S. access to the Panamá Canal Zone, thus enabling the completion of the canal, which the French had unsuccessfully attempted to build in the 1880s (Panamá - Growth and Structure of the Economy, 2016). France's failure resulted from economic troubles and difficulties posed by the environment in Panamá. U.S. influence in Panamá, particularly with regard to the canal, involved joint Panamá and U.S. control of the canal and the surrounding area. Joint control of the canal lasted from 1903 until Panamá's acquisition of full ownership of the canal in 1999 (CIA, 2016). From 1968-1989 Panamá experienced two consecutive dictatorships, the second of which ended forcefully in a U.S. military operation (Gascoigne, 2016). Following this, Panamá established a constitutional democracy which has lasted to this day. Presidential elections occur every five years, with Juan Carlos Varela of the Panamenista Party currently holding the office of President (Long, 2015). Currently, the center-left Democratic Revolutionary Party and the center-right Democratic Change and Panamenista parties dominate Panamánian politics.

Economically, Panamá has not yet reached its full potential. In its early history, indigenous people lived off of the land, utilizing the favorable geography and resources of the region. After the arrival of the Spanish in the early 1500's, Panamá quickly became a principal shipping point to and from Central and South America (Infoplease, 2016). From then on,

Panamá's economic standing relied heavily on global trade through its ports, and later, its canal. Currently, the country utilizes a dollar-based, free-market economy, and thus, experiences small increments of inflation (Berg and Borensztein, 2008). Projections for 2016 place Panamá as the fastest-growing economy in the Central American Region, with a projected 6.1% growth in GDP (Mancellari, 2016). The expansion of the Panamá Canal, which should reach completion by the end of 2016, has contributed to the economy by driving growth in service industries such as tourism, banking and insurance. Further economic development has resulted from initiatives targeting transportation. Strictly developed service divisions, which include the Panamá Canal, the Colón Free Trade Zone, and the Trans Panamá Pipeline, comprise more than 75% of Panamá's \$45 billion gross domestic product as of 2015 (Panamá Economy, 2016; Panamá Forbes, 2015).

Although forecasts predict a comparatively large 6.1% GDP growth rate for Panamá in 2016 (U.S. GDP growth in 2015 was 2.5%), the country's recent economic performance suggests that this may not occur. In 2015, Panamá experienced its slowest economic growth rate since 2010, and the GDP growth rate has decreased steadily since that year (Mancellari, 2016).

In order for the increase in GDP to occur, Panamánian government officials must face and fix issues such as the "lack of skilled workers, corruption, and a lack of judicial independence" which have contributed to the decline in Panamá's GDP growth rate since 2010 (Trading Economics, 2016). With the expected completion of the Panamá Canal Expansion in 2016, growth in tourism, product production, banking, and trade will likely occur (Dixon, 2007). These aspects play a major role in the forecasted leap in Panamá's GDP by the end of 2016 (Mancellari, 2016).

As of 2016, about 4 million people live in Panamá, with an employment to population ratio of 63% (Employment to population ratio, 2015). This means that approximately 63% of the civilians of Panamá contribute continuously to the economy. According to Bob Adams, the low cost of living in Panamá plays a major role in the fact that Panamá has significant number of retirees, both of Panamánian and U.S. origin. Adams also states that on top of Panamá's already low living cost, countless hotels, restaurants, medical offices, and utility companies offer large discounts on their services (Adams, 2015). These discounts fall under the Panamá Pensionado Program, a list of appealing incentives which encourage retirees to consider settling in Panamá (Adam, personal communication, September 12, 2016). Consequently, Panamá has received the ranking of “Best Retirement Destination” by *International Living* (Retire in Panamá, 2015).

According to CECOM-RO's website, David, the capital of Chiriquí, serves as the economic center of the province, with industries such as agriculture, livestock, heavy industries, tourism, and communications, and businesses such as restaurants, schools, stores, and hospitals (n.d). The agriculture and livestock industries comprise the bulk of the economy in Chiriquí, and the province has recently become a popular tourist destination. Significant growth potential exists within agribusiness, as Chiriquí produces a number of high-value exportable goods such as pineapple, pepper, watermelon, and coffee. Potential for growth in tourism exists as well, especially along the coast and in the highlands of Boquete. In order to take advantage of this potential, CECOM-RO's website states that the Chiriquí Society, a partnership of businesses, institutions, and citizens, with support from the government and the Latin American Development Bank, promotes a plan to foster growth within the agriculture and tourism industries by modernizing the agricultural sector and developing infrastructure. CECOM-RO's website also mentions that most of the banana production in Panamá occurs in Chiriquí and

Bocas del Toro, with approximately 98% of the crop exported to Europe and the U.S. Bocas del Toro's reputation rests on tourism, as the existence of coastal islands, rainforests, and great biological diversity make the province an ideal tourist destination. Additionally, CECOM-RO's website contains information on the Ngäbe Buglé Comarca, an indigenous region created in 1997 from territory in the provinces of Chiriquí, Bocas del Toro, and Veraguas which serves the purpose of returning control of the land to the indigenous people through the establishment of an autonomous government. The census of 2010 determined that 154,355 people live in the Comarca. Production of coffee, cocoa, and crafts serve as the main economic activities in Ngäbe Buglé, with much of the coffee exported, primarily to Germany. Essentially, the three provinces in the Western Region fall on a spectrum of economic development, with Chiriquí at the higher end and Ngäbe Buglé at the lower end.

## **B. Nature of the Problem**

Panamá ranks 50th on the Global Competitiveness Ranking, placing Panamá as the most competitive country in Central America (Competitiveness Rankings, 2015). The country has sustained its competitiveness as a result of allowing for increased awareness and collaboration with global commerce (Panamá, 2016). Around 2013, a decrease in Panamá's competitiveness occurred due to the country's inability to fight corruption, raise government efficiency, and address the ineffective education system (Latin America and the Caribbean, 2015). One of Panamá's greatest economic difficulties relates to the inability of the country to adapt to economic changes, as seen with its fluctuating economy. Additionally, Panamá must address the shortage of skilled laborers with applicable skill sets for companies and employers. This shortage has the potential to produce a bottleneck effect for Panamá's economy as it moves forward (Global Competitiveness Report, 2015).

### **C. CECOM-RO and the Specific Problem**

Our project team worked with the Competitiveness Center of the Western Region of Panamá, or, in Spanish, el Centro de Competitividad de la Región Occidental (CECOM-RO). CECOM-RO, a private non-profit foundation created in late October of 2015, seeks to promote economic competitiveness within the Western Region of the country by providing tools and resources to partners working on development projects in order to ensure the success of these projects (CECOM-RO, n.d.). Partners of the organization include educational institutions, agricultural businesses, information technology companies, and more. Improving the Western Region's competitiveness through these partners and their projects requires certain resources. A list of CECOM-RO's partner projects can be found in figures 11-14 on the following pages. In the case of our project, American expatriates fall into the resource category of human capital, and provide the knowledge, skills, and experience that partners of CECOM-RO need to create successful projects. Due to CECOM-RO's short existence of less than a year, the organization has not yet started to build connections with American expatriates of diverse skill sets. The lack of professional organizations within the Western Region complicates this task. Many of the expatriates living in the area may possess needed skills and a willingness to assist with development projects in the region.



