DEVELOPING HIGHER EDUCATION PROGRAMS IN EMERGENCY MANAGEMENT:

GHANA'S EXPERIENCE

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Developing Higher Education Programs in Emergency Management: Ghana's Experience

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ABSTRACT

Ghana is highly vulnerable and threatened by several hazards and has sought ways of

minimizing impacts of hazards events over time including demonstrating an interest in

developing an emergency management training and an higher education degree program. Yet, as

of 2013, the country has not developed a disaster management training program or a degree

program. This study investigated Ghana's efforts to see these programs develop with a particular

focus on identifying the factors involved in explaining the current status of Ghana's efforts.

Purposive and snowball sampling were used to select 19 emergency management

scholars and practitioners who have been involved with Ghana's efforts. An additional 6 faculty

members who have been involved with development of other new degree programs in 4

Ghanaian universities were selected through snowball sampling for the purposes of comparison

with the data collected from those involved in efforts to initiate an emergency management

higher education degree program. The data collection was done through in-depth semi-structured

face-to-face and telephone interviews. Both the data collection and analysis were guided by

Rubin and Rubin's (2005) Responsive Interviewing Model.

The data show that although Ghana intends to develop an emergency management degree

program in the future, its efforts, to date, have been geared towards developing a training

program. The results suggest that six main factors explain why Ghana has not yet established the

emergency management training program it intends to first develop. The factors include

institutional support, partnership, advocacy, funding, program marketing, and cultural factors.

Further, the results show that there are likely to be six other factors to address if, and when

Ghana decides to pursue an emergency management degree program. These factors include

faculty issues, student issues, supporting learning materials, professional legitimacy,

accreditation and curriculum development, and autonomy and administrative location.

brothers, eschewing any pleasures of this world in the process. You are a true hero, and words cannot express my gratitude to you. To my mother's gentle soul: Wherever you are, God richly bless you for the good work you started has been very fruitful; maybe more than you would have ever asked for. To my husband: Another kind hearted and selfless man, who encouraged me to keep going even when I lost hope in myself. Thank you for supporting me through this process, celebrating when I did well, making me laugh when I failed and wanted to quit.

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LIST OF ABBREVIATIONS

EM Hi Ed ………………………………………………Emergency Management Higher Education

EM ……………………………………………………………Emergency Management

EMI …………………………………………………………Emergency Management Institute

FSU …………………………………………………………………Florida State University

FFHEA ……………………………………………..Foundation for Higher Education Accreditation

GIMPA ..…………………………………..Ghana Institute of Management and Public Administration

IDNDR ..…………………………………….....International Decade for Natural Disaster Reduction

KNUST ………………………………..Kwame Nkrumah University of Science and Technology

MoE……………………………………………………………………Ministry of Education

NADMO ………………………………………...National Disaster Management Organization

NAB……………………………………………………………National Accreditation Board

NDNG……………………………………………………………North Dakota National Guard

NDSU …………………………………………………..North Dakota State University

NEC……………………………………………………………….National Emergency Council

SPP………………………………………………………………...State Partnership Program

UCC ………………………………………………………..University of Cape Coast

UDS……………………………………………………...University of Development Studies

UNT……………………………………………………………….University of North Texas

CHAPTER ONE: INTRODUCTION

At least one Ghanaian university has expressed interest in establishing an emergency management higher education (EM Hi Ed) degree program in the past, but, as of 2013, one has not developed. This study sought to investigate Ghana's pursuit of such a program with the main goals of 1) exploring if factors suggested by the education and emergency management literature to hinder/facilitate the development and quality of higher education programs are present in Ghana and 2) evaluating the likelihood that the country will succeed in establishing its first EM Hi Ed degree program in the near future. Specifically, the research set out to explore the following question:

What factors explain Ghana's experience with developing an EM Hi Ed degree program?

During the data collection process, the researcher discovered that while Ghana has an interest in starting a EM Hi Ed degree program in the future, its efforts to date have been dedicated toward starting a non-degree training program. Thus, the researcher began to explore the factors that explain the current status of the non-degree training program Ghana wishes to see develop as well as the factors that might facilitate or hinder the development of a future EM Hi Ed degree program.

Background

A number of hazards threaten Ghana; and, the country has a diverse array of vulnerabilities that make it susceptible to these hazards. Throughout the country's history, hazards have interacted with vulnerabilities, and this interaction has manifested itself in many disasters. Overtime, Ghana has sought ways to minimize the impacts from these disasters, better respond to them, and better position itself to recover. Its efforts have included an attempt to develop training and education programs for citizens who work in the disaster field.

