

**A CASE STUDY OF THE EARLY STAGES OF TEXAS A&M AGRILIFE  
HAITI: IDENTIFYING COMPETENCIES FOR INTERNATIONAL  
AGRICULTURAL DEVELOPMENT GRADUATE STUDENTS**

A Thesis

By

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## **ABSTRACT**

Some non-governmental organizations (NGOs) are viewed as beneficial to agricultural and extension education in ways that government organizations are not (Mwangi, Agugnga, & Garforth, 2003). The College of Agriculture and Life Sciences at Texas A&M University is partnering with NGOs in Haiti (Texas A&M AgriLife Haiti) to improve agricultural and rural development. Texas A&M AgriLife Haiti, which utilizes graduate researchers, sent the first pair of students in the spring semester of 2014. This thesis comprises two individual studies in article format.

The objectives for the first study were to 1) determine the desired competencies of graduate students who participate in international agricultural development programs based on expert program coordinators of Texas A&M AgriLife Haiti and 2) describe a competency framework for graduate students in international agricultural development from the collected data.

To accomplish these objectives this study used qualitative methods including semi-structured interviews with Texas A&M AgriLife Haiti program coordinators. The study resulted in a descriptive and succinct list of competencies for graduate students in international agricultural development. These competencies were a) Contextual Knowledge and Understanding, b) Social Sciences, c) Technical/Agricultural Sciences, d) Character, e) Realism, f) Resource Management, g) Critical Thinking, h) Communication, i) Leadership, and j) Research Methods and Tools. From this list a

framework was developed that depicted the interconnectivity among competencies and with the individual.

Using qualitative case study research methods with an embedded design, the second sought to accomplish the following objectives: 1) describe the steps taken by Texas A&M University and a partnering NGO in Haiti in preparing AgriLife Haiti to incorporate graduate student researchers, 2) describe the steps taken by Texas A&M University in preparing graduate students to take part in AgriLife Haiti, and 3) identify challenges faced by Texas A&M AgriLife Haiti.

This study gathered data via observations, communication records, and semi-structured interviews in order to meet the objectives. Three key components emerged in the study. They were 1) *program preparation* by the partnering entities of the program, 2) *student preparation* by Texas A&M University, and 3) *challenges* faced in the program.

## DEDICATION

I dedicate this thesis to my family for always supporting and encouraging me in all that I do. It is your love and faith that has enabled me to get where I am. I love you all, and I am forever grateful. Additionally, this is dedicated to my dear brother in Christ, Todd Walker, who is battling Amyotrophic Lateral Sclerosis (ALS). You have inspired me and touched my life more than you can ever know. I love you, brother.

Lastly, I would also like to dedicate this thesis to those around the world who are struggling to survive, whether they are American, Filipino, Haitian, or any other people. Your fight for survival is a lesson for us all. Don't ever give up!

Hast thou not known? hast thou not heard, that the everlasting God, the Lord, the Creator of the ends of the earth, fainteth not, neither is weary? there is no searching of his understanding. He giveth power to the faint; and to them that have no might he increaseth strength. Even the youths shall faint and be weary, and the young men shall utterly fall: But they that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run, and not be weary; and they shall walk, and not faint.

—Isaiah 40:28-31

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I would also like to acknowledge my wonderful family and friends for encouraging me during this whole process, even though some of them did not understand anything I was doing. Lastly, I would like to thank my new family. The Aggie Family is something that you cannot understand until you become a part of it, and even then you struggle to grasp the depth and unity of it. My graduate career at Texas A&M has been an experience I will keep with me for the rest of my life. “Thank you” to all the Aggies, students, faculty, and former students, who have provided a positive influence on my experience here. Gig’Em!

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# CHAPTER I

## INTRODUCTION

### **General Introduction**

In the spring of 2014, Texas A&M University took the lead on an effort for change in Haiti, the poorest country in the Western Hemisphere and one of the poorest countries in the world. The College of Agriculture and Life Sciences at Texas A&M University sent two graduate students to work with a non-governmental organization (NGO) in Haiti. These students were sent on multiple platforms. First, the graduate researchers' main intent was helping the people of Haiti through agricultural education. Other platforms included assisting the NGO, conducting research in order to improve the livelihood of Haitians, assisting in the development of the program while it was in its beginning stages, and facilitating the conception of this new project, deemed Texas A&M AgriLife Haiti. This master's thesis is a result of those experiences and hinges on addressing human suffering in Haiti and the limitations of Texas A&M AgriLife Haiti.

This thesis will follow the journal article style thesis format. Therefore, this all-inclusive document will contain two distinct manuscripts. However, both manuscripts concentrate on program development and improvement of Texas A&M AgriLife Haiti. The manuscripts will use some of the same data. These manuscripts were written according to the submission guidelines of the *Journal of International Agricultural and*

*Extension Education* (AIAEE, 2014). The first manuscript is titled “What Program Coordinators Want: A Competency Framework for Graduate Students in International Agricultural Development Programs Such as Texas A&M AgriLife Haiti.” The second manuscript is titled “Institutional Partnerships in Developing Countries: A Case Study of the Early Stages of Texas A&M AgriLife Haiti.” These writings will be referred to as Manuscript #1 and Manuscript #2, respectively.

The end product of Manuscript #1 is a competency framework comprising 10 competencies. These competencies were: 1) Contextual Knowledge and Understanding, 2) Social Sciences, 3) Technical/Agricultural Sciences, 4) Character, 5) Realism, 6) Resource Management, 7) Critical Thinking, 8) Communication, 9) Leadership, and 10) Research Methods and Tools. These competencies are based on the data gathered through semi-structured interviews with the program coordinators of Texas A&M AgriLife Haiti and confirmed with supporting literature. Each competency includes subcategories. Further, Manuscript #1 provides a detailed explanation of each competency. While this framework was specifically constructed for graduate students in international agricultural development contexts, it is generalizable to other international agricultural development contexts.

Manuscript #2 is based on case study research methods. Case study research was conducted to describe the planning process of Texas A&M AgriLife Haiti through the preparations between Texas A&M University and the partnering NGO. The case study also describes the preparation of students by Texas A&M University. This study resulted in the identification of challenges and issues faced in the program.

## **Background of Texas A&M AgriLife Haiti**

During a class in the spring semester of 2013 at Texas A&M University, a student identified her work with a faith-based non-governmental organization (NGO1) involved in agricultural education and development in Haiti. The class instructor subsequently invited the director of the NGO to visit the class as a guest lecturer. Concluding his visit to the university, the director of the NGO extended an invitation to Texas A&M University faculty to make a site visit to the Haiti campus of the NGO. In the summer of 2013, two faculty members from the College of Agriculture and Life Sciences visited the NGO to assess needs for agricultural development and to determine suitability of the NGO's facility to host graduate students and faculty who would conduct applied agricultural research and agricultural development activities.

During this same time frame, a former prominent employee of the university approached the administration of the College of Agriculture and Life Sciences at Texas A&M University to assist another NGO (NGO2), also located in Haiti, with agricultural development (a second priority to its primary mission of healthcare). While the professors were conducting their assessments and evaluations at NGO1, the leaders from NGO2 were invited to visit NGO1 so that 1) NGO1 could provide a tour of its facilities and programs to NGO2, which is a young organization in the process of establishment, while NGO1 has over a quarter century of established presence in the country, and 2) the two organizations could establish a relationship for future partnerships and collaborations to benefit the Haitian people.

Later in September of the fall semester of 2013, faculty members took a second trip to Haiti for further needs assessment related to how Texas A&M University could cooperate with the two NGOs in Haiti. This time three faculty members took part in a week-long endeavor, and the site visit was made at NGO2 (one faculty member did visit NGO1 for a short period of time). Following the September visit, three faculty members in the Department of Agricultural Leadership, Education, and Communications and a faculty member in the Department of Horticultural Sciences—all of whom had visited one or both of the NGOs in Haiti—submitted a needs assessment report and a “proposed plan of action” to the Office of the Vice-Chancellor for Agriculture. Subsequent meetings among parties resulted in a plan dedicated to sending graduate research assistants to assist the NGOs, while also conducting applied research for agricultural development in Haiti.

Two students were formally identified in December and accepted the opportunity to take part in the program as graduate research assistants aiding with agricultural development and research with NGO2. In early January of 2014, they began meeting periodically with faculty advisors to plan and organize the program in Haiti. While NGO1 was the original contact for work in Haiti, the director encountered health problems during the fall semester of 2013 that impinged on developing a Memorandum of Understanding (MOU) prior to launching the program in 2014. However, a MOU was created between Texas A&M University and NGO2. February 2014 marked the milestone in which the College of Agriculture and Life Sciences sent two graduate students to work in Haiti for the remainder of the semester. The project was viewed as

the first major student activity of a program now referred to as Texas A&M AgriLife Haiti.

### **Context of Haiti**

Haiti, a Caribbean nation which borders the Dominican Republic, occupies the western one-third of the island of Hispaniola. Considered to be a developing nation, Haiti has several hurdles in its geography alone. Haiti is below the Tropic of Cancer and considered to be a tropical country; however, the mountains isolate the trade winds in some areas, creating a semiarid climate (CIA, 2014). Further, Haiti lies in the middle of the Hurricane Belt, receiving severe storms from June to October, and is susceptible to occasional flooding, earthquakes, and periodic droughts. With a mostly rough and mountainous terrain, the effects of issues like deforestation (with the wood harvested often used for fuel), inadequate supplies of potable water, and soil erosion are multiplied.

In order for one to have a relative perspective on the problems facing Haiti, one must understand the change that came about in 2010. It is important to understand Haiti pre and post 2010. Before 2010, Haiti was considered the poorest country in the Western Hemisphere, ranking 145th out of 169 countries in the UN Human Development Index (The World Bank, 2014; Disasters Emergency Committee, 2014). According to the Disasters Emergency Committee, more than 70% of Haitians were living on less than \$2.00 (United States Dollars) per day. Additionally, 40.6% of the population was unemployed, and of those employed the agricultural and services sectors were

responsible for nearly 90% of the labor force at 38.1% and 50.4%, respectively (CIA, 2014).

According to Haub (2010), the population was 9.8 million prior to the 2010 earthquake. Of that population, 37% were under the age of 15, and 4% were 65 or older with a life expectancy of 61 years. The World Factbook (CIA, 2014) reported that 52% of the population lived in urban areas. About half of those living in the capital city of Port-au-Prince (more than 2.1 million), did not have access to toilets, only about one-third had access to tap water, and 86% were living in slum housing.