# PROJECT'S PORTFOLIO

## PRIVATE PROJECTS (P.PR)



**VISION CHIRIQUI**  
**2 0 2 5**

Project for the development of a tropical fruit processing plant to obtain pulp and puree for exportation.		
<b>P. PR CODE:</b>	P. PR 001	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 522,925. <sup>93</sup>	Development of a Tropical fruit processing plant to obtain pulps and purees, from top quality fresh fruits, duly processed in processing line using latest technology, pasteurized and packaged aseptically applying HACCP and GLOBALGAP plans to export to international markets.
<b>CONTACT INFORMATION:</b>	Guillermo Gomez E-mail: guileg32@gmail.com	
Coco's Bay Residential, Touristic and hotel Complex.		
<b>P. PR CODE:</b>	P. PR 002	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 20,000,000. <sup>93</sup>	Beach Development of 20 hectares at Funte Bejuco, Boca Chiva, San Lorenzo, Chiriquí, with spectacular view to the sea, including a residential and hotel area.
<b>CONTACT INFORMATION:</b>	Felipe A. Rodriguez y Felipe V. Rodriguez. Tels.: 775-7740, 6676-9677 / E-mails: fel@felperodriguez.com, frodrguezv@cwpanama.net	
Playa Grande: A Hotel, Marina, Golf and Residencial Complex.		
<b>P. PR CODE:</b>	P. PR 003	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 200,000,000. <sup>93</sup>	A development of 495 hectares in from of the sea at Boca Chiva, San Lorenzo, Chiriquí, planned by an equipment of professional consultants as EDGA Land Planners, Jack Nicklaus Design, Hill Glazier Studio Resort Architects, ATM Environmental Consultants and others.
<b>CONTACT INFORMATION:</b>	Woo-Mingh Fung, Prestige Panama Realty Independent Development, Inc. David, Chiriquí, Panama. Office: +(507)775-0253, Fax: +(507)775-7115, Cell: +(507) 6983-8183. Emails: wmfung@prestigepanamarealty.com, wmfung@chiriquihardwoods.com	
APRE's Coffee Roasting Plant (Renacimiento Coffee Producer's Association).		
<b>P. PR CODE:</b>	P. PR 004	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 314,478. <sup>93</sup>	Adding value to the product and to be able to process excess of production.
<b>CONTACT INFORMATION:</b>	Ernesto Ameth Lezcano. E-mail: cafeapre@hotmail.es, Cell: 6524-3382	
Training of officers and leaders of 13 municipalities of the province of Chiriquí in "Decentralization and New Criminal Justice".		
<b>P. PR CODE:</b>	P. PR 005	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 350,000. <sup>93</sup>	Community leaders that will be multiplying beings in their communities will be training on duties and rights of the citizens regarding these regulations.
<b>CONTACT INFORMATION:</b>	Nixa Gnaegi de Ríos / Universidad Tecnológica Oteima. Cellular: 66728430, E-mail: nixa@oteima.ac.pa   www.oteima.ac.pa	
Consulting the design of law to create a Trust for Financing Agricultural Carriers.		
<b>P. PR CODE:</b>	P. PR 006	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 20,000. <sup>93</sup>	Achieve a fund by law of US\$ 75,000,000. <sup>93</sup> at IFARHU to train professionals in agricultural careers (technicians, graduates, engineers, specialists, doctors) in a period of 15 years.
<b>CONTACT INFORMATION:</b>	Nixa Gnaegi de Ríos / Universidad Tecnológica Oteima. Cellular: 66728430, E-mail: nixa@oteima.ac.pa   www.oteima.ac.pa	

Figure 5 - Chiriquí Projects page 1 of 4

<b>Batipa Research Institute for the Conservancy and Sustainability of Marine Coastal Environment.</b>		
<b>P. PR CODE:</b>	PPR 007	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 1,000,000. <sup>20</sup>	The Batipa Institute will be a center of academic tourism, which will encourage and support the development of the Boca Chica-Cobiza-Batipa triangle.
<b>CONTACT INFORMATION:</b>	Nixa Graaigi de Rios / Universidad Tecnológica Oteima. Celular: 66728430, E-mail: nixa@oteima.ac.pa   www.oteima.ac.pa	
<b>Certified Slaughterhouse to Export to USA and the European Union.</b>		
<b>P. PR CODE:</b>	PPR 008	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 8,000,000. <sup>20</sup>	All years in Panama loses its bovine meat quota at the European Union, because it does not have certified facilities to export.
<b>CONTACT INFORMATION:</b>	National Livestock Association Chiriquí. Celular 6699-2551, E-mail: anaganchiriqui@yahoo.com	
<b>Use of protected cultivars under the Hydroponic System for the production of vegetables. Its processing and trading at Chiriquí's Highlands.</b>		
<b>P. PR CODE:</b>	PPU 009	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 3,056,854. <sup>24</sup>	The purpose, at this first stage of the project, is to make a change (hydroponic means) to achieve a greater production environmental peppers to favor the development of the same, is a efficient complete and sustainable way. Allowing therefore, control of temperature, humidity and other factors.
<b>CONTACT INFORMATION:</b>	Cooperativa de Producción Multicultivos 3D R.L. E-mail: multicultivo3d@gmail.com Edgar Hils, Cel.6527-3271 / Anel Rios, Cel.: 6960-1077	
<b>Power Generation with biogas by using rice husks.</b>		
<b>P. PR CODE:</b>	PPR 010	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 4,628,000. <sup>24</sup>	To install a gas plant to generate biogas from rice husks, this gas will be used to feed a power plant which generates electricity to serve the rice facilities and the country. Advantages of gasification. In the Elimination of waste. Almost all incoming waste is removed; the resulting ashes, of minimum volume, are inert.
<b>CONTACT INFORMATION:</b>	Miguel Sáez (General Manager) AGROSILCOS, S.A Telephones: 850-6429, 6262-9149, E-mail: msaez@agrosilcos.com	
<b>Pan Pacific Interiors.</b>		
<b>P. PR CODE:</b>	PPR 011	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 100,000. <sup>20</sup>	Computer design, manufacture and installation of kitchen furniture and high quality European style Cabinets coated with granite, marble and quartz for the local market and export. The project will generate direct and indirect employment in the province by the location of the plant as well as national and international projection by its focus on exports of Congoleum Flooring Products and Calume Ceiling Tiles.
<b>CONTACT INFORMATION:</b>	FAJARDO & ASOCIADOS - CONSULTANTS Carlos Fajardo, Celular: 507-6070-0331 E-mail: cfo44@gmail.com	
<b>Development of a association net of tourism entrepreneurs for the Province of Chiriquí.</b>		
<b>P. PR CODE:</b>	PPR 012	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 200,000. <sup>20</sup>	To promote the development of enterprise associations as sprint to the commercial productive improvement of enterprises with impact on the social economic development of the Province of Chiriquí, to strengthen small and medium local enterprises, to develop the producing linkage, to create sustainable jobs and to decrease the local unemployment rate.
<b>CONTACT INFORMATION:</b>	FAJARDO & ASOCIADOS - CONSULTANTS Carlos Fajardo, Celular: 507- 6070-0331 E-mail: cfo44@gmail.com	

**Figure 6 - Chiriquí Projects page 2 of 4**

# PROJECT'S PORTFOLIO

PRIVATE (P.PR)



VISION CHIRIQUI  
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Sol y Mar Residential and Marina Project (Las Lajas Panama International Inc.)		
<b>P. PR CODE:</b>	PPR 013	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	Up to this date, the project has an investment of (Three million dollars) US\$ 3,000,000. <sup>20</sup>	The project Sol y Mar residences and marina is a great source of development not only for this province, but also for the country, since it focuses on one of the most important areas of the business and commercial sector, such as tourism.
<b>CONTACT INFORMATION:</b>	Web page: www.Laslajaspanama.net, www.Laslajaspanama.com E-mail: Karen1@laslajaspanama.net, lomytraw@cuppanama.net Tel.: 774-9876	
Construction and furnishing of David's Metropolitan Park (Thematic).		
<b>P. PR CODE:</b>	PPR 014	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	Approximately US\$ 5,000,000. <sup>20</sup> (five million dollars)	The population of the District of David is constantly growing which results in a need of a park with green areas for recreation and amusement, thereby improving the quality of life of the population. The municipality of David, by means of Agreement N°. 26 of July 30th, 2014 authorized the use of 30 hectares of Property N°. 245, inscribed at Book 245, Page 192, property of the Municipal Omste Services (SEMA) for the construction of the Metropolitan Park.
<b>CONTACT INFORMATION:</b>	Francisco Vigil Chavarria, Mayor of the City of David. Tel. 775-1013 Dr. Manuel Molina, Director of the Director of the Urban Development. Abdel Torres Diaz, President of the Chamber of Commerce, Industries and Agriculture of Chiriquí. Tel. 775-4851 / 730-1020 E-mail: presidencia@camchi.org.pa	
A Business Development Model for the Agricultural Sector of Chiriquí and Panama.		
<b>P. PR CODE:</b>	PPR015	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	Approximately US\$ 1,200,000. <sup>20</sup> (one million two hundred thousand dollars).	Intervention of the Agricultural Sector to reverse the trend to reduce its contribution to the national GDP. Increase of the production hours; increase in production by category; reduction of production costs; increase in output per unit of measurement; post crops actions; mitigate infra-on-demand and speculation of prices inside the chains of value. Three hundred (300) producers benefited; Activation of the centers of collection of the cold chain; One hundred (100) producers / Collection Center. Key words: inclusive business; Food security; Agricultural sector; Impact on poverty; Value chains.
<b>CONTACT INFORMATION:</b>	NGO: Organization for Sustainable Development President: Andrés B. Palacios N. Email: Andros_palacios07@hotmail.com Celular: 6690-8304	
Strategic Plan for the Overall Recovery and Development of Barú.		
<b>P. PR CODE:</b>	PPR 016	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	To be Defined.	Seeks to develop an strategic plan for the "cluster" integration at Barú's District, integrating national infrastructure and part of the dry canal. Barú-Panama Maritime way or Chiriquí Grande -Cobán to reduce transportation costs of products and the cost of first necessity products. Define and organize "the Cluster" and the SOCIAL/SPACIAL infrastructure created by readapting existing social, economic and physical systems of the region, creating an sustainable interaction among the same, a new pole of encounters and work – an industrial, touristic and cultural hybrid; a New Independent Economy, Self-Sufficient and attractive to foreign and local investors.
<b>CONTACT INFORMATION:</b>	Héctor Palacios Celular: (607)6641-8110 E-mail: hp.mas@hotmail.com	

Figure 7 - Chiriquí Projects page 3 of 4



<b>Global Recycles.</b>		
<b>P. PR CODE:</b>	PPR 017	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$30,000,000. <sup>00</sup>	A proposal to develop a project that allows to work by generating clean energy, produced from the transformation of solid waste from the districts of Bugaba, Alarje, Bari, San Félix and Dolega. The first phase includes the building of five biomass plants.
<b>CONTACT INFORMATION:</b>	Penama's Nature Foundation E-mail: fundacionnaturaleza@gmail.com	
<b>Construction of a high technology greenhouse for agricultural production in Boquete, Province of Chiriquí.</b>		
<b>P. PR CODE:</b>	PPR 018	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 250,000. <sup>00</sup>	During the last 40 years the agricultural production has been substantially reduce, as well in hectares of crops as in local products, to the above, we shall add the immigration from agricultural activities to others such as real estate and tourism that apparently generate more expectations regarding profitability, especially in the high lands. In addition, the agriculture productions in open skies are subject to a great variation on the weather conditions that reduce its development. Our project proposes to retake production but under a high tech mode, which allows to increase production, contributes to employment of the area, especially in non-qualified or without formal education employees. Additionally, will give a focus point for the transference of knowledge regarding crops in greenhouses complying with safety and traceability required for the internal market, as well as the international market.
<b>CONTACT INFORMATION:</b>	Naturex, S.A. RUC: 36528-72-263759 DV52 Legal Representative Mariel MAGRINI CED: N-18-638 Address: Chiriquí, Boquete, afo Boquete El Santuario, main road, House #2922. TEL.: 6480-0630, E-mail: marielmagrini@yahoo.com	
<b>Vacuum Packaged Vegetables and Crops, and in at conditioned atmosphere.</b>		
<b>P. PR CODE:</b>	PPR 019	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 80,000. <sup>00</sup>	This is an important project because currently there are several products that, by not been commercial, are lost in the field, and by adding value become attractive to the client.
<b>CONTACT INFORMATION:</b>	Mariuzenia M. Castillo de Aguilar Telephones: 6720-9809 / 6727-4812 / 771-5262 E-mail: mariuzenia@hotmail.com, mariuzenia@hotmail.com	
<b>Creating a Community Mediation Center in each of the county courts of the District of David.</b>		
<b>P. PR CODE:</b>	PPR 020	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 30,000. <sup>00</sup>	To prevent violence and reduce administrative actions, with the purpose of improving social peace and access to justice.
<b>CONTACT INFORMATION:</b>	Oliver Candanedo, Arbitration Court and Mediation center. CAMCHI. E-mail: corteaarbitral@camchi.org.pa	
<b>Implementing two model centers of School Mediation at the Professional and Technic Institute of David and the Pablo Emilio Kersen Basic Level.</b>		
<b>P. PR CODE:</b>	PPR 021	<b>JUSTIFICATION:</b>
<b>TOTAL AMOUNT OF INVESTMENT:</b> (ESTIMATED IN DOLLARS)	US\$ 20,000. <sup>00</sup>	To design a comprehensive plan that includes work with students, teachers and parents as the result of the implementation of mediation in the solution of disputes generated inside schools.
<b>CONTACT INFORMATION:</b>	Oliver Candanedo, Arbitration Court and Mediation center. CAMCHI. E-mail: corteaarbitral@camchi.org.pa	

Figure 8 - Chiriquí Projects page 4 of 4

Expatriates may assist in any manner of their choice, from providing consulting and advice to management. Our team, therefore, aimed to aid CECOM-RO in connecting these expatriates with companies and their respective development projects through the use of a database system. The database consists of information about expatriates including name, contact information, areas of expertise, work interests, constraints, level of commitment, and Spanish fluency. Utilization of this system by CECOM-RO is intended to improve the economy, and thus improving living standards in western Panamá.

In addition to providing connections to experienced professionals, CECOM-RO also assists businesses in various sectors such as agriculture, logistics, and tourism by promoting investment, infrastructure development, entrepreneurship, social and cultural inclusion, collaboration between public and private economic efforts, and connections between partner organizations. CECOM-RO ultimately facilitates connections both on the individual and organizational levels in order to connect companies with the resources needed for economic competitiveness, allowing the Western Region to develop “sustainable competitive advantages” (“Panama’s western region,” 2016).

## **1. Tourism**

One of the major goals of CECOM-RO involves improving tourism in the Western Region of Panamá. The organization, as a whole, believes that Western Panamá does not compete effectively with neighboring countries, such as Costa Rica and Mexico, in the touristic sector. Currently, the Western Region has over 4000 hotel rooms, 6 direct flights, 5 bus routes, and 1000 restaurants (Rodriguez & Tovar, 2016). This infrastructure serves as a base for tourism,

but does not create tourism on its own. The region possesses ideal environments for many different activities, including snorkeling, whale watching, fishing, kayaking, and many types of tours. Unfortunately, international tourism agencies tend to overlook the region. CECOM-RO's aims to improve tourism in the Western Region in the following categories: adventure tourism, agro tourism, ecotourism, event tourism, archeological and cultural tourism, gastronomic tourism, and ethno tourism (indigenous communities) (Rodriguez & Tovar, 2016).

Accomplishing this involves improving tourism infrastructure and promotion, as increasing touristic competitiveness requires both (L. Chang, personal communication, September 6, 2016). Currently, CECOM-RO has several projects aimed directly at improving touristic infrastructure. For example, the Coco's Bay residential, touristic, and hotel complex project involves development of 20 hectares of beach in Boca Chica (Vision Chiriquí 2025, 2014). Another project involves connecting tourism entrepreneurs into a network to help promote the region.

From our conversations with Liz Chang, the head of CECOM-RO's tourism sector, we learned that CECOM-RO wants additional input on their projects, as well as consultation for future works (personal communication, September 6, 2016). CECOM-RO wants to hear expatriates' stories: the reasons they came to Panamá, the factors that made them stay, and reasons for success in prior business endeavors. CECOM-RO also wants more direct involvement from interested expatriates in the form of consultation on better business practices and potential methods of promoting tourism in Panamá. CECOM-RO's tourism sector welcomes ideas and suggestions, and constantly strives for improvement.

## **2. Agriculture**

The Western Region accounts for the majority of agricultural production in Panamá. Approximately 90% of all cattle production and other produce in Panamá comes from farms

throughout Chiriquí and the surrounding provinces. Due to the high agricultural production of the Western Region, the agricultural sector provides a vital contribution to the region's economic standing. However, the region has recently experienced greater agricultural competition from other parts of the country. Over the past few years, agriculture has grown in eastern Panamá due to increasingly favorable land conditions and improved practices. Following this increased domestic competition, CECOM-RO has made it one of their goals to improve the competitiveness of the Western Region's agricultural sector. The organization has made it their mission to generate 30,000 jobs and reduce the negative environmental impacts of farming, while increasing overall production ("La Visión Chiriquí," 2016). The key strategy for achieving these improvements involves improving technology and practices on existing farm land, rather than expanding land use.

In order to achieve this mission, CECOM-RO has secured \$557 million dollars of investment over 5 years from both the private (\$402 million) and public (\$155 million) sectors. These investments will go toward multiple programs and projects, as well as future promotion, communication, and availability of improved technologies. Programs and projects will focus on the main agricultural resources that western Panamá has to offer (milk, meat, coffee, vegetables, palm oil, plantains, cacao, etc.), as well as expansion to new potential products ("La Visión Chiriquí," 2016). For example, a hydroponic farming system project has been developed to educate communities on how to set up their own sustainable hydroponic gardens.

CECOM-RO has already set yearly goals for agricultural improvement, and has projected broad ranges of increased productivity across many resource scenarios. In order to complete these projects, CECOM-RO wants to connect with expatriates who possess knowledge in the agricultural fields of Panamá and ideas for more productive and sustainable agricultural

practices. CECOM-RO has also identified the importance of communicating agricultural methods and the effectiveness of these methods with the community in order to improve involvement and acceptance of these projects. One of the ways they plan to reach these goals includes increasing the availability of agricultural technology throughout the region. This will provide businesses the tools to develop competitive advantages. Many larger farms in the Western Region have similar technology and equipment to farms in the US; however, many local farms still operate using simple and often back-breaking methods. CECOM-RO plans to transfer some of the improved technology and practices of the commercial Panamánian producers to local farmers, including the indigenous people, in order to increase total productivity. Increased productivity will lead to higher crop yield and thus, to cheaper prices for the Panamánian consumer. Improved customer relations will help CECOM-RO promote their work in the agriculture sector so that they can attract investment, additional entrepreneurship, necessary infrastructure in new farm land, and help promote social and cultural inclusion in agriculture. In order to best improve the region as a whole, encouraging participation of the native peoples must occur as well. To ensure effective adoption of improved farming practices, CECOM-RO plans to bring education tools to the field in order to teach locals. This method of learning by doing serves to both directly teach local farmers how to adopt better practices and demonstrate the effectiveness of these practices. Overall, CECOM-RO seeks to improve Western Panamá's agriculture sector, both commercially and locally, in order to increase the competitiveness of the region.