The data provide convincing evidence that the state of Haiti prior to 2010 was very poor. This matter was exacerbated on January 12, 2010, when a massive earthquake with a magnitude of 7.0 occurred near Port-au-Prince, with multiple devastating aftershocks. Between 220,000 and 250,000 people were estimated to have been killed, including 25% of civil servants in Port-au-Prince; over 300,000 injured; and overall, 3.5 million people affected in a variety of ways by this catastrophic natural disaster (Kent, 2010; Disasters Emergency Committee, 2014). Four thousand schools, 60% of the government and administrative buildings, 80% of the schools in Port-au-Prince, and 60% of the schools in the West and South Departments were damaged or destroyed (Disasters Emergency Committee). Increasing the challenges of the earthquake was an outbreak of cholera only seven months later. “By July of 2011, 5,899 had died as a result of the outbreak, and 216,000 were infected” (Disasters Emergency Committee, “Impact of the January 12 earthquake”). Conclusively, 2010 marked a dramatic and shocking decline in

the development of Haiti, causing a gap in data and a crisis that had not yet been resolved by 2014, despite the overarching efforts of relief workers around the world.

Approximately four years after the earthquake, Haiti still faced development obstacles. In 2014, the population rebounded and is estimated to be between 9.9 and 10 million, of which 54% live in abject poverty (CIA, 2014). Many of the issues that faced Haiti prior to 2010 are no better now than before. Corruption and a lack of adequate education still plague the country, causing over two-thirds of the labor force to be unskilled. Haiti is also still considered a U.N. Tier 2 country in regards to human trafficking, another issue which has yet to be addressed by the government.

**CHAPTER II**

**WHAT PROGRAM COORDINATORS WANT: A COMPETENCIES  
FRAMEWORK FOR GRADUATE STUDENTS IN INTERNATIONAL  
AGRICULTURAL DEVELOPMENT PROGRAMS SUCH AS TEXAS A&M  
AGRILIFE HAITI**

**Introduction**

Shinn, Wingenbach, Briers, Lindner, and Baker (2009) defined agricultural/rural development as “processes for improving lives of individuals, families, and communities—meeting basic human needs, improving economic well-being, and allowing hope, promoting peace, and sustaining their environment (see Snapp & Pound, 2008; Wals & Bawden, 2004)” (pp. 60-61). Agriculture/rural development is one of the 12 identified knowledge domains identified by Shinn et al. as what “should constitute doctoral study in agricultural and extension education from a global context” (p. 58). Moreover, Davis and Place (2003) stated, “Major theories are advocating a shift toward pluralistic agricultural extension models, in which the public and private sectors, including partners such as non-governmental organizations (NGOs), form coalitions to provide extension services (Anderson & Crowder, 2000)” (abstract). Mwangi, Agunga, and Garforth (2003) described the positive benefits of faith-based initiatives in international development and agricultural extension, such as the fact that they are closer to the local people than is the government.



Lindner and Dooley (2002) stated, “Collectively, knowledge, skills, and abilities are referred to as competencies. Competencies are behavioral dimensions that help to identify effective from ineffective performance (Maxine, 1997)” (p. 57). They went on to explain that doctoral students will acquire and enhance, through both life and educational experience, and rely on a set of unique competencies (the compilation of knowledge, skills, and abilities) in order to be successful in their profession. Not only is a doctoral program recognized as an opportunity for individuals to acquire and enhance their unique set of competencies, but also any graduate studies program is so recognized (Lindner, Dooley, & Wingenbach, 2003). Lindner et al. also pointed out that little research has been done which focuses on compiling a distinctive competency set needed by agricultural and extension education graduate students in “cross-national” contexts (p. 52).

### **Theoretical Framework**

Bruner and Connolly (1974) describe the importance of competence and the relationship between competence and the ability to complete a task. Lindner, Dooley, and Murphy (2001) indicated that low competency levels could ultimately result in failure for graduate students. Bruner (1966) and Ohlsson (2011) further reinforced the importance of competence, personal growth, and the theory of competencies. This framework is the foundation for Objective 1, which focuses on identifying student competencies, and part of Objective 2, which deals in part with student growth.

## **Purpose and Objectives**

The purpose of this study was to improve the student selection process of professionals for agricultural development programs in an international context by determining what expert program planners in international agricultural development seek in graduate students whom they select for agricultural development programs in a global context. With this information graduate students can understand the competencies required, and professionals can improve their student selection process. The following are the objectives of the study:

1. Determine and describe the desired competencies in graduate students who participate in international agricultural development programs based on the expert program coordinators of Texas A&M AgriLife Haiti.
2. Describe a competency framework for graduate students in international agricultural development from the collected data.

## **Methods**

This qualitative study conforms to the goals of most qualitative research conducted in the field of education, as well as various other fields of practice (Merriam, 2009). In describing basic qualitative research, Merriam writes:

Here the researcher is interested in understanding the meaning a phenomenon has for those involved.... Thus qualitative researchers conducting a basic qualitative study would be interested in (1) how people interpret their experiences, (2) how they construct their worlds,

and (3) what meaning they attribute to their experiences. The overall purpose is to understand how people make sense of their lives and their experiences.... The *primary* goal of a basic qualitative study is to uncover and interpret these meanings (pp. 22-24).

Further, she explains that while the purpose of “understanding how people make sense of their lives and their experiences” (p. 23) is a characteristic of all qualitative types of studies, additional dimensions are used to characterize other types.

For example, a phenomenological study seeks the underlying structure of the phenomenon.... A grounded theory study seeks not just to understand, but also to build a substantive theory about the phenomenon of interest.... Critical qualitative research focuses on societal critique in order to raise consciousness and empower people to bring about change. (Merriam, p. 23)

“Since generalization in a statistical sense is not a goal of qualitative research, probabilistic sampling is not necessary or even justifiable in qualitative research” (Merriam, 2009, p. 77). Patton (2002) argues the depth and richness of information that can be achieved through purposeful sampling. A *unique* purposeful sample is characterized by Merriam as possessing “unique, atypical, perhaps rare attributes or occurrences of the phenomenon of interest. You would be interested in them because they are unique or atypical” (p. 78). Furthermore, because of the uniqueness of the phenomenon (Texas A&M AgriLife Haiti) and its attributes, this study used purposeful (Patton), or purposive (Chein, 1981), sampling to identify experts [ $N = 3$ ], coded AH1,

AH2, and AH3, in international agricultural development who served as the program coordinators for Texas A&M AgriLife Haiti.

The situation is analogous to one in which a number of expert consultants are called in on a difficult medical case. These consultants—also a purposive sample—are not called in to get an average opinion that would correspond to the average opinion of the entire medical profession. *They are called in precisely because of their special experience and competence* [emphasis added]. (Chein, 1981, p. 440)

The participants were deemed experts based on their participation in the Texas A&M AgriLife Haiti program, professional standing and experience, and international experience. The participants' combined credentials included more than 60 years of professional experience at a top-tier land-grant institution, more than 25 international development experiences, and one, a senior scientist at the Norman Borlaug Institute for International Agriculture.

The Institutional Review Board of Texas A&M University approved qualitative research focused on agricultural development in Haiti. This study, under that approval, used a protocol to gather data for the evaluation and examination of Texas A&M AgriLife Haiti through “semistructured” (Merriam, 2009, p. 90) interviews. Merriam identified semi-structured interviews as a way to get desired information, and “it allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic” (p. 90). The protocol was checked for content validity by an expert panel. Additionally, data triangulation, member checks, peer

reviews, and an audit trail were used to reinforce validity and reliability in the study, as supported by Merriam. Moreover, the study used constant data analysis through the interviews and after, as well as peer debriefing post-interviews (Merriam).

Lindner and Dooley (2002) identified the primary areas of competencies as knowledge, skills, and abilities. However, Shinn et al. (2009) specifically focused on knowledge objects and knowledge domains within the encompassment of a competency, while Palmer, Ziegenfuss, and Pinsker (2004) argued that competencies are much more extensive than just knowledge, identifying some studies as knowledge-focused, and described the relationship between knowledge and skills to produce ability. Increasingly, Lindner and Dooley, along with Shinn et al., also recognized the relationship and interconnectedness between knowledge, skills, and abilities. Therefore, distinction between knowledge, skills, and abilities can sometimes become difficult. Furthermore, though some interconnectedness may be found in competency descriptions, in this study the researcher will not distinguish competencies within one of the three primary areas, but rather leave them open within the borders of the competency definition.

### **Findings/Results**

The first objective of this study was to determine and describe what competencies professors—experts in international development—desire when selecting graduate students for an international development program. Interviews with the experts resulted in the expression of ten significant competencies desired by coordinators of graduate programs that send students to international locations in the third world. These ten competencies identified were a) Contextual Knowledge and Understanding, b) Social

Sciences, c) Technical/Agricultural Sciences, d) Character, e) Realism, f) Resource Management, g) Critical Thinking, h) Communication, i) Leadership, and j) Research Methods and Tools.

### ***Contextual Knowledge and Understanding***

For the purpose of this study, *Contextual Knowledge and Understanding* refers to one's knowledge and understanding of the country and program in which one is working in relation to the history of the country and program, language(s) spoken, cultural practices and customs, immediate needs of the country (both perceived and real), and one's cultural respect and open-mindedness. Emphasis was placed heavily on understanding the program location's cultural context. This context includes, but is not limited to, cultural practices and customs, language(s), and "what their [Haitians] immediate needs are" (AH2). AH3 stated, "I work in predominantly English speaking countries for a reason.... Language skills are important and make a difference." In regard to cultural practices AH2 said, "You have to know why things are done the way they are." Rogers (2003) expands upon and reinforces the concept of cultural understanding through "cultural relativism" (p. 441). Further stress was placed upon knowing the context of the situation beyond the country of placement, but also of the program itself. "You have to know the history of the country and of the project; where the funding comes from, the interests..." (AH2).

AH2 heavily emphasized the history of the country. "That's why I had you all read that book [*Caribbean* (Michener, 1991)]" (AH2). AH3 seemed to think that you can over-prepare. "If you want to travel to a city and you walk all of the streets on

Google Earth you have desensitized yourself” (AH3). Conclusively, AH3 stated, “You can’t learn a culture 100%. You don’t even have to appreciate it, but you have to respect it, or at least tolerate it.”

### ***Social Sciences***

For the purpose of this study, the *Social Sciences* are referred to as one’s ability and understanding of sociology, one’s knowledge and understanding of the adoption-diffusion process (Rogers, 2003) and human psychology and development. While there is some crossover between this competency and the previous competency, social science goes beyond understanding only the specificity of the program context, but understanding peoples’ cognitive, attitudinal, and behavioral background, history, and preconceived notions. “You have to realize that common sense isn’t common sense. It is based on preconceived notions, and your preconceived notions are different than others’.” Perhaps the best description of this competency is, “You’ve got to have knowledge about people” (AH1).