### **3. Logistics**

CECOM-RO's collaboration with the region's logistics center serves to facilitate many of the regional projects and work on a local level by creating new community groups and



legislature. The logistics center's current efforts involve a border modernization project valued at \$50 million ("Panama's Western Region," 2016). On the more local scale, CECOM-RO seeks to create a community mediation center for courts in David. Our team lacked additional information on the logistics plans of CECOM-RO because an executive missed his meeting with us. Based on what we were told, collaboration with expatriates will contribute greatly to these projects, as many have business management skills and consultation experience. By working on both the regional and local scale, CECOM-RO can provide a broad but thorough effect through their competitive improvement plans.

#### **D. Universidad Tecnológica Oteima**

Oteima Technological University, located in the city of David in the Province of Chiriquí, was established in 2011 (Oteima Technological University, 2016). The University's objectives and fields of study focus mainly on conservation and sustainability initiatives associated with tropical environments. The institution has a partnership with CECOM-RO in order to help improve the competitiveness of the Western Region of Panamá, particularly in environmental and sustainability aspects (F. Ugel, personal communication, April 20, 2016). Oteima University's collaboration with CECOM-RO meant that the university played a major role in our work by providing knowledge and resources, which aided in our development of an effective database.

#### **E. Past Approaches to Improving Economic Competitiveness**

Efforts to improve economic competitiveness exist in many countries other than Panamá, and have resulted in varying degrees of success. In Botswana, focus on the diamond mining industry has resulted in the attainment of upper-middle income levels (World Bank, 2015). Additionally, the World Bank notes that growth in the private sector and shrinkage of the public

sector has correlated with economic growth in Botswana. This suggests that effective utilization of a country's resources, public sector shrinkage, and private sector growth can play a significant role in economic competitiveness. However, the World Bank also notes that over-reliance on the diamond industry places Botswana at the mercy of the diamond market. Diversification of the economy, then, would provide for a more stable economy. In the case of Panamá, the economy relies heavily on revenue generated by the Panamá Canal. Diversification of Panamá's economy, then, could likewise improve economic stability. This relates to CECOM-RO's goal of improving economic competitiveness of the Western Region, which operates separately from the canal. However, the Western Region itself does not display great economic diversification due to the aforementioned prominence of the agricultural sector. By improving the economy in the Western Region in multiple sectors, CECOM-RO's efforts will help to both grow and diversify the Panamánian economy.

In addition to the information on Botswana, the World Bank also describes some of the causes of economic competitiveness in Singapore. According to the World Bank, a significant portion of Singapore's economic competitiveness results from the development of human capital through the Singapore Skills Development System (SSDS), a joint collaboration between the government and the private sector. The SSDS involves cooperation between the Ministry of Trade and Industry (MTI), Economic Development Board (EDB), National Manpower Council (NMC), and Ministry of Education (MOE). The MTI coordinates economic development, the EDB coordinates foreign investment, the NMC examines manpower development in the tertiary education system, and the MOE oversees the overall education system. The program has successfully attracted foreign investment through incentivization by guaranteeing investors the right to hire a proportion of the students trained through the program. Growth in the program has

resulted in the funding of training centers by foreign countries. For example, Japan, Germany, and France have established training centers specializing in metal machinery, production technology, and electronic technology. The World Bank notes that the success of SSDS highlights the necessity for organizations to directly address target issues and communicate openly with partner organizations. Successful development of human capital by the SSDS likely plays a significant role in Singapore's economic growth, which averaged about 5% in GDP per year in the ten years leading up to 2014 (Bhaskaran, 2014). Significantly, Bhaskaran notes that GDP growth does not necessarily improve economic welfare evenly across the board, as in Singapore, GDP growth has come with increasing income inequality. This has significant implications for Panamá and elsewhere, in that economic growth may not benefit everyone equally. Singapore's focus on improving economic competitiveness through the development of human capital also has relevance to the Panamánian context. By training the people of Singapore for career work, the nation created a significant supply of human capital, which enabled economic growth. Currently, Panamá has a shortage of skilled workers, which the creation of a skills development system similar to that of Singapore could address (Trading Economics, 2015). In the case of our project, though, our sponsor, rather than focusing on training the people of Panamá, seems to desire human capital in the form of already-trained expatriates. In the short term, working with those who already have training may prove more convenient, but in the long term, our sponsor may consider developing human capital within Panamá, as Oteima and other universities do.

## **F. Our Task**

According to Katharina Bodirsky, modern economies depend on knowledge and innovation, thus competitiveness requires human capital possessing the necessary knowledge to

produce innovation (Bodirsky, 2012). The situation in Botswana seems to reflect this, as companies offering positions in engineering, accounting, and management often recruited expatriates, presumably due to a lower supply of qualified residents (World Bank, 2010). In this respect, Panamá may very well have some similarities. Due to Panamá's expected economic growth, companies will need more human capital, and CECOM-RO has identified the population of American expatriates in the Western Region of Panamá as a potential source. These expatriates may bring new policy and trade ideas from their home country, as well as unique knowledge, communication, and organizational techniques from their previous work experiences. By taking advantage of this expatriate resource, CECOM-RO could more effectively complete development projects and help companies to improve competitiveness, thus creating a stronger regional economy.

Prior to our project, CECOM-RO had no system in place to connect with expatriates living in the Western Region of Panamá. In light of this, our group was tasked with creating a database of American expatriates living in the Chiriquí Province of Panamá who would like to contribute to the development of the region. This database was to contain contact information from the expatriates, as well as work experience, work interests, constraints to work, and Spanish fluency status. This will allow CECOM-RO and partner organizations to reach out to expatriates whose skills best fit the needs of specific development projects.

Our review of the literature suggests that few similar situations of connecting expatriates with local organizations have been recorded within organized information systems. In this sense, then, our project provides new insight into this relatively ignored topic area. At the same time, our project compiles relevant knowledge on the general topic of connecting expatriates with local organizations, and the specific topic of creating an expatriate database to do so. This

compilation will serve as a future reference for others who aim to accomplish a similar project or learn about similar topics.

In order for our project to succeed, our team had to answer one big question: How can we create and sustain a database of American expatriates living in the Chiriquí Province of Panamá who would like to contribute to development of the region? The process for answering this question involved preliminary research on the topics of the history and current situation in Panamá, as well as focused research on how to create and maintain a database and what CECOM-RO and its partner companies desires in regards to the database. Preliminary research occurred prior to our stay in Panamá, and the focused research took place as outlined in the methods section that follows.

## **IX. Methodology**

### **A. Methodology Introduction**

Through our project, our team intended to improve the economic development within the Western Region of Panamá, thus improving Panamá as a whole. This involved working with the Competitiveness Center of the Western Region of Panamá (CECOM-RO) to improve regional economic competitiveness. CECOM-RO has started working in the provinces of Chiriquí, Bocas del Toro, and Ngäbe Buglé over the past year to promote economic growth by providing tools and services to companies in order to promote economic competitiveness. Our team sought to help CECOM-RO connect development projects with American expatriates who have an interest in contributing to development initiatives in the region. To do this, our team created a database of these expatriates, which will allow CECOM-RO to connect development projects with expatriates possessing desired skills. CECOM-RO intends for the American expatriates to work as temporary project consultants for partner companies. However, expatriates may contribute to these project in whatever capacity that they wish to. Ideally, this will enable the creation of a stronger and more competitive economy in the Western Region of Panamá, resulting in improvements to society and quality of life.

In order to build a database of American expatriates for CECOM-RO, we needed to understand the intended usage and ultimate goal for the database. In regard to this need, our group sought to learn more about CECOM-RO and past projects that the organization has completed. Since the organization has existed for less than a year, the list of past projects does not exist. However, we did receive a list of current projects. Additionally, we visited several project sites and CECOM-RO partners. By learning about the projects conducted by CECOM-RO, we gained a better understanding of the organization, which allowed us to both tailor the

database to the organization's specific needs and better describe the organization to prospective database members.

In order to achieve the desired outcomes, our team established the following objectives:

1. Collect expatriate information for the database
2. Build and refine the database
3. Establish a framework for continued use, maintenance, promotion, and growth of the database

In order to store and access information on expatriates, a database must first exist to hold and organize the information. At the same time, functionality of the database requires information to store. Once the database exists and contains information, maintenance of the database will ensure that information remains current, and promotion of the database will enable the addition of new information, thus sustaining and growing the usefulness of the system.

The process of our project depended significantly on the location of our team. The City of Knowledge, located in Panamá City, serves as the residence for the Panamá City Project Center. However, our sponsor's location in the City of David in the Province of Chiriquí requires a six-hour bus ride or a forty-minute plane ride from Panamá City. Because we worked with our sponsor and American expatriates within the Chiriquí region, our sponsor wanted us to spend approximately five out of our seven weeks living in David and working in Chiriquí. However, the Worcester Polytechnic Institute Interdisciplinary Global Studies Division limited our stay in Chiriquí to two out of the seven weeks. These two weeks occurred on our second and third weeks in Panamá. Because of Oteima University's relationship with CECOM-RO, Dr. Francisco Ugel, the Vice Chancellor of the University, provided the arrangements and resources for our

stay in Chiriquí and served as the supervisor for our work. Dr. Ugel reserved living arrangements in hotels during our stays in David and Boquete. He also arranged for transportation during most of our stay. As our supervisor, he set our daily schedule for our two weeks in Chiriquí, and arranged the details of many of our activities.

### **1. Collect Expatriate Information for the Database**

In order to create a functioning database, information must exist to put into the database. In our case, prior to collecting information for the database, we needed to learn more about the intended role of the expatriates who would participate in CECOM-RO's projects. To do this, we first met with several CECOM-RO executives. Dr. Ugel arranged these meetings, which occurred on the first three days of our stay in Chiriquí. These meetings served as briefings on our project, as well as informational sessions on the different sectors of CECOM-RO.

The next step involved visiting several project sites and partner organizations for the purpose of gaining a better understanding of both CECOM-RO's projects and the region. This occurred during the fourth through sixth days of our stay in Chiriquí. On the fourth day, we visited Petroterminal de Panamá and a cattle farm owned by a member of CECOM-RO. Our activities on the fifth day included visiting the indigenous community of Soloy, an African palm tree plantation, and one of the beaches at Boca Chica. On the sixth day, our team took a guided five-hour hike on the Sendero Los Quetzales trail, a pathway created as a result of a project by Oteima University (F. Ugel, personal communication, September 9, 2016). CECOM-RO has various other project sites and partner organizations which we did not visit due to time constraints. During these activities, we learned about the projects related to each site, as well as current efforts, successful methods, required resources, and future plans needed to achieve these projects.



During the second week of our stay in Chiriquí, our group spent the first three days in the town of Boquete. Located in a mountain valley, Boquete has a large expatriate population. Earlier in the year, CECOM-RO posted an advertisement on the website Chiriquí.Life. The advertisement targeted expatriates, with the goal of eliciting responses from those interested in working with CECOM-RO to contribute to development projects in the region. Eleven expatriates responded to the advertisement, and Dr. Ugel gave us the list of these expatriates and their contact information. These expatriates served as our initial contacts. In Boquete, we intended to communicate with these expatriates through both scheduled interviews and informal conversations at several events. We utilized face-to-face communication in order to build stronger connections, with the intent of increasing the number of expatriates joining the database. Setting up interview times occurred by email. Additionally, we attended the Tuesday expatriate flea market at the BCP Theater in order to connect with even more contacts. For the expatriates, these interviews served the purpose of gaining a better understanding of CECOM-RO, its projects, and what the organization wants from the expatriates. For our team, the interviews served the purposes of establishing connections between CECOM-RO and the expatriates, securing initial database members, and learning about the expatriate community in the area. In terms of learning about the expatriate community, we sought to discover their reasons for coming to Panamá, how our project may affect them, how to approach them, and how to secure collaboration with them.

## **2. Build and Refine the Database**

While collecting this information, our group concurrently constructed the framework of the database. In order to organize the information from the expatriates, a survey was developed. We created this survey with Google Forms. We used a survey because each expatriate should

answer the same set of simple questions, which should not require further explanation or communication. Sending the survey to interested expatriates was done by email. The outline of this email can be viewed in Appendix C. Both the survey and accompanying email were created during the second and third week of our trip. The questions in the survey of participating expatriates included topics that relate to their knowledge, expertise and skills, and interest in taking part in projects. The list of survey questions asked is located in Appendix B. We also gathered their contact information to place into the database in order for CECOM-RO to contact these individuals later on, as our database's main purpose is to connect expatriates to projects. After submission of the survey occurs, a setup created by our team places the responses to the survey into a Google Spreadsheet, essentially Google's online version of Microsoft Excel. This application serves as our database.

### **3. Establish a Framework for Continued Use**

After the database reached full functionality, we gave a demonstration of the database to several members of CECOM-RO during our presentation in order to generate feedback. Following this, we returned to the City of Knowledge for the rest of our seven weeks. During the rest of the project, we further improved the database, reached out to more expatriates through social media, and prepared our project deliverables. Once the database reached completion, we created an informational document on use and maintenance of the database in the form of an email communication to CECOM-RO. At the end of our project, all documents and ownership of the database were transferred over to our sponsor, CECOM-RO, as well as other documents which they requested.

## **X. Findings & Analysis**

### **A. Personal Experiences**

In order to obtain data for our database, we had to connect and converse with members of the expatriate community. As mentioned previously, we obtained an initial list of expatriate contacts from Dr. Ugel of Oteima University. The University placed an advertisement in an online newspaper distributed within the Chiriquí region: Chiriquí.Life. This advertisement explained the need for an equivalent database and strived to spark interest in expatriates living within the Chiriquí region who would potentially participate. From this initial outreach, Oteima University received responses from approximately twelve expatriates who expressed interest in participating, or who simply wanted to learn more about the database.

From this primary list of prospective database participants, our team set out to meet and interview these individuals. The list contained basic information needed for the database such as areas of interest and contact information, which we used to get in touch with these expatriates in order to set up interviews. Direct interviews served the purposes of gauging actual interest, explaining the database and CECOM-RO to a greater extent, and encouraging participation in the database. During our first few days in David, we reached out to expatriates via email. A copy of this email can be found in the Appendix under Appendix D, Example Email to Initial Expatriates. The email explained our relationship with CECOM-RO and Oteima University, as well as our task of building the database. In addition, we mentioned the idea of scheduling in-person interviews while we were residing in Chiriquí. Our interviews took place during our time in Boquete because all of the expatriates on the list live in the area. In fact, the entire reason for our stay in Boquete related to the large expatriate population of the town.

Expatriates may move to Panamá for a variety of reasons including lower cost of living or retirement incentives such as the Panamá Pensionado Program. In the Boquete region, as more expatriates come, it is assumed that others follow in a domino effect of sorts, resulting in a majority expatriate community and a mixing of United States and Panamánian influence. During our stay, we interviewed eight expatriates in person. We met with some in their houses and others in public places. Most of them displayed an eagerness to learn about CECOM-RO and their potential involvement in projects.

## **B. Expatriate Interviews**

Note that the names have been changed and much information has been withheld to protect identity and personal information.

### **1. Adam**

Adam served as our first expatriate encounter during our stay in Boquete. Through our interview with him, we learned that he possesses significant experience in marketing, finance and strategic planning, which could prove useful to CECOM-RO in their endeavors. He exhibited curiosity of CECOM-RO's intent and planned courses of action, as well as our own involvement with the organization. As our first interviewee, he provided us with challenging questions to consider in relation to our project as a whole. Questions on topics such as how the Panamánian people will react to increased influence of government organizations and an increasingly competitive lifestyle stimulated thinking on our part about the effects of CECOM-RO's work. While Adam came off as slightly inquisitive, he actually possessed great interest in participating in the database and helping CECOM-RO in any way possible. Thus our database gained its first expatriate.

## **2. Britney**

Our group met Britney, our second expatriate interviewee, for a brief chat at the BCP Theater. Britney's experience involves several entrepreneurial endeavors. On Tuesdays, expatriates gather at the BCP Theater to sell their goods and listen to short educational lectures. During our visit to the BCP Theater, Britney introduced us to other expatriates who may have an interest in joining the database.

## **3. Carl**

Our third interviewee, Carl boasts a rather impressive resume. In the United States, Carl's career involved work in high positions within various companies. Currently, he holds a position in a US company which he manages remotely from Panamá. Carl and his wife came to Boquete because they wanted to live in the mountains with a lower cost of living than in the United States. He currently serves as a mentor in Panamá and would like to continue doing so.

During the interview, he mentioned that Panamánians generally do not market businesses and products effectively. For example, people will start a new restaurant, but will make little or no attempt to bring in customers. They will expect the customers to just come, and when this does not happen, the restaurant goes out of business. With his experience, Carl should serve as a valuable resource for CECOM-RO's projects.

## **4. Doug**

Our interview with Doug occurred at a restaurant on a coffee plantation. During dinner, our group talked with Doug about a wide variety of topics. Doug's professional career involved support and management of industry. Since retirement, he has explored various interests such as

cooking and writing. During the interview, he highlighted the importance of skill development for Panamánian workers through his own life stories.

### **5. Edgar**

In the United States, Edgar worked independently of large businesses. He has accomplished many things in his architectural and entrepreneurial career, and loves his work. Edgar came to Panamá after the 2008 financial crisis as he and his wife wanted to live in a country with cheaper living costs. They chose to come to Panamá at the recommendation of friends.

### **6. Frank**

Similar to Edgar, Frank worked primarily independently. In Panamá, he wants to help the indigenous people to improve their living conditions. He has ideas for how to do this, but lacks the necessary resources to put his ideas into practice. Frank also has many other ideas he wishes to bring to reality. Another suggestion of his involved using the website Khan Academy as a teaching resource for people in the region. He also stated that since most scientific papers are published in English, Panamá and other non-English-speaking countries will eventually have to adopt English as the main language. Indeed, a 2012 study found that 80% of the journals in Scopus, the world's largest database of peer-reviewed journals, were published in English (Huttner-Koros, 2015).

### **7. George**

George owns and operates a company in Panamá, and talked about his experience of doing so.