*Diffusion of Innovations* (Rogers, 2003) begins with a case study of a failed innovation in Peru (pp. 1-5), proving that no matter how much hard scientific knowledge you have, if you do not have an understanding of how innovations are diffused in a social setting, there is a big chance you will not be successful in disseminating your innovation to the client. “You have to be able to get along with and work with people. You can’t just be a lab rat.... You can’t just go and change something that you think they should do” (AH2).

### ***Technical/Agricultural Sciences***

*Technical/Agricultural Sciences* include production agriculture, natural resource management, and agricultural sciences as they are applicable to the program context (e.g., goat production, soil sciences, horticultural science). All participants placed prominence on being able to contribute to the needs, based on the understanding of the context and social setting, of the region of work. AH2 heavily emphasized having some hard science that is applicable to them, which concurred with data found in a study by Karbasioun, Mulder, and Biemans (2007) that portrayed the importance of subject matter knowledge as a competency by agricultural extension instructors, as did Conner, Roberts, and Harder (2013) for entry level international agricultural development practitioners. Shinn et al. (2009) listed “Agricultural/Rural Development” (p. 60) and “Agricultural/Biophysical Systems” (p. 61) as 2 of their 12 knowledge domains.

During a class AH2 once said, “If you’re going to a country to work in development and they grow peppers and have rabbits, you better know something about peppers or rabbits.” AH1 said, “You have to have practical skills. You’ve got to be able to do things in production agriculture.” This expanded upon AH2. The idea that these skills and knowledge bases were to be on a practical level was further supported by AH3. “They need to have technical skills; animal science, horticulture, rangeland, ecology, something. They don’t have to be formally trained. It can be something they learned through an experience in 4-H or FFA” (AH3).



### ***Character***

Collectively, one's morality, empathetic nature, work ethic, honesty and integrity, and attitude make up his/her *Character*. While character is not a competency abundant in the literature, some studies (Graham, 2001; Boyd, Dooley, & Felton, 2006) indicate an importance in empathy, honesty, dependability, and other traits (subcategories in Table 1) related to one's character in international and agricultural and extension education settings. The findings illustrated how much it meant to the professors that character was something they looked for the students to have. "It's very important to have a strong moral compass.... You also have to be able to empathize. If you don't have empathy, then how can you really want to help them?" (AH3). Further, AH1 stated, "Certainly they [graduate students] are there to learn, but they are there to give." AH2 reinforced that statement when he/she identified outreach as the third portion of what should be a student's research platform. Additionally, "One of the first things we look for is a good work ethic" (AH1).

### ***Realism***

In international agricultural development, *Realism* illustrates a balance between idealism and pragmatism, and upholds realistic program/project expectations according to the context. Realism, or pragmatism, has been seen as a conceptual framework and a foundation for other frameworks in international development (Shinn et al., 2009). "Students don't need to expect royal treatment.... They have to be willing to be in non-luxurious situations.... Just by saying there's no A/C in a hot climate and no hot water will eliminate a lot of people" (AH1). While AH1 promoted the realism of what to

expect on-site regarding living conditions, they also stated, “Students need to know the realities of the developing world.” Increasingly, AH3 promoted a more pragmatic approach concerning program expectation, which supports further literature (De Young, Soto, Bahri, & Brown, 2012; Toledo & Manzella, 2012) that depicts a need for pragmatic approaches in strategic and adaptation planning.

I’m not an idealistic thinker; I’m pragmatic.... It [research] is often misused [as a word].... You can plan all of kinds of research and great things, but you have to understand the likelihood for failure is greater than the likelihood of success. Failure should be expected; it’s the norm.... We have to balance between idealism and pragmatism.

You have a glass full of water. You put your finger in it and remove it. How much water have you displaced? So little you can’t even tell. Students’ expectations are too high. If they’re lucky, they will displace a tiny amount of water.... If all we’re doing is traveling and talking to people, we’re making the world a little smaller one conversation at a time. (AH3)

### ***Resource Management***

*Resource Management* refers to one’s ability to manage resources on a multidimensional level; the ability to manage time, stress, and the appropriate technologies used (e.g., computers, research tools, innovations). Resource management is a competency indicated by some to be an expected student trait based on graduate school attendance. “These people are already in graduate school, so we already know

they're bright, educated, and resourceful..." (AH1). "Resourceful" can encompass a great deal of other competencies (or subcategories in the case of this study). "Place and Jacob (2001) found that Extension employees needed resource management competencies such as time management, work place, and stress management to be effective" (Lindner & Dooley, 2002, p. 57). Supportively, Conner et al. (2013) identified the ability to "exhibit organizational skills" (p. 28) as a competency for those entering the international agricultural development sector. AH2 added to the desire for a resource management competency by saying, "You have to be able to stay focused and get your work done." Further, AH3 added that they should "Teach them to be able to transect—anything when they run out of stuff to do."

### ***Critical Thinking***

For the purpose of this study, *Critical Thinking* refers to one's ability to conceptualize and respond appropriately to situations as they relate to problem solving and methods of planning and program analyses. Several studies (Lindner et al., 2003; Dyer & Osborne, 1996; Lindner & Dooley, 2002; Conner et al., 2013; Shinn et al., 2009) concluded that there is a need for critical thinking in those either in international development, agricultural education, or both. AH1, in a previous quote, added by saying, "...we already know they're bright, educated, and resourceful, but they need to be adaptable..." They then discussed critical thinking as it relates to planning and implementing small-holder broiler production in Haiti. "Small holders have to work hard to compete with large-scale broiler producers and broiler producers are almost always dependent on outside feed" (AH1). The way AH2 described critical thinking was, "You

have to listen and make sense of stuff.” Further, AH2 can be constantly quoted as saying, “Thinking is hard work.”

### ***Effective Communication***

*Effective Communication* represents an ability to clearly and concisely convey a point or purpose through oral, non-verbal, or written communication on multiple platforms (conversationally, publicly, or technologically) while exercising adept listening. Communication was described as a needed competency on several levels. AH1 described the need for communication between the student(s) and faculty while in-country. AH2 stated, “Writing well is very important.” and later added in the discussion, “Communication between the students and faculty are important. That’s what I was referencing to when I mentioned writing, and along with that internet and Wi-Fi is important in order to communicate back to faculty.” This is in harmony with Conner et al. (2013). AH3 stressed the importance of listening skills, which is also supported by a previous quote by AH2: “You have to listen and make sense of stuff.”

An overlap from a previous competency, Contextual Knowledge and Understanding, is language skills. While this is relative to the context of the experience, it is also an important aspect of communication. Moreover, communication has, in some form, been listed as a desired competency by several researchers (Conner et al., 2013; Graham, 2001; Lindner, et al., 2003; Shinn et al., 2009; Galt, Parr, & Jagannath, 2013) for any context for agricultural education or development, domestic or international.

## ***Leadership***

For the purpose of this study, *Leadership* refers to the demonstration of positive qualities by example, and an ability to work with and motivate people. “Being a leader is hard work” was something heavily emphasized by AH2, further reinforced by his/her previous statement, “You’ve got to stay focused.” He/she continued to elaborate upon the importance of leadership by saying, “You can’t be buddies with everyone and still exercise leadership. Sometimes your peers can hold you back.”

Leadership, seen as a critical competency by Graham (2001), could be considered a combination of competencies. Within the idea of leadership is contained the ability to tolerate ambiguity, take initiative, and exhibit patience and flexibility. Flexibility was identified as a needed competency in international agricultural development practitioners by Conner et al. (2013). “You have to be able to tolerate ambiguity” (AH3). AH3, as previously quoted, implied the taking of initiative by saying, “Teach them to be able to transect—anything when they run out of stuff to do.” Further, AH1 emphasized the need of flexibility and adaptability.

## ***Research Methods and Tools***

The competence of *Research Methods and Tools* denotes a knowledge and understanding of critical research methods (needs assessments, rapid and participatory rural appraisal, transecting) and the appropriate methods (qualitative and/or quantitative) and tools for the program setting. Conner et al. (2013), Shinn et al. (2009), and Lindner et al. (2003) identified knowledge of research methods and tools as a needed competency (or competencies depending on the study breakdown; see Conner et al.) Moreover, AH2 identified the need for a research platform, which consisted of “research

related to your studies,” “research because you’re there,” and “outreach.” He/she further elaborated upon case study research as an avenue of data analysis supported by Merriam (2009).

AH3 provided the most insight upon research, first with his/her previously quoted statement: “It [research] is often misused [as a word].” Then, he/she elaborated upon his/her meaning of “research methods and tools” by mentioning rapid rural appraisal, participatory rural appraisal, needs assessments, peer debriefing, and transecting as methods.

Objective two of the study was to describe a competency framework based on the previously enumerated competencies, of which components are provided similar to that of the National FFA Organization’s (2012) National FFA Officer Candidate competency rubric. This framework also contains supporting literature for each competency. Table 1, below, is the resulting compilation of the competencies found in the study.