## **8. Henry**

Henry's experience in the United States involved law enforcement and owning several small businesses. While discussing the region, he noted that the area lacks a sufficient number of senior living centers.

### **C. Interview Challenges**

Our position as the first contact between CECOM-RO and the expatriate community made direct interviews key. However, face-to-face interviewing did bring us some challenges. Some of the expatriates on the list proved difficult to contact, and our short stay of three days in Boquete forced us to limit our interviews to those who responded promptly. During our interviews, many of the expatriates shared concerns about the Panamánian culture and how it could affect involvement in CECOM-RO's projects. Several individuals shared concerns about how the Panamánian people would view their influence; they did not want Panamánians to view them as intruders pushing their own methods upon established businesses. The concept of "Panamá time" also came as a concern to most of the expatriates. Typically, American business practices require firm punctuality and scheduling. Panamánians, on the other hand, tend to have a more relaxed view of time. Expatriates also shared a general concern about the language barrier, as many expatriates do not speak Spanish fluently. Our team also found it very important to convey to expatriates our exact role with CECOM-RO, as well as CECOM-RO's role in the region because some individuals did not fully understand that we, as WPI students, do not have a direct link to CECOM-RO. Overall, though, our interviews proved successful, as we managed to pique the interest of almost all of the expats with whom we spoke and gain useful insight for CECOM-RO.

## **D. Boquete**

With the large expatriate population in the Chiriquí region, especially in Boquete, a group of English-speaking individuals living in and around Boquete has formed an organization known as the Boquete Community Players (BCP). This community provides a number of programs and services, including drama, markets, and educational talks. The BCP aims to allow members of the community to “meet new people, develop or improve talents, learn a new skill, and provide a valuable service to the residents of Boquete and beyond” (Boquete Community Players, 2016).

Every Tuesday, the BCP Theater hosts a flea market presented by both expatriates and Panamanians. Here, vendors from around the area come and sell their products and services. Through this event, members of the BCP can assist others in their businesses and share knowledge or expertise. Also on Tuesdays, the BCP Theater hosts a “Tuesday Talk” wherein a guest speaker comes to discuss topics ranging from volcanology to plastic surgery. Our group witnessed one of these talks during our visit to the BCP. Before each talk, if anyone present in the theater has any kind of announcement to make, then they may do so. We gave an announcement briefly describing our project and mentioning our search for expatriates such as those in the room. We stated that we would remain after the talk if any individual was interested and would like more information or would like to join the database. As a result, we spoke with multiple expatriates following the talk and received significant interest from these individuals. As mentioned previously, we met with Britney when we visited the BCP theater. We interviewed her as we would any other expatriate, but we also used Britney and her connections to our advantage. She kindly brought us around to some of the expatriates at the market; mainly those who she thought would have an interest in our database. As a result of this, we were able to reach out to several individuals directly without having to converse via email and schedule an



interview. With these expatriates, our interactions occurred in a short and simple manner. We stated our reasons for being there, described our project and the database, and explained how the individuals could become involved. Afterwards, we collected multiple business cards and discussed further information via email.

### **E. Further Outreach**

Although our stay in the Western Region of Panamá only lasted two weeks, our attempts at connecting with expatriates occurred over a longer time frame. As stated earlier, we learned of multiple expatriate forums online, and used these to our advantage. We utilized two groups on Facebook, both called Expats of Panamá. One group currently has over 7,000 members, while the other has just under 2,000. We wrote a post of similar content to the email that we sent out to prospective expatriates, and posted it on both pages. Within the post, we talked briefly about CECOM-RO and its mission, the database, and the opportunity for expatriates to collaborate and assist in development projects within the region. Our survey, explained in further detail later, and a link to CECOM-RO's website were also added to the post. See Appendix for the actual post.

### **F. Project Outcome**

While progressing through each interview, we gained much useful information from the expatriates. This information pertained to the interviews themselves, as well as what we required for the database and our research. We found that communication happened best when keeping the conversations open. For most of the interviews, we met with expatriates in a fairly open setting such as at their home or in a nearby cafe. The interviews started with our team explaining how we got involved the project and what CECOM-RO looks for in the expatriate community. We then moved control of the conversation to the expatriates, allowing them to express their own

ideas and opinions. This resulted in a mix of back-and-forth chit-chat, and it appeared that we effectively fulfilled our responsibilities as the first contact between expatriates and CECOM-RO. Many of the expatriates became more open to participation in the database when they learned that they determine their level of involvement in CECOM-RO's projects. By not forcing standard participation requirements on expatriates, they became more comfortable with joining the database and more interested in assisting the organization. Our contact with key expatriate community players such as Britney also contributed to a successful outcome. By interviewing face-to-face with expatriates, our team gained the necessary knowledge to structure the database.

When it came to choosing a method for building the database, our team researched various options. We had several ideas such as a creating web page to contain the database, using SQL or SQLite to build a computer application for it, or manually inputting information into an Excel document. To narrow these options down, we discussed the pros and cons of each option. Our team rejected the web page idea due to its complicated nature and the lack of necessity, as the other two methods simplified our job. The use of SQL/SQLite would have worked fine for building a database, as the language mainly serves the purpose of building databases. However, only half our team had any coding experience, thus this option would make our project too intricate to complete in seven weeks. We chose the Excel document idea as the best method since everyone could work on it. Additionally, Excel organizes data easily, though keeping it up to date could prove tedious, and maintenance after we leave could prove difficult. After more research, our team discovered a Google Add-On called AppSheet, which we chose as the best database creation method for both us and CECOM-RO.

In order to use AppSheet, we needed a Google Spreadsheet to contain the data to be used in the app. This would become our database. Then, to collect the data and put everyone's

information into our database easily, our team created a simple survey. By using a Google Form, as shown in figure 6 below, we gained flexibility to edit questions or an aspect of the form easily and at any time. Also, we could take survey responses and save them to the Google Spreadsheet as shown in figure 7 below. In addition to these advantages, use of the form allows sharing of the survey with expatriates in various ways. Distribution of the link can occur via email or messaging, and it can be embedded very elegantly into a web page, such as that of CECOM-RO, for anyone to fill out. Linking the form to the spreadsheet provides the means to create add-ons such as the one our team member Marissa made in order to automatically email survey respondents upon submission. Finally, we created a user-friendly database app with AppSheet as shown in figures 8-10 on the next page, which lays out and organizes the information from the spreadsheet into an appealing interface which functions on any device. We also included subsections for sorting the people in the system into the three areas of focus for CECOM-RO: Agriculture, Logistics, and Tourism. The only issue with this method involves adding questions to the form, as discovering how to update AppSheet proved a bit complicated. The security for this database method comes in where our team made a Gmail account for CECOM-RO. Only this account has access to editing the application, spreadsheet, and form. Limiting access to these items to one email alias provided the assurance that only CECOM-RO can access this information. This also enabled a smooth transfer of the database to CECOM-RO at the end of our project. Currently we have developed the database to the extent intended, and addition of information can occur 24/7.

## Connect with CECOM-RO

Expatriates looking to help improve the Western Region of Panama can sign up here for contact with CECOM-RO and to receive information on projects in their areas of expertise.

\* Required

Personal info

This will be entered into a database for use by CECOM-RO only. Information will be kept private and will not be shared or sold in any way to outside sources without the consent of the individual.

**Name \***

Your answer \_\_\_\_\_

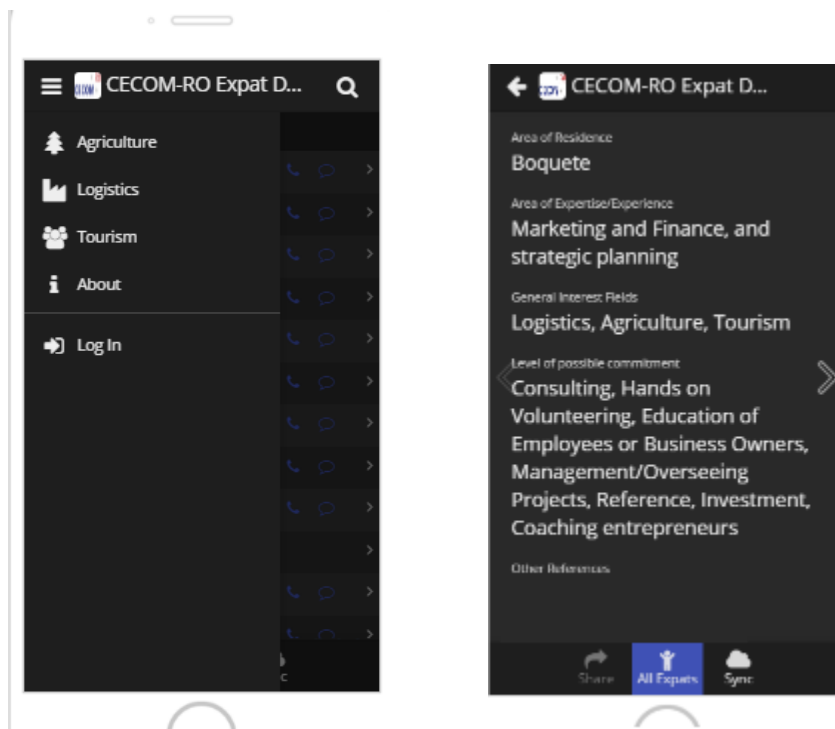
**Figure 9 - Our Google Survey**

	B	C	D	E	F	G	H	I	J
1	Name	Email address	Phone	Area of Residence	Area of Expertise/Experience	General Interest Fields	Constraints	Level of possible commitment	Other Reference
2				Boquete	Marketing	Logistics, Agriculture, Tourism		Consulting, Hands on Vol	
3				Boquete, Panama	Entrepreneurship	Agriculture, Logistics, Tourism		Education of Employees	
4				Boquete	IT services	Agriculture, Logistics, Tourism		Consulting, Ideas or feedback on the	
5				El Frances, Boquete, Chiriquí	Computer science	Agriculture, Logistics, Tourism		Consulting, Education of	
6				Boquete, Chiriquí, Panama	Business	Agriculture, Logistics, Tourism		Consulting, Education of	
7				Boquete	All plus	Agriculture, Logistics, Tourism		Consulting, Hands on Vol	
8				Santa Lucia	Retail	Agriculture, Logistics, Tourism		Consulting, Education of	
9				Boquete (at this time)	Aviation	Agriculture, Logistics, Tourism		Consulting, Hands on Vol	
10				Boquete	Marketing	Agriculture, Logistics, Tourism		Consulting, Hands on Vol	
11				Boquete	Real estate	Agriculture, Tourism, Logistics		Ideas or feedback on the	
12				Boquete	Services	Tourism, Logistics	Depend on	Consulting, Hands on Vol	
13				Boquete, Panama	Civil Engineering	Tourism, Logistics	None	Consulting, Education of	
14				Boquete	Architecture	Agriculture, Tourism	Full time	Consulting, Hands on Vol	
15				Auto Boquete, Chiriquí	Dust	Agriculture, Tourism, Logistics		Hands on Volunteering, M	

**Figure 10 - Google Sheet (Database)**



**Figure 11** - The editors' view of our app on AppSheet



**Figures 12 & 13** - Organization of Sectors & Expat Responses

## **XI. Conclusion & Recommendations**

Currently, the lack of professional networks in Western Panamá leaves businesses in the region without access to the human capital needed for economic growth and competitiveness. Our project involved the creation of a database of American expatriates living in the province of Chiriquí who have an interest in assisting businesses in the region in order to improve economic competitiveness and complete development projects. Our sponsor CECOM-RO will own and maintain the database, which will serve the purpose of matching development projects partnered with CECOM-RO with expatriates who possess the skills, knowledge, and experience necessary for individual projects. This provides human capital to businesses, which will allow them to become more economically competitive, thus improving economic competitiveness in the Western Region, and the economy of Panamá as a whole.

Our group has several recommendations for future use and continuation of the database. Since CECOM-RO has assumed complete ownership of the database after the end of our project, only certain personnel of CECOM-RO may work on it. Improvements to the current database could involve finding new ways of accessing the database and other options for security features, adding the capability of having the systems in Spanish, or creating and using more add-ons for various functions. These improvements can entail, respectively, a different application than AppSheet, the purchase of an upgrade in membership of AppSheet, or password protection of the spreadsheet, adding a translate button or option, or any function that cannot be easily met without the help of code. All of these can be applied to meet changing needs of CECOM-RO, and enhance the quality and functionality of the database itself.

Due to our limited stay in the Western Region, we did not connect face-to-face with a large number of expatriates, thus, the database remains fairly small. In order to increase the number of expatriates in the database, our team developed a number of suggestions. Firstly, we would like to highlight the importance of face-to-face communication. By speaking directly to expatriates, we gave explanations and answered questions effectively. Many expatriates had a number of questions for us and needed a better explanation of CECOM-RO's purpose and function, as well as expected expatriate contribution before committing to joining the database. Therefore, we recommend that CECOM-RO send other individuals to connect directly with expatriates. These other individuals could include members of CECOM-RO or students. From our perspective, we felt that our status as students working on a project made expatriates more willing to talk to us and more interested in our work. For our team, constraints imposed by the Worcester Polytechnic Institute Interdisciplinary and Global Studies Division limited our stay in the Western Region to two weeks. Whoever connects with expatriates in the future should continue working in Boquete, as well as other areas which have significant expatriate populations. Our work only took place in Boquete, and with the large expatriate population there, we only scratched the surface in terms of connecting with interested expatriates. The Tuesday market at the BCP Theater in Boquete presents an excellent opportunity to connect with more expatriates. CECOM-RO could potentially set up an information table at the event or provide one of the Tuesday Talk lectures. We did not connect with expatriates in other communities, which leaves an even greater number of potential database participants. In addition to communicating with expatriates in person, we also suggest using online message boards and social media to connect with expatriates. Although communicating over the internet does not build strong connections as effectively as face-to-face communication, the internet enables

connecting with a large number of expatriates in a short amount of time and without requiring travel. Additionally, online chat services such as Skype or Google Hangouts enable face-to-face communication over the internet.

In addition to liaisons of CECOM-RO, the organization itself and the expatriates participating in the database can also play a role in building up the database. As participants of the database, expatriates who have their information in the database should actually participate in something, whether or not they are currently working on one of CECOM-RO's projects. CECOM-RO could meet with the database participants, get them involved in some aspect of the organization's work, send out regular newsletters to them, or invite them to events. These activities could serve to engage the database participants with CECOM-RO's work and maintain connection. Additionally, some expatriates could actually become members of CECOM-RO, which would involve even greater commitment and connection. Greater engagement in CECOM-RO will allow and encourage expatriates to contribute to the organization's projects. Also, friends of these expatriates will take notice, and may decide to join the database themselves. Database participants could even actively seek to recruit other expatriates into the database. During recruitment efforts and marketing of database participation, focus on CECOM-RO's projects may induce greater interest than primarily talking about the organization itself, since expatriate involvement centers around work on the projects. Overall, recruitment efforts for the database should focus on building and maintaining relationships with expatriates, as this will facilitate database growth and maintenance and promote a productive relationship between CECOM-RO and database participants.

During our conversation with Liz Chang, the head of CECOM-RO's tourism department, she asked us to provide her with ideas for improving tourism marketing in Panamá. In response



to this request, we have come up with a few general ideas. The first of these ideas involves the importance of a good name. For example, the name of the City of David, due to its bland and uninteresting sound, does not evoke excitement. By comparison, the Province of Chiriquí sounds a bit more exciting. Boca Chica, on the other hand, sounds exciting, exotic, and touristy. Hearing the name, one can almost imagine the palm tree-fringed beaches of the area. By focusing on exciting names, marketers of tourism can generate increased interest. To add to this point, the old adage “a picture is worth 1000 words” rings especially true for tourism marketing. Showing tourists images of the best that the region has to offer can make tourists significantly more likely to go there. During our tour of Boca Chica, our guide and CECOM-RO member Felipe Rodriguez brought up an important point related to tourism. According to Felipe, the region has plenty of nice hotels that the owners market well. However, to paraphrase Felipe, people do not go on vacation to sit in a hotel. They may do so at first, but eventually, they will want to do something, and according to Felipe, hotels do not market activities. This leaves significant potential for marketing the activities and adventures in the area. Fortunately, the Western Region offers a rare variety of adventures. From David, one can drive about one hour to Boca Chica, where tropical beaches and a wealth of activities await. Boat rides can take tourists to islands in the area, which offer further adventure. From David, one can also drive to the mountain towns surrounding Volcán Barú in about an hour. This area offers a variety of outdoor activities from hiking to zip lines and white water rafting. With all of these activities available within such short travel distances, many options exist for marketing tourism in western Panamá. Liz probably already knows most of these things, but hopefully our recommendations for marketing tourism prove at least somewhat helpful.

With these recommendations in mind, CECOM-RO could continue this project in the future, or start related projects. In relation to the database, improvements to the actual database could occur, but does not need to happen. However, addition of more database participants must happen in order to provide a diverse skill set with adequate manpower in each skill area. If continuation of this project does eventually occur, our team wishes the next group the best of luck.

## **XII. Appendix**

### **G. Interview Questions for Expatriates**

1. When and why did you move to Panamá?
2. Are you currently employed or retired?
3. Are you willing to participate in a database of American expatriates who have an interest in assisting with development initiatives in the Western Region of Panamá? The database will be owned and maintained by the Competitiveness Center of the Western Region of Panamá, and will be used to connect skilled expatriate volunteers with development projects.
4. Are you a member of any expatriate organizations?
  - a) If so, which organizations?
5. Do you think that there are other expatriates within these organizations who would be willing to participate in the database?
  - a) If so, are you willing to help us to connect with them?
6. Do you know any other expatriates who would be willing to participate in the database?
  - a) If so, are you willing to help us to connect with them?

### **H. Survey for Participating Expatriates**

Only questions marked with “(Required)” were required to be answered in our survey. The survey itself and all other questions were optional.