Table 1

<i>Competencies for Graduate Students in International Agricultural Development</i>		
Competency	Sub-categories	Supporting Literature
1. Contextual Knowledge and Understanding	<ul style="list-style-type: none"> <li>a. History (program and country)</li> <li>b. Language</li> <li>c. Cultural practices and customs</li> <li>d. Their immediate needs</li> <li>e. Cultural respect/open-mindedness</li> </ul>	(Rogers, 2003; Conner et al., 2013)
2. Social Sciences	<ul style="list-style-type: none"> <li>a. Sociology</li> <li>b. Adoption-diffusion process</li> <li>c. Psychology</li> </ul>	(Rogers, 2003; Shinn et al., 2009; Conner et al., 2013)

Table 1 Continued

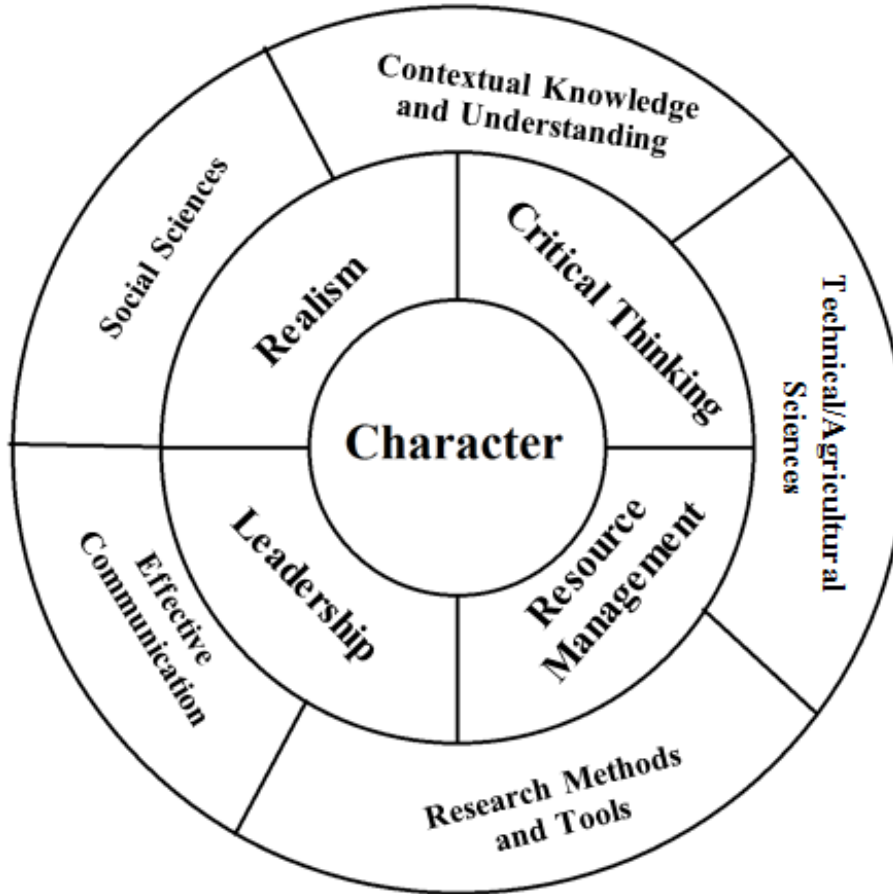
Competency	Sub-categories	Supporting Literature
3. Technical/ Agricultural Sciences	a. Applicable content area (e.g., animal science) b. Natural resource management c. Production agriculture	(Karbasioun et al., 2007; Conner et al., 2013; Shinn et al., 2009)
4. Character	a. Moral compass b. Empathy c. Work ethic d. Honesty and integrity e. Positive attitude	(Boyd et al., 2006; Graham, 2001)
5. Realism	a. Balance between pragmatism and idealism b. Realistic project expectations	(Shinn, et al., 2009; Toledo & Manzella, 2012; De Young et al., 2012)
6. Resource Management	a. Appropriate technologies b. Time management c. Stress management	(Lindner & Dooley, 2002; Conner et al., 2013)
7. Critical Thinking	a. Problem solving b. Planning c. Program analysis (e.g., SWOT)	(Lindner et al., 2003; Dyer & Osborne, 1996; Lindner & Dooley, 2002; Conner et al., 2013; Shinn et al., 2009)
8. Effective Communication	a. Listening b. Non-verbal c. Oral; including language skills d. Public speaking e. Technology f. Writing	(Conner et al., 2013; Graham, 2001; Galt et al., 2013; Lindner et al., 2003; Shinn et al., 2009)
9. Leadership	a. Teamwork b. Ability to tolerate ambiguity c. Patience d. Initiative e. Ability to stay focused f. Flexibility/adaptability	(Graham, 2001; Conner et al., 2013)

Table 1 Continued

Competency	Sub-categories	Supporting Literature
10. Research Methods and Tools	<ul style="list-style-type: none"> <li>a. Needs assessments</li> <li>b. Rapid rural appraisal</li> <li>c. Participatory rural appraisal</li> <li>d. Transects</li> <li>e. Appropriate methods/tools</li> </ul>	(Conner et al., 2013; Shinn et al., 2009; Lindner et al., 2003; Merriam, 2009)

Based on the list of competencies in Table 1, a competency framework was developed (Figure 1). This framework illustrates the interconnectivity and relationships among the competencies and with the individual. This framework depicts the individual's character as the center competency. This is the competency that is closest to the individual and who he/she is. Surrounding that character are four other competencies (i.e., realism, critical thinking, resource management, and leadership) that are closely related to an individual's natural competence; these competencies are seen to directly contribute to one's character. Lastly, there are five competencies that are considered to be more learned than natural. These competencies are contextual knowledge and understanding, social sciences, technical/agricultural sciences, research methods and tools, and effective communication. It is important to note that, regardless of where on the framework these competencies lie, they are all subject to development and improvement by the individual.





*Figure 1.* A competency framework for graduate students in international agricultural development.

### **Conclusions, Recommendations, and Implications**

Through separate semi-structured interviews with three expert professors involved in international agricultural development, and in coordinating Texas A&M AgriLife Haiti, 10 broad-spectrum competencies and subsets were formed. These 10 competencies were 1) Contextual Knowledge and Understanding, 2) Social Sciences, 3)

Technical/ Agricultural Sciences, 4) Character, 5) Realism, 6) Resource Management, 7) Critical Thinking, 8) Communication, 9) Leadership, and 10) Research Methods and Tools. These results were similar to those found by Lindner and Dooley (2002), Lindner et al. (2003), Shinn et al. (2009), and Conner et al. (2013). Each of the competencies can be found in some form in at least one of their works; however, there are some differences. The most distinct difference is the subsets of each competency. Long lists of competencies can be difficult for program coordinators, employers, and others in leadership positions to use effectively. Therefore, based on the National FFA Organization's (2012) National FFA Officer Candidate competency rubric, subcategories which fall under a broader, but still narrow, competency were used. It is further suggested that future competency compilations do the same.

While there are no other programs identical to Texas A&M AgriLife Haiti, further research within different cultural contexts is suggested to determine transferability. Lindner et al. (2003) also recommended additional research be conducted to determine the applicability of single country studies in other international contexts. Additionally, quantitative studies similar to that of Conner et al. (2013) and Shinn et al. (2009), in which the Delphi method is used, are recommended to validate the competency compilation from this study.

A framework emerged from the study that depicts the interconnectedness of the competencies identified in the study. It is recommended that further research be conducted to determine the efficacy of this framework, and to expand upon the relationships that exist among the competencies and with the individual.

**CHAPTER III**

**INSTITUTIONAL PARTNERSHIPS IN DEVELOPING COUNTRIES: A CASE  
STUDY OF THE EARLY STAGES OF TEXAS A&M AGRILIFE HAITI**

**Introduction**

As new programs in international development are initiated, there is a critical need for program evaluation (Stufflebeam, 1983; O’Sullivan, 2004; Campbell & Martin, 1993; Cronbach et al., 1980). Merriam (2009) stated:

Evaluation research collects data or evidence on the worth or value of a program, process, or technique. Its main purpose is to establish a basis for decision making. As Patton (2002) explains, “When one examines and judges accomplishments and effectiveness, one is engaged in evaluation. When this examination of effectiveness is conducted systematically and empirically through careful data collection and thoughtful analysis, one is engaged in evaluation research” [p. 10, emphasis in original]. (p. 4)

Stufflebeam (1983) stated program evaluation should be used to improve a program. Furthermore, Stufflebeam, O’Sullivan (2004), and Campbell and Martin (1993) focused on qualitative approaches in program evaluation, which concurred with Merriam’s qualitative description. Also, Madey (1982) and Caracelli and Greene (1997) described the use of mixed methods in program evaluation.

In terms of the research process, Yin (2014) defined a case study as “an empirical enquiry that investigates a contemporary phenomenon (the ‘case’) in the depth within its real-world context, especially when the boundaries between the phenomenon and context may not be clearly evident” (p. 16). Merriam (2009) described a case study as, “An in-depth *description and analysis* [emphasis added] of a bounded system” (p. 40), and described the case study that results from a phenomenological investigation as “an intensive, holistic *description and analysis* [emphasis added] of a single entity, phenomenon, or social unit” (p. 46). Further, Merriam emphasized that the topic does not characterize a case study, but instead the unit of analysis.

Support for selecting the case study method has been described by Merriam (2009): “Finally, a case study might be selected for its very uniqueness, for what it can reveal about a phenomenon, knowledge to which we would not otherwise have access” (p. 46). She also wrote, “The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon” (p. 50). Yin (2012) provided examples of case studies on various topics, including education leadership and university innovations, which are large proponents of the phenomenon in this case study.

Shields (2007) argued:

The strength of qualitative approaches is that they account for and include difference—ideologically, epistemologically, methodologically—and most importantly, humanly. They do not attempt to eliminate what cannot be discounted. They do not attempt to simplify what cannot be simplified.

Thus, it is precisely because case study includes paradoxes and acknowledges that there are no simple answers, that it can and should qualify as the gold standard. (p. 13)

Flyvbjerg (2006) identified case study research misconceptions and clarified them. For example, he provided rebuttal for the argument of bias in case study research by pointing out that there is no more bias than in other methods and forms of research.

### **Background of the Study Context**

In 2013, the College of Agriculture and Life Sciences at Texas A&M University began the initial phases of developing what would become Texas A&M AgriLife Haiti through partnerships with two NGOs, referred to as NGO1 and NGO2, in Haiti. NGO1 is located in Gressier and has been in existence for more 25 years. On the other hand, NGO2 is located in Thomazeau and has been operating for only a few years. Throughout 2013, measures were taken to form a partnership in which the College of Agriculture and Life Sciences would provide graduate student researchers in semester-long internships to each NGO. These students would then conduct applied research and assist the NGOs in advancing their missions through agricultural education, extension, and development.

Due to uncontrollable circumstances, a Memorandum of Agreement (MOA) between Texas A&M University and NGO1 could not be created in time for the spring semester. However, by December 2013, a MOA was developed between NGO2 and Texas A&M University, and two graduate students were selected to spend the spring semester of 2014 on the campus of NGO2. These students underwent a preparatory process through the Department of Agricultural Leadership, Education, and

Communications at Texas A&M University. This department spearheaded the majority of the institutional side of the program. Simultaneously, preparations among the College of Agriculture and Life Sciences, the Department of Agricultural Leadership, Education, and Communications, and NGO2 took place. This case study documents the experiences of the graduate students who participated. One participating graduate student will be referred to as GA1, and the author will be referred to as GA2.

### **Theoretical Framework**

This study's framework is related to higher education programs that are directed at preparing graduate students for international agricultural development careers. Therefore, administrative and experiential learning theories (specifically with an international focus) comprehensively compose this framework. Ellingboe (1998) defines internationalization as it relates to a university as

... the *process* of integrating an international perspective into a college or university system. It is an ongoing, future-oriented, multidimensional, interdisciplinary, leadership-driven vision that involves many stakeholders working to change the internal dynamics of an institution to respond and adapt appropriately to an increasingly diverse, globally focused, ever-changing external environment [emphasis in original]. (p. 199)

He then identified five integral components that assist a university's understanding of the internationalization process. Three of these were 1) college leadership; 2) faculty members' international involvement in activities with colleagues, research sites, and institutions worldwide; and 3) the availability,

affordability, accessibility, and transferability of study abroad programs for students (p. 205).

Complex organizations' coalitional function is often described in a way that illustrates the idea wherewith each member benefits but also contributes (Thompson, 2011). Thompson explained that "the co-alignment we assert to be the basic administration function is not a simple combination of static components. Each of the elements involved in the co-alignment has its own dynamics" (p. 147). He also identified an "Open-System Strategy" for studying organizations, which means that when studying an organization, uncertainty is to be expected (p. 6).

According to Kolb's (1984) experiential learning theory, "The emphasis on the process of learning, as opposed to the behavioral outcomes, distinguished experiential learning from the idealist approaches of traditional education and from the behavioral theories of learning created by Watson, Hull, Skinner, and others" (p. 26). He explained that an outcome-based learning theory can lead to a false conclusion of no learning, but in reality learning is an adaptation.

Spring 2014 was the first time students were sent to Haiti as part of Texas A&M AgriLife Haiti. Thompson's (2011) "Open-System Strategy" (p. 6) related to administrative theory is appropriate to apply to the situation where unknown factors and uncertainties exist. These uncertainties and emerging factors affected the outcome of the internship experience. Application of the experiential learning

theory helps validate the learning that occurred during the Texas A&M AgriLife Haiti experience.

### **Purpose and Objectives**

The purpose of this study was to utilize case study research to improve the planning and preparation of Texas A&M AgriLife Haiti in order to create an efficient, successful international development program. It also serves as a real world, in-context example for graduate students and program coordinators for Texas A&M AgriLife Haiti, which may be used to inform expectations for similar programs in international agricultural development. The following were the objectives of this study:

1. Describe the steps taken by Texas A&M University and NGO2 in preparing Texas A&M AgriLife Haiti to administer graduate student researchers.
2. Describe the steps taken by Texas A&M University in preparing graduate students to take part in Texas A&M AgriLife Haiti.
3. Identify challenges faced by Texas A&M AgriLife Haiti.

### **Methods**

Yin (2014) defined a case study as “an empirical enquiry that investigates a contemporary phenomenon (the ‘case’) in the depth within its real-world context, especially when the boundaries between the phenomenon and context may not be clearly evident” (Yin, 2014, p. 16). Merriam (2009) states, “A *case study* [emphasis in original] is an in-depth description and analysis of a bounded system” (p. 40).



This qualitative study focused on a unique, observational qualitative single case using the experiences and observations of the two participants. An embedded design was used to describe, analyze, and evaluate the Texas A&M AgriLife Haiti experience. This was a *single* case study because it is based around a *single* phenomenon (Texas A&M AgriLife Haiti). Because the phenomenon of this study was a new, unique, and individual program, the study was an *unusual* single case study. Yin (2014) relates the rationale of an unusual case study to clinical psychology.

A second rationale for a single case study is where the case represents an *extreme* [emphasis in original] or an *unusual* [emphasis in original] case, deviating from theoretical norms or even *everyday occurrences* [emphasis added, Texas A&M AgriLife Haiti is not the norm]. For instance, such cases can occur in clinical psychology, where a specific injury or disorder [the phenomenon] may offer a distinct opportunity worth documenting and analyzing. In clinical research, a common research strategy calls for studying these unusual cases because the findings can be connected to a large number of people, well beyond those suffering from the original clinical syndrome [generalizable]. (Yin, p. 52)

A case study in which “the major data-gathering technique is participant observation (supplemented with formal and informal interviews and review of documents) and the focus of the study is on a particular organization (school, rehabilitation center) or some aspect of the organization” (Bogdan & Biklen, 2007, p. 60) is an observational case study. In this study, observation was the primary data-gathering technique with a focus

on a collaborative program between organizations. Moreover, an embedded single case study design allows multiple units of analysis within a single case (Yin). Because the objectives of this study called for multiple units of analysis, it was considered embedded.

The study used purposive sampling (Merriam, 2009; Chein, 1981; Patton, 2002) to identify GA2 and three expert program coordinators (AH1, AH2, and AH3) of Texas A&M AgriLife Haiti. Personal journals, photographs, “semistructured” (Merriam, p. 90) and “nonstructured” (Yin, 2012, p. 12) interviews with the program coordinators, field notes, and personal communication (i.e., e-mails, conversations, conference calls) were used for data collection (Merriam; Yin). Data triangulation, member checks, peer reviews, and thick, rich descriptions were used to ensure internal validity and reliability (Merriam; Yin; Geertz, 1973).

## **Findings/Results**

During the study, three key elements of the program were identified: 1) *program preparation* by the partnering entities of the program (Texas A&M University and NGO2), 2) *student preparation* by Texas A&M University, and 3) *challenges* faced in the program. Each component will be described below.

### ***Program Preparation***

The preparation of the spring 2014 international internship began in the fall of 2013. In September of 2013, three of the coordinating professors of Texas A&M AgriLife Haiti and one other College of Agriculture and Life Science faculty member took a trip to Haiti to visit NGO1 and NGO2 (AH1). While there, they conducted needs assessments and determined the next steps of a partnership (Briers et al., 2014). Later in

the fall semester, a MOA was signed between Texas A&M University and NGO2. NGO2 would provide room and board for the graduate students, transportation to and from the airport, and basic needs for their work in Haiti. Texas A&M University would cover assistantships, flight costs, and funding for major project. This MOA was never received by GA1 or GA2. Additionally, it was made known by AH1 that no research had been done by university faculty on the preparation processes of other institutional programs (Texas A&M University or others) similar to Texas A&M AgriLife Haiti. This section of the study focuses on the preparation that was done by GA1 and GA2, Texas A&M University, and NGO2 to cover logistical matters, and in particular, the preparation process from the student selection in late December 2013 to student departure on February 5, 2014. Challenges of the experiences are described in the section that follows.

**Student recruitment, selection, and preparation.** This section refers only to the communications from the side of Texas A&M University and NGO2. Further detail about the actual processes is presented in the following element, *student preparation*. During the phases leading up to student departure several e-mails (GA2 was included in more than 125 e-mail messages) were sent amongst all parties in the program (coordinators, faculty, NGO2, GA1, and GA2). The electronic communication included details on all forms to be submitted, flights, research plans, scheduling meetings, and other logistical information. Furthermore, Skype calls were made and attempted on a few occasions between NGO2 in Haiti and those at Texas A&M University. On one occasion, a call could not be completed to Haiti, and the Texas A&M University project

members were told that the internet was being worked on and normally worked great as it was “high-speed.” Nonetheless, communication between NGO2 and Texas A&M University was mediocre due to technological disadvantages in Haiti.

Communication between GA1 and GA2 and Texas A&M University was frequent and effortless due to everyone’s proximity and the technological conveniences in College Station. A large number of e-mails were sent amongst faculty, coordinators, and participants. A meeting was also held at least twice per week until the departure date.

There was little communication between GA1, GA2, and NGO2 that did not include Texas A&M University faculty and program coordinators. Only two e-mail exchanges occurred with NGO2 and not Texas A&M University faculty members (personal communication, January 17, 2014; personal communication, January 30, 2014), one with both GA1 and GA2, and one with only GA2. This was expected due to the transparency and essential universality of communication between all parties.

**Timeline.** An e-mail was sent from AH2 (personal communication, January 7, 2014) early in the process that provided an agenda in Excel format with a tentative weekly timeline for the whole project (Figure 2). This timeline included items from program preparation, student preparation, operation in Haiti, and post-project. This served as an excellent guide during the preparation process. Because this timeline was tentative, the field operations in Haiti varied considerably.

	January			February			March			April			May				
	Wk 1 13 thru 17	Wk 2 20 thru 24	Wk 3 27 thru 31	Wk 4 3 thru 7	Wk 5 10 thru 14	Wk 6 17 thru 21	Wk 7 24 thru 28	Wk 8 3 thru 7	Wk 9 10 thru 14	Wk 10 17 thru 21	Wk 11 24 thru 28	Wk 12 31 thru 4	Wk 13 7 thru 11	Wk 14 14 thru 18	Wk 15 21 thru 25	Wk 16 28 thru 2	Wk 17 5 thru 9
Note: Dark cells are faculty responsibilities, light cells are student responsibilities.																	
Request IRB																	
Students register for 9 credit hours																	
Arrange for funds to departments																	
Insure funds for two round trip tickets																	
Insure funds for faculty visits																	
Coordinate with Study Abroad Office																	
Conduct profrection exercise																	
Conduct postreflection exercise																	
Students read required readings																	
Provide orientation to Haiti																	
Provide orientation to Live Beyond																	
Provide orientation to Christianville																	
Develop research plan																	
Develop tentative outreach plan																	
Develop other tentative research topics																	
Skype conference calls w/advisors																	
Set field trip objectives/dates																	
Coordinate with AIAEE for field trip																	
Communicate with AIAEE for conference																	
Planning with Live Beyond																	
Coordinating with Christianville																	
Set deliverables/milestones																	
Set departure/break/return dates																	
Make travel arrangements																	
Propose faculty site visits																	
Develop project evaluation process																	
Set date/objectives for final seminar																	

Figure 2. Texas A&M AgriLife Haiti spring 2014 tentative agenda.

**Logistics.** Logistics for the field experience were the responsibility of NGO2. These included room and board for interns, security, transportation, work stations, communication with Texas A&M University, local translation, health care, and facilities and resources for implementing the research projects determined by the Texas A&M AgriLife Haiti team for GA1 and GA2 and confirmed by the NGO partner. Much of the site was already prepared to provide room and board. The Director of Agriculture (DOA) at NGO2, who was the offspring of NGO2's CEO, provided GA2 with a security analysis (NGO2, personal communication, November 19, 2013) and information regarding the base in Haiti (NGO2, personal communication, November 25, 2013). Based on the provided documents, as well as the coordinators' visit to the site in September of 2013, the location was deemed ready to accept students for boarding.

Facilities were needed to support the proposed research plans. GA2's research plan included needs assessments and potentially working with goats; GA1's plan related to plant and soil sciences. NGO2 indicated availability of a translator (when not needed by a visiting medical team). Research interests were expected to be expanded once in Haiti. Communication with the DOA at NGO2, program coordinators, Texas A&M University faculty members, GA1, and GA2 on January 24 (Texas A&M AgriLife Haiti, personal communication, January 23, 2014), indicated a few facility enhancements taking place to ensure site adequate for research, including an irrigation system to be used on field variety trials and a fence/wall around the farm for animal containment and crop protection. In addition to these facility provisions, "high speed" internet was to be available. The conference call was originally supposed to be on Skype, but a working

connection could not be established due to internet issues at the Haitian site.