#### **Beginning of Survey:**

Expatriates looking to help improve the Western Region of Panamá can sign up here for contact with CECOM-RO and to receive information on projects in their areas of expertise.

Personal Info: This will be entered into a database for use by CECOM-RO only. Information will be kept private and will not be shared or sold in any way to outside sources without the consent of the individual.

1. Name (Required) - Short answer
2. Email Address (Required) - Short answer
3. Phone - Short answer
4. Area of Residence - Short answer
5. Do you speak Spanish? (Required) - Radio buttons for Yes, No, Some, Other (With fill in)

## Connection to Projects

6. Area of Expertise/Experience (Required) - Short answer
7. General Interest Fields (Required) - Checkboxes for Agriculture, Tourism, Logistics
8. Constraints/Availability - Short answer
9. Level of possible commitment (Required) - Checkboxes for Consulting, Hands on Volunteering, Education of Employees or Business Owners, Management/Overseeing Projects, Marketing, Reference, Ideas or feedback on the area, Investment, Other (with fill in)
10. Other References - Short answer
11. Additional Information or Comments - Short Answer

## I. Example Email to Initial Expatriates



Armstrong, Caroline

Request for Expatriates to Assist With An Educational Project

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Dear

We are a group of students from Worcester Polytechnic Institute (WPI) who are working on a project with Oteima University, the City of Knowledge, and the Competitiveness Center of the Western Region of Panama (CECOM-RO). This project involves connecting experienced expatriates from the United States with development initiatives within Western Panama.

We are reaching out to you in regards to your response to an advertisement in [ChiriquiLife](#) from Oteima University which requested expatriates to assist with an educational project.

In order to organize information collected from you and other interested expatriates, our group is creating a database. This database will enable CECOM-RO and partner organizations to effectively match expatriates with specific projects. In order to kick start this initiative, we would like to meet with you, preferably in person, or via online communication, to further discuss your potential role and confirm your interest. We will be travelling throughout the Chiriqui province until Wednesday, the 14th of September.

We will be following up with you in the near future with additional information on CECOM-RO and the projects you could potentially play a part in.

Please feel free to contact us for scheduling or with any questions, comments, concerns via email at [wrcr\\_iqp@wpi.edu](mailto:wrcr_iqp@wpi.edu).

Sincerely,

The WPI Team;

Caroline Armstrong  
Marissa Bennett  
Matthew Eaton  
Ranier Gran

(Email has been redacted to hide personal information)

## J. Facebook Post

### 1. Expat Group 1



# ExpatFocus

FOR ANYONE MOVING OR LIVING ABROAD

Visit us at [www.ExpatFocus.com](http://www.ExpatFocus.com)

## Expats in Panama

Public Group

Joined ▾ Share Notifications ...

Discussion Members Events Photos Files

Search this group 🔍

Write Post Add Photo / Video Create Poll More

Write something...

PINNED POST

**Expat Focus** uploaded a file. September 5

Download your free copy of the Expat Focus Guide To Moving Abroad, we hope you find it useful 😊

**Expat Focus Guide To Moving Abroad.pdf**

ADD MEMBERS

+ Enter name or email address...

MEMBERS 1,409 Members (23 new)

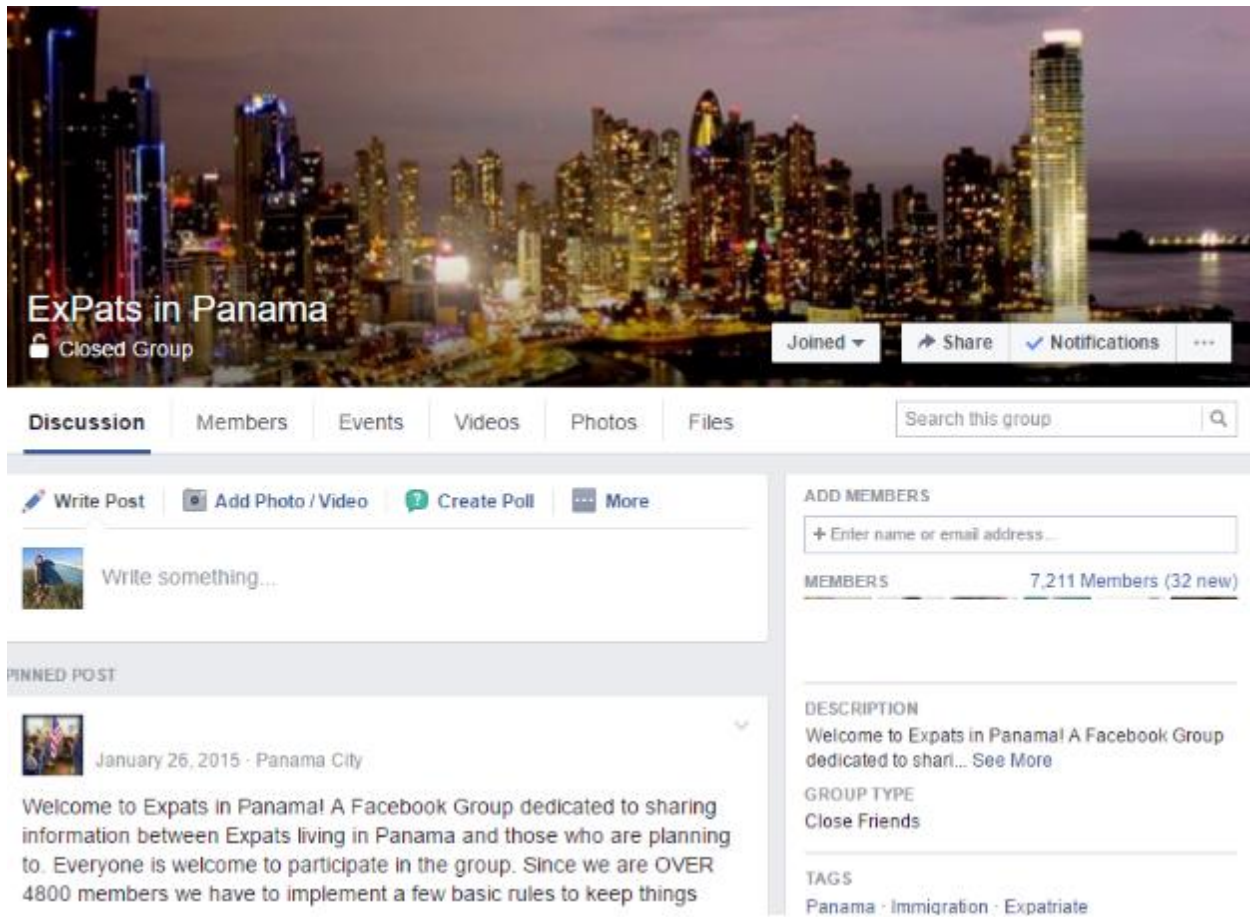
DESCRIPTION

ExpatFocus.com group for English speaking expats in Panama. Strictly no advertising.

TAGS

Panama · Expatriate

## 2. Expat Group 2



**Expats in Panama**  
Closed Group

Joined ▾ Share Notifications ...

Discussion Members Events Videos Photos Files

Search this group

Write Post Add Photo / Video Create Poll More

Write something...

**PINNED POST**

January 26, 2015 · Panama City

Welcome to Expats in Panama! A Facebook Group dedicated to sharing information between Expats living in Panama and those who are planning to. Everyone is welcome to participate in the group. Since we are OVER 4800 members we have to implement a few basic rules to keep things

**ADD MEMBERS**  
+ Enter name or email address...

**MEMBERS** 7,211 Members (32 new)

**DESCRIPTION**  
Welcome to Expats in Panama! A Facebook Group dedicated to shari... See More

**GROUP TYPE**  
Close Friends

**TAGS**  
Panama · Immigration · Expatriate

### 3. Post



**Caroline Armstrong**

September 26 at 2:52pm



Hello!

I would like to introduce you to the organization CECOM-RO, which is the Competitiveness Center of the Western Region of Panama. CECOM-RO's main goal is to provide tools and resources to other companies and organizations within Western Panama. This ultimately involves connecting experienced expatriates from the United States with these development initiatives within the region.

I am a part of a group of students from Worcester Polytechnic Institute (WPI), located in Massachusetts, and we are working with CECOM-RO to facilitate a connection between expats like all of you and future development projects.

This is where you all come in!!

We believe that your interests could help benefit the region and would like to connect you with CECOM-RO, if you're interested.

Below you will find a link to CECOM-RO's website with more information regarding some projects, as well as their vision. You will also find a link to a survey to become connected to the organization and to be included into a [database](#) for contact with CECOM-RO. The [database](#) will be private and will only be accessible to CECOM-RO, and the sharing of your information will only be allowed with your permission.

CECOM-RO's website:

<http://www.cecomro.com/cecom-ro/>

[Database](#) Survey:

<https://docs.google.com/.../1FAIpQLSfVialqXFRU81iv7e.../viewform>

Please feel free to contact us with any questions, comments, concerns via email at [cecomro.expats@gmail.com](mailto:cecomro.expats@gmail.com)



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