Nonetheless, the Texas A&M University program members were told the satellite was being worked on and, in fact, the internet was “high speed.” With this information, Texas A&M AgriLife Haiti faculty concluded the site ready for the program.

***Student Preparation (January 29-February 4, 2014)***

Student preparation took place over the course of about one month (27 days from first official meeting to departure). The timeline given by AH2 was utilized to guide for preparation. Overall, GA1 and GA2 felt that they were over-prepared in some ways and underprepared in others. After returning, AH3 expressed that he/she felt the students were “way over-prepared for Haiti,” and that can lead to being desensitized to one’s work setting. AH3 stated “I hate how much we use the word research.... It’s often misused.... I knew a lot of research wouldn’t actually get done.”

**Student selection.** Graduate students within the College of Agriculture and Life Sciences were identified through snowballing and purposive methods during the fall 2013 semester, as the program was developing. Using the competency framework from Cherry (2014), the list of students was narrowed down. By the beginning of November, the Department of Agricultural Leadership, Education, and Communications and the DOA at NGO2 had unofficially identified two graduate students to participate in the program. However, because of formalities and a structure chain of command within the College of Agriculture and Life Sciences and Texas A&M University, these students could not be officially selected at that point in time.

On December 11, while in a developing country, GA2 received an e-mail with an application to participate in Texas A&M AgriLife Haiti with a 24-hour turnaround (AH1, personal communication, December 11, 2013). Upon submission of the application, GA2 received notification of official acceptance into the program on December 26, 2013 (AH2, personal communication, December 26, 2013). As this e-mail stated, GA2 knew he/she had been unofficially selected for the program, but this notification served as the official acceptance. This e-mail also advised GA2 to look at what possible courses he/she could take online during the spring 2014 semester. Because he/she already had a feeling that he/she would spend the spring semester of 2014 in Haiti, GA2 had already met with his/her committee chair/advisor and registered for two online classes that could be taken while in Haiti in addition to three hours of research credit.

**Competencies expected.** “Collectively, knowledge, skills, and abilities are referred to as competencies. Competencies are behavioral dimensions that help to identify effective from ineffective performance (Maxine, 1997)” (Lindner and Dooley, 2002, p. 57). A framework of ten competencies was constructed in order to identify the knowledge, skills, and abilities desired by expert program coordinators in graduate students that participate in international agricultural development programs such as Texas A&M AgriLife Haiti (Cherry, 2014). This study will utilize the definitions provided by Cherry in his study. These competencies were 1) *Contextual Knowledge and Understanding*, defined as “one’s knowledge and understanding of the country and program in which one is working in relation to the history of the country and program,



language(s) spoken, cultural practices and customs, and immediate needs of the country (both perceived and real), and one's cultural respect and open-mindedness" (p. 14); 2) *Social Sciences*, defined as "one's ability and understanding of sociology, one's knowledge and understanding of the adoption-diffusion process (Rogers, 2003) and human psychology and development" (p. 15); 3) *Technical/Agricultural Sciences*, which refers to "production agriculture, natural resource management, and agricultural sciences as they are applicable to the program context" (p. 15); 4) *Character*, which is made up of "one's morality, empathetic nature, work ethic, honesty and integrity, and attitude" (p. 16); 5) *Realism*, which "illustrates a balance between idealism and pragmatism, and upholds realistic program/project expectations according to the context" (p. 17); 6) *Resource Management*, defined as the "ability to manage resources on a multidimensional level; the ability to manage time, stress, and the appropriate technologies used" (p. 18); 7) *Critical Thinking*, defined as "one's ability to conceptualize and respond appropriately to situations as they relate to problem solving and methods of planning and program analyses" (p. 19); 8) *Effective Communication*, which "represents an ability to clearly and concisely convey a point or purpose through oral, non-verbal, or written communication on multiple platforms (conversationally, publically, or technologically) while exercising adept listening" (p.19); 9) *Leadership*, referring "to the demonstration of positive qualities by example, and an ability to work with and motivate people" (p. 20); and 10) *Research Methods and Tools*, which "denotes a knowledge and understanding of critical research methods (needs assessments, rapid and participatory rural appraisal, transecting) and the appropriate methods (qualitative

and/or quantitative) and tools for the program setting” (p. 21). While this set of competencies was constructed with graduate student researchers in mind, they can be generalized beyond those boundaries. That is to say, the set of competencies is desired by program coordinators within each partnership, and should be possessed by all who work or take part in international agricultural development. In other words, the assumption can be made that regardless of status/position (e.g., graduate student, practitioner, or missionary) this set of competencies is desired. It is also important to note that one individual may or may not wholly complete the framework, but multiple partnering individuals combining their competencies may also complete the framework.

The competencies GA1 and GA2 jointly possessed addressed most of the list constructed by Cherry (2014). AH1 expressed that GA1 and GA2 were selected to serve together because their competency sets complemented each other. Some competencies from the construct, such as character, resource management, and critical thinking, are expected to be possessed prior to selection. “These people are already in grad school, so it’s already known that they’re bright, educated, and resourceful...” (AH1). AH1 expressed the desire for students to not be in need of technical agriculture training, but already possess a strong work ethic and a sound knowledge of people and of agriculture. It was also emphasized that practical skills are essential.

Competency 1 was “Contextual Knowledge and Understanding” (Cherry, 2014). While neither GA1 nor GA2 possessed experience in Haiti, both were considered open-minded and respectful of cultures. Further, GA2 possessed previous international agriculture experience in developing countries. With a degree focused on agricultural

leadership and education, GA2 met the needs for competency 2, “Social Sciences.” Competency 3, “Technical/Agricultural Sciences,” was met by both GA1 and GA2. GA1 held a Bachelor of Science (B.S.) focusing in agronomy and soil science, while also having background in bovine/beef cattle management. GA2’s B.S. held emphases in agricultural education and leadership, animal science, and agricultural mechanics; he/she also owned a beef herd, providing personal knowledge. Together, they brought GA1’s perspective of Texas agriculture and an agriculture degree from Texas A&M University and GA2’s perspective of Kentucky agriculture and an agriculture degree from Murray State University.

The following competencies on the list are less technical. Both of the students were considered by faculty to possess “Character,” “Resource Management,” “Critical Thinking,” and “Leadership” competencies (AH1). Going into the program, “Realism” is a competency GA2 believed he/she understood through previous experiences. Nevertheless, GA1 and GA2 both were found lacking in this area. “Communication” is a competency that both students comprehensively possessed in a broad scope; however, this competency can be limited when dependent on technological resources. The final competency in the framework is “Research Methods and Tools.” GA1 was knowledgeable of quantitative research methods and methods involving biological sciences (e.g., soil, plants), and possessed more overall research experience; GA2’s knowledge of research, however, was in qualitative methods and in the social or psychological sciences. Their knowledge complemented each other, allowing them to work together effectively.

Texas A&M University was a key contributor to the students' competencies both pre- and post-preparation. GA2's Master of Science (M.S.) degree in ALEC allows an area of concentration. His/her concentration was International Agricultural Development. Through this focus, GA2 took a number of classes that contributed to his/her "Contextual Knowledge and Understanding" and "Social Sciences" competencies. ALEC 640, Methods of Technological Change, is a class focusing on the diffusion process as described by Rogers (2003). ALEC 644, The Agriculture Advisor in Developing Nations, also uses Rogers, but focuses on an international context and the role of an advisor for agricultural projects in developing countries. Furthermore, in order to build up the students' "Contextual Knowledge and Understanding" the Department of Agricultural Leadership, Education, and Communications at Texas A&M University assigned them Haiti readings that included Wikipedia (Wikipedia, 2014) and a fictional novel, *Caribbean* (Michener, 1991). They also had a briefing meeting with the Study Abroad office (AH2, personal communication, January 7, 2014; L. Tauferner, personal communication, January 14, 2014). Both felt that the (mandatory) meeting with Study Abroad, which discussed similar information as the previous meetings with the College of Agriculture and Life Sciences faculty, was beneficial. Additionally, through the Texas A&M University Library System, they had access to Mango Languages, a language learning app that included Haitian Creole. However, with such a short amount of time they struggled to gain fluency or become intermediate in the language.

With a B.S. from Texas A&M University, GA1's "Technical/Agricultural Sciences" competence was highly impacted by the university. GA2's competence in this

area received more contribution from his/her previous institution. However, GA2 took HORT 423, Tropical Horticulture, at Texas A&M University prior to going to Haiti, and it provided a small contextual understanding of horticulture in tropical climates.

The “Research Methods and Tools” area received contribution from Texas A&M, as both had taken research classes. GA2 had taken ALEC 695, Frontiers in Research. Both students acknowledged they needed improvement as they had never engaged in a project like Texas A&M AgriLife Haiti. For the spring semester of 2014, GA2 enrolled online in ALEC 696, Qualitative Research in Agricultural Education. AH3 taught the campus face-to-face course and in order to help prepare the students for qualitative methods, he/she allowed the students to sit in on couple of classes. In addition, a Texas A&M University faculty member pointed GA2 in the direction of a very beneficial needs assessment training module from USAID (Strong, 2011; R. Strong, personal communication, January 16, 2014).

**Student research.** In this study, *student research* collectively references the platforms of research indicated by AH2 (“research related to your studies,” “research because you’re there,” and “outreach”), and particularly the research plans of each graduate student. Members of the College of Agriculture and Life Sciences, NGO2, and GA1 and GA2 met multiple times and exchanged several e-mails on their research plans. GA1 quickly established his/her research plan using his/her agronomy background to plan variety trials. However, GA2 struggled with forming a research plan. The group working with Texas A&M AgriLife Haiti established that GA2 was to conduct needs assessments, but he/she also wanted to conduct field trials where possible. Therefore, the

comprehensive plan identified GA1's plans for field variety trials, GA2's plan for needs assessments and semi-structured interviews with Haitians using a protocol (AH1, personal communication, January 16, 2014), as well as the opportunity to expand on whatever possibilities might emerge once the students get there, including a group-known understanding that GA2 was searching for opportunities to conduct research with goats. Their plans also included outreach interests and the development of agricultural seminars for Haitians.

**Forms and other preparations.** While there was a timeline, there was not a list of forms the students had to submit. Instead, everyone set a target date for departure and tried to get everything finished prior to then. GA1 and GA2 simply filled out forms and completed tasks as they were made aware of their necessity. This was stressful for GA1 and GA2. Often times a form that needed to be submitted was sent through two or three parties before reaching them. By the end of the preparatory period GA1 had compiled a checklist of all forms that needed to be filled out.

One key formality that the graduate students had to go through was the Study Abroad office. Even though they were not part of a Study Abroad program per se, they were going through Texas A&M University and it was essential that they meet all of the Study Abroad office's requirements. Though it was in some ways redundant to the briefings within the college, GA1 and GA2 appreciated having a formal process that had been set in place well before Texas A&M AgriLife Haiti, as opposed to trying to develop the process through trial and error on the first attempt.

Other preparations included a preflexion exercise from AH3 (AH3, personal communication, January 13, 2014). This was an online instrument used to not only assess the students' preparedness for the program, but also aid in opening their minds to the cultural contexts of Haiti. Separate from the preflexion, the participants were also required to be up-to-date on vaccines that the Centers for Disease Control and Prevention (CDC) required for Haiti (CDC, 2014).

Another large portion of preparation included making sure everything was ready regarding their assistantships. GA1 was currently on an assistantship through his/her department; however, GA2 was not. Because the funds for the assistantships were coming from the College of Agriculture and Life Sciences, GA1 was able to keep and transfer his/her assistantship under Texas A&M AgriLife Haiti. GA2 had to go through several faculty members to ensure that he/she was able to receive tuition support, a stipend, and the other benefits from becoming a Graduate Assistant. Flights and travel details (travel dates and other logistical details) were determined by Texas A&M AgriLife Haiti members.. Once those decisions were made, GA1 and GA2 sent the information to a staff member whose job was to purchase tickets and handle itineraries.

### ***Challenges***

There are many challenges when working in international development contexts. The developing world operates on polychronic time instead of monochronic like much of the western world. Therefore, time is not as important, slowing processes down. Linguistic challenges can occur, as did with the students; however, rather than list all the

challenges faced, this section of the case study is devoted to highlighting a few specific challenges that were confronted throughout the semester-long project.

**Availability of assured resources.** For any program to work, effective communication is critical. When the program members on Texas A&M University's campus struggled communicating with the staff at NGO2 during the preparatory phase, they were told that the internet was being worked on. They had been assured that it was "high speed" and was capable of doing everything needed (Texas A&M AgriLife Haiti, meeting, January 23, 2014). When they got to Haiti, GA1 and GA2 found that the internet speed was 1 megabyte (MB) download and 3 MB upload, which is more than six times slower than the average American's internet download speed, and was therefore not "high speed" as had been indicated (Andrew, 2014). They also found that the internet was unstable and incapable of supporting more than a few devices. Additionally, the phone that was originally on site (that domestic Texas A&M AgriLife Haiti members had contacted them on in a meeting) was disconnected.

With Skype calls failing (AH2, personal communication, February 19, 2014) and no way to call without it costing an exorbitant amount, e-mail had to be relied on, which often was either delayed or did not work because of the slow internet connection. Further, the students were often asked to disconnect from the internet so NGO2 could handle organizational business. While this was understandable, it also hindered them from some of their work. GA1 had 9 hours of research while in Haiti, so he/she did not have any classes. However, assured the internet was capable, GA2 had two online classes that he/she struggled to complete. GA2 took an incomplete on one class,



finishing after the semester ended, and finished the other class within a week of final grades being due.

In addition to high speed internet, the students were also told by the DOA that an irrigation system for field trials was being put in place as he/she was speaking with everyone (Texas A&M AgriLife Haiti, meeting, January 23, 2014). Unfortunately, when the students arrived, no irrigation system had been initiated, nor was one ever put in while they were there. Because the plants were acquired prior to preparations being made, the majority of them died . This resulted in a great deal of wasted time and effort spent on preparing the research studies. In the same meeting the DOA indicated that the wall surrounding the demonstration farm was almost finished and would be ready when the students arrived. Again, this was not completed the entire time GA1 and GA2 were there. The wall was deemed necessary to keep intruders out of the proposed field trial area.

Another resource that was supposed to be available to the student researchers was a translator. It was already understood that access would be limited when there was a medical group on site. However, in order to conduct needs assessments and gather data from farmers, GA2 needed a translator was needed and someone who knew the people and area's agriculture (i.e., the DOA). Moreover, the meetings with farmers were pushed back several times and, apart from walking around the base on the first day, GA2 was unable to visit farmers to gather data during the two months there.

**Communication.** As stated previously, a lack of internet availability and capability resulted in a communication barrier between GA1 and GA2 and Texas A&M

University faculty, and a lack of access to translators created a linguistic communication barrier between the students and the Haitians. Effective communication in Haiti amongst NGO2 and GA1 and GA2, however, was a larger communication challenge. Personal communication to the graduate assistants was often passive aggressive, confrontational, or assertive. Additionally, GA1 and GA2 relied on the DOA when they needed something or wanted to start a project. It had been indicated that he/she (the DOA) was, in fact, in charge of agriculture programs at NGO2. Contrariwise, a few days prior to departure in a conflict resolution meeting with the CEO and DOA of NGO2 and GA1 and GA2, GA1 and GA2 were told by the CEO that if they needed anything then they should have just talked to him/her; the converse of what was indicated previously. The MOA was also brought up regarding Texas A&M University and the NGO's responsibilities in Texas A&M AgriLife Haiti. (NGO2, personal communication, March 27, 2014). As GA1 and GA2 talked after the meeting, it was evident there were a lot of aspects left unclear for all parties in Texas A&M AgriLife Haiti (GA1, personal communication, March 27, 2014).

GA1 and GA2 often felt that they had to follow the orders of the DOA and do as they indicated. GA1, GA2, and the DOA would meet in the mornings; the DOA would provide a list tasks to accomplish. Sometimes, he/she was involved in the tasks, and sometimes not. It was difficult to know where he/she was and know what was going on. The students were afraid to construct or initiate something without the DOA's input since they were leaving and it would remain on the NGO's site, and also because they never knew how the DOA would respond. The students felt they could do nothing

without the DOA, but if with the DOA, they were to adhere to his/her schedule and list of tasks. GA1 and GA2 spent over a week doing landscaping for the guesthouse on the base, a job that their Haitian workers could have done. Essentially, GA1 and GA2 agreed that the agricultural priorities communicated between NGO2 and Texas A&M University did not remain. Further, NGO2 is primarily a health mission and agriculture in general was not a high priority.

**Acknowledgement of expertise and applicability of practice.** As mentioned above, part of why GA1 and GA2 were selected was for their comprehensive competence in “Technical/Agricultural Sciences.” Even though NGO2 had a DOA, he/she did not have an agricultural degree and lacked adequate agricultural experience and knowledge. On the other hand, the DOA would tell GA1 and GA2 from time to time that they had expertise while he/she did not, and that was why they were there. Conversely, often times their expertise was ignored or disregarded, sometimes in a passive aggressive demeanor.

One example is when the DOA told GA1 and GA2 of an online certification for goat production at Langston University (2014) that he/she had completed. Acknowledging the DOA’s training in goat production, the students made the assumption that he/she was competent in goat science (later, it was discovered that the training program does not include reproductive diseases and infections), but when discussing plans for a goat farm and the genetic improvement of goats in Haiti (A. L. Cherry, field notes, March 19, 2014) the DOA wanted to use a single breed buck for NGO2’s herd that would also serve as a breeding buck for farmers in the area to bring

their does to be bred on their farm. GA2 immediately told the DOA that doing such was not a good idea and GA1 concurred. GA2 was then asked, “Why?” Upon explaining sexually transmitted diseases and the risk to herd health, the DOA did not believe GA2 was serious. GA2 then explained that it was not a joke, and GA1, the Agronom (regional worker for the Haitian Ministry of Agriculture), and AH1 (who was on a site visit) agreed with GA2. To this, the DOA said, “Then we will just have a second buck that we will use for the farmers.” “So you will infect other people’s herds then?” was GA2’s response. The topic was then dropped.

Along the same lines as acknowledging expertise was the applicability of agricultural practices. An issue found by GA1 and GA2 particularly in their area, Thomazeau, was poor soil drainability and aeration (A. L. Cherry, field notes, February 6, 2014). Haiti, particularly in the region they were in, has a huge problem with deforestation, with the wood used for cooking fuel (A. L. Cherry, field notes, February 10, 2014; CIA, 2014). Further, throughout the day, a strong smoke odor could be smelled and GA2 often saw piles of trash and organic matter burning (A. L. Cherry, field notes, February 17, 2014).

In order to address the problem in the soil profile, the DOA came up with an idea to char rice hulls. Rice is a largely produced product in Haiti (CIA, 2014) and there was a mill in town. The DOA’s design, which was improvisational (rightfully so, considering Haitians’ creative usage of items), contained half of a 55 gallon metal barrel, a sheet of roofing tin, and fuel for a fire. To char the rice hulls, a fire had to be built inside the barrel where the rice hulls were, but separated by the tin. Afterwards, an informal trial

study was done to determine improvement of soil profiles in two containers with raw rice hulls and charred rice hulls, respectively, and a young coconut plant each.

The two students collaboratively decided that it was not a feasible project for an average Haitian, particularly a farmer. Therefore, GA1 and GA2 confronted the DOA about some of the problems they saw with the idea. First, GA2 had asked during the preparation of the project what Haitians will build the charring chamber out of; since many of them did not have access to the materials NGO2 did and if they did it would be used elsewhere (i.e., the tin would be used for putting a roof over their heads). “We will just show this to them and they can build it out of whatever they want” (DOA, personal communication, March 14, 2014). Another issue was that a Haitian farmer could not obtain enough rice hulls to amend the soil on his farm. Increasingly, if rice hulls came into demand then they would be sold, thus adding input costs to the farmers and not actually helping to increase income. Another added barrier was that Haitians are not willing to try something new if they have not seen results. One of the biggest issues with the project that the student researchers tried to convey to the DOA was that doing this would 1) increase the demand for fire fuel resulting in more cutting, 2) be an attempt to divert fuel from cooking, which is essential, and 3) release even more emissions into the air. This idea was to be used on a demonstration farm and the practice they wanted to demonstrate could not be replicated, was not efficient, and carried a negative environmental impact. Their reasoning was ignored by the DOA.

Another example was when they (the DOA, GA1, and GA2) visited a rice farm with the Agronom. At the edge of one of the fields, there was a small pond-like area

approximately 4 or 5 square meters and just less than a meter deep (A. L. Cherry, field notes, February 7, 2014). Then, the following conversation took place: “Agronom, why don’t they put fish in there?” (DOA). “I don’t know. They could put some in there” (Agronom). “Let’s work on getting some koi in there” (DOA). “Koi? Why would we use koi? We need to put tilapia in there” (A. L. Cherry). Then, the DOA, who often told the students of his/her working on a certificate in aquaculture from the University of St. Andrews in Scotland (2014) and his/her knowledge of fisheries, asked GA2, “Why would we do that?” GA2 explained to him/her that koi were ornamental and are not considered an edible fish, but that tilapia, which the DOA had said in a previous conversation were easy to attain and nearby, would be easy to raise and provide more nutritional value to Haitians (DOA, personal communication, February 7, 2014).

A combination of the challenges described, as well as other challenged and miscommunications among all members of the program, led to the early termination of the internships at NGO2. Discouragement and frustration led to an argumentative conflict between the graduate students and the DOA at NGO2. Following the argument, GA1 and GA2 called AH2 requesting they be able to return to Texas A&M University (AH2, personal communication, March 27, 2014). It was evident that a lack of communication from the graduate students to faculty members at NGO2 contributed to the escalation of the conflict. On April 1 the two graduate students returned to Texas A&M University on good terms with NGO2, having had a post conflict meeting called by the CEO (NGO2, personal communication, March 27, 2014).

## **Conclusions, Recommendations, and Implications**

Program preparation overall was fairly positive. The timeline was extremely helpful in the process. On the other hand, some preparations suffered in quality due to the time crunch between program initiation, student selection, and program implementation and a lack of pre-program research. In addition, there was a lack of concise understanding between NGO2 and Texas A&M University faculty on different aspects of the program.

For program preparations it is recommended that extensive research be done on institutional programs similar to Texas A&M AgriLife Haiti and that preparations begin significantly earlier, perhaps by one year. It is also recommended that the reevaluation of the MOA by Texas A&M University and NGO2 collectively to come up with a more specific, detailed, and clear MOA in which there is a distinct, mutual understanding. A means of accountability and transparency should also be implemented to ensure that either party is legitimately prepared for the next set of students.

Student preparation was rushed and sometimes unclear, like program preparations; however, the university's input in student competence was positive. The development of students' research plans was fair, but the plans made were unrealistic. Also, there was a lack of organization throughout the process, specifically a lack of understanding of the formalities for sending students to Haiti.

Based on the findings within student preparation, it is recommended that students be selected much earlier and begin the preparation process much earlier. It would be better to begin student preparation toward the beginning or middle of the semester prior

to departure. It is also recommended to development of realistic research goals with students. Lastly, a more organized plan of action is recommended.

There were many challenges faced by GA1 and GA2 in Haiti. There was a lack of resources that were indicated would be available (e.g., such as irrigation, high speed internet, and a farm wall). This hindered them from doing their jobs. Additionally, there was a lack of communication between all parties, which led to misunderstandings. GA1 and GA2's expertise was often ignored by the DOA and sometimes this resulted in impractical projects. Impractical projects, a lack of communication, and a lack of common paradigm led to a lack of project output.

It is recommended that all Texas A&M AgriLife Haiti parties collectively dissect the challenges described herein and reflect. Upon that reflection it is believed that understanding can be accomplished and program improvement can be made on both sides of the ocean. Understanding and discussing challenges together is the only way to overcome them.

Broadly, further research is recommended from this case study, which will enable program participants, students, and partners to reap the most benefit from the program. Gap analyses could be used in multiple contexts for improvement. It is recommended that a gap analysis be conducted by Texas A&M University regarding student and program preparation, using this case study as a means of helping identify the current state of preparation. Using this case study, it is also recommended that NGO2 conduct a gap analysis of their responsibilities. Then, an entire program gap analysis with all partners is suggested.



It is implied that part of the reason such large challenges existed was simply because Texas A&M AgriLife Haiti was a new endeavor, and GA1 and GA2 were the first students to be a part of it. It is further suggested that in the next phases in the program and the next time graduate students are sent to Haiti, this program evaluation will be beneficial. Furthermore, while there was not much output to be seen externally from Texas A&M AgriLife Haiti in the spring of 2014, the theory of experiential learning and the findings through this study illustrate that learning did take place. Based on this case study, uncertain realities emerged and challenges were identified. These data can allow program coordinators and other participants in Texas A&M AgriLife Haiti to assess and improve the program.

## CHAPTER IV

### SUMMARY AND CONCLUSION

A handful of Texas A&M University's College of Agriculture and Life Sciences faculty members began making plans to implement graduate research work in Haiti through a partnership with an NGO (NGO1). Later, this partnership expanded to NGO2. This plan which grew unexpectedly evolved into a larger program that would eventually be named Texas A&M AgriLife Haiti. The resulting program began its implementation with student researchers in 2014.

In the spring semester of 2014, two Texas A&M University graduate students from the College of Agriculture and Life Sciences spent two months in Haiti working with NGO2. Goals were to conduct applied research and further the mission of NGO2. This thesis is a result of that experience with the purpose of improving international agricultural development programs for graduate students. Shinn et al. (2009) stated:

It is essential for continued growth that all in agricultural and extension education work together to understand our knowledge base and educational needs so that we may develop knowledge in agricultural and extension education and disseminate that knowledge beyond our field of study. (p. 58)

Manuscript #1, "What Program Coordinators Want: A Competency Framework for Graduate Students in International Agricultural Development Programs Such as

Texas A&M AgriLife Haiti,” contained a basic qualitative study with two objectives. These objectives were to: 1) determine the desired competencies in graduate students who participate in international agricultural development programs based on the expert program coordinators of Texas A&M AgriLife Haiti, and 2) create a competency framework from the data. This study resulted in the achievement of both objectives.

The expression of desired competencies in semi-structured interviews with Texas A&M AgriLife Haiti program coordinators led to the description of ten competencies, which led to the construction of a competency framework. This framework contained those ten competencies, each with subcategories. The competencies were identified through the analysis of data from interviews and confirmed by previous studies. These competencies were 1) Contextual Knowledge and Understanding, 2) Social Sciences, 3) Technical/Agricultural Sciences, 4) Character, 5) Realism, 6) Resource Management, 7) Critical Thinking, 8) Communication, 9) Leadership, and 10) Research Methods and Tools. Each of these competencies was supported by multiple literature sources (see Table 1 in Chapter II).

It is recommended, due to the small and unique sample, that further studies be conducted similarly in other global contexts to determine if the findings are applicable to similar programs in other countries. It was also recommended by Lindner et al. (2003) that further research be conducted to be conducted on single country studies to understand the transferability to other international settings. Lastly, it is recommended that Delphi studies similar to Conner et al. (2013) and Shinn et al. (2009) be conducted to verify this set of competencies.

Manuscript #2, “Institutional Partnerships in Developing Countries: A Case Study of the Early Stages of Texas A&M AgriLife Haiti,” contained a unique single case study with an embedded design. This study used a framework based on Kolb’s (1984) experiential learning theory and the administrative theory. The objectives of the study were to:

1. Describe the steps and means of planning taken by Texas A&M University and NGO2 in preparing Texas A&M AgriLife Haiti to take on graduate student researchers.
2. Describe the steps and means of planning taken by Texas A&M University in preparing graduate students to take part in Texas A&M AgriLife Haiti.
3. Identify features of Texas A&M AgriLife Haiti that present challenges.

The results of the study were organized into three program components that emerged; 1) *program preparation*, 2) *student preparation*, and 3) *challenges*.

Component one, *program preparation*, was focused on objective 1 of the study, describing the planning that was done by Texas A&M University and NGO2. The data brought out three focuses within this component. They were: a) preparatory communication, b) timeline, and c) site preparation. This, rich descriptions were used to express the data.

Component two, *student preparation*, concentrated on objective two and provided thick, rich descriptions of the process in which Texas A&M University prepared its students for Haiti. Four focal areas emerged from this component. These

areas were: a) student selection, b) competence, c) student research, and d) forms and other preparations.

The third component that emerged from the data was *challenges*. This key component was directed toward the third objective of this study and elaborates on some of the struggles and challenges that were encountered during Texas A&M AgriLife Haiti in the spring of 2014. Within this component were: a) availability of assured resources, b) communication, and c) acknowledgement of expertise and applicability of practice.

The conclusion was made that the overall preparation was positive, but there was a lack of effective communication between all persons involved in the program. Additionally, the efforts of Texas A&M University in increasing student competence were effective, but the process should start much earlier. It is recommended that extensive research be conducted of programs similar to Texas A&M AgriLife Haiti. It is also recommended that some of the program features (i.e., the MOA) be reevaluated for effectiveness. In regard to the challenges, it is recommended that each challenge be dissected by Texas A&M AgriLife Haiti personnel and resolved. Lastly, further research, such as gap analyses, using this study should be conducted to determine the project target state and the current state.

In comprehensive conclusion, this thesis provides rich data for persons and professionals in international agricultural development settings. Manuscript #1 provides a framework of competencies that can be utilized by professionals and program coordinators in projects/programs similar to Texas A&M AgriLife Haiti. These

competencies can be used for identifying students for programs or for students who wish to be involved in such programs.

The framework developed in Manuscript #1 illustrates the relationships that exist among the competencies. It also depicts the relationships that exist between the competencies and the individual. This framework can be used in future competency-related studies (e.g., personal growth).

Manuscript #2 provides valuable data that can be used for improving Texas A&M AgriLife Haiti and similar programs and providing a much needed overview of the realities of working in international agricultural development contexts. Data from case study methods provide personal insight that otherwise would not be known, and rich, thick descriptions make understanding these experiences possible. Furthermore, this thesis contains data and analyses that can suggest improvements to Texas A&M AgriLife Haiti, and also foster growth within the field of agricultural extension and education and provide an opportunity to disseminate knowledge beyond the field of agricultural extension and education.

### **Lessons Learned**

1. The compilation of a list of needed competencies and subsequent development of competence by graduate student interns does not ensure preparedness for international agricultural development internships. But interconnectivity of competencies and complementarity of individuals' strengths increase the likelihood of needed preparedness and subsequent success.

2. Competence in conflict resolution should be highlighted as communication skills are assessed and developed.
3. Preparation for international experiences of graduate students should begin early—long before the departure date.
4. Clear communications of expectations, resource needs and provision, and contingency plans are a must.
5. Early in the internship experience, university-based faculty should provide on-site observation and supervision to ameliorate unmet needs and assess progress—guiding restructuring of the internship experience as needed.
6. Expect the unexpected. Regardless of the amount and quality of planning, the diligence in selection of interns and internships, and the level of competence possessed by graduate student interns, unforeseen situations and unplanned incidents will occur.
7. Success through experience is based on lessons learned. The Kolb's (1984) experiential learning theory makes it clear that even without tangible results, learning will still take place; thus, the experience was successful.

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