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Socio-economic Characteristics

Formerly known as the Gold Coast, the boundary of Ghana was demarcated by the British colonial masters between 1844 and 1918 (Osei-Kwame & Taylor, 1984). The country is located in the center of the West African coast and has a total land area of 238,533 square kilometers (92,100 square miles). Ghana is about the size of the United Kingdom, or slightly smaller than the state of Oregon (CIA, 2007). In addition to being on the Gulf Coast, Ghana is replete with streams, rivers, lagoons, and lakes. Ghana has three main seasons—namely two rainy seasons from March to July and September to October and a dry season from November to February (Acheampong, 1982).

The country's average annual gross domestic product (GDP) is $39.20 billion, and it has a population of 24.97 million (World Bank, 2011). Ghana is endowed with a plethora of natural resources, including gold, timber, diamonds, bauxite, manganese, rubber, petroleum (recently discovered), silver, salt, and limestone (Auty, 2000). Yet, in spite of these resources, almost a third of Ghanaians live in poverty (i.e., individuals who live on less than $1.25 per day) (Adjasi & Osei, 2007; Awumbila, 2006; Lund, Dei, Boakye & Opoku-Agyemang, 2008; Grant & Yankson, 2003; Whitehead, 2006; World Bank,1995, 2010). Moreover, Ghana's illiteracy rate (i.e., the percent of the population who can neither read nor write) is significant at 35.5 percent (Blunch & Verner, 2000; Ghana Statistical Service, 2008). Canagarajah and Coulombe (1997) found that in urban areas, 1 in 3 girls and 1in 4 boys do not attend school, and that the non-school attendance rates for boys and girls are even higher in rural Ghana.

While the country's average life expectancy at birth has improved from 45.5 years in 1999 (Mathers, Sudana, Salomon, Murray, & Lopez, 2001) to 64 years in 2010 (World Bank, 2011), the United Nations Children Fund (UNICEF) estimates Ghana's infant mortality rates of

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96 per 1000 live births to be higher than the average for developing countries. This situation may be directly related to the fact that about half of Ghana's population has little or no access to safe water or adequate healthcare, electricity, and/or transportation (Ashiabi, 2000), and a third of women of reproductive age cannot meet their family planning needs (Johnson & Madise, 2011). Moreover, the few recreation facilities, education, and job opportunities that exist are concentrated in major cities like Accra and lead to high rates of rural-urban migration (Adams, 2006; Agyei-Mensah, 2006; Asiedu & Agyei-Mensah, 2008; Awumbila & Ardayfio-Schandorf, 2008; Brand, 1972; Geest, 2011; Yeboah, 2010).

Hazards Profile

Like most countries, the West African nation of Ghana faces several hazards. For instance, the country has a history of earthquakes (Amponsah, 2002), which are expected to recur every 65 years (Kovacs & Spens, 2009). Accra, the capital city of the country and its most densely populated area, "…lies within a seismic zone with known isoseismals of between 7 and 9" (Ayetey & Andoh, 1988, p. 15) magnitude on the modified Mercalli scale[1].

Pests and insect infestation are a major source of famines and epidemics in Ghana (Kovacs & Spens, 2009; Tanzubil & Yakubu, 1997). Insects reduce stored millet by over 50 percent in Northern Ghana (Tanzubil & Yakubu, 1997), and controlling the insects can be costly (Owusu, 2001). In addition, Ghana is predisposed to epidemics such as yellow fever, malaria, and cholera (Kovacs & Spens, 2009). Leimkugel et al. (2005) found that the incidence rate of strepcoccus pneumonia meningitis in Northern Ghana is between 10 and 20 cases per year, half of those cases result in fatalities. There are also extreme instances such as the one between November 1996 and May 1997 where 18,703 cases of meningoccal disease were reported,

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[1] This is equivalent to 6.1 to 6.9 on the Richter scale.

claiming some 1,356 lives (Woods et al., 2000). Although these numbers may be disturbing, they are not the worst in terms of deaths from disease in the country.

Malaria is the leading cause of deaths in Ghana (Asenso-Okyere & Dzator, 1997) especially in children under age 5 (Ahorlu, Dunyo, Afari, Koram, & Nkrumah, 1997). Malaria accounts for almost 40 percent of daily hospital visits and 38,000 annual deaths, including over 2,000 pregnant women (Buabeng, Duwiejua, Dodoo, Matowe, & Enlund, 2007). In the Northern Region alone, Malaria was responsible for 23 percent of infant mortality between 1991 and 1992 (Binka et al., 1996).

Many of the other hazards that threaten Ghana result in perennial hazard events (Boateng, 2012; Jankowski, Weeks, & Engstrom, 2011; Mohammed & Abdul Rahman, 1998; Twumasi & Asomani-Boateng, 2002; Wharton & Tomlinson, 1999). Accra, the capital city of the country, has experienced flooding problems dating back to the 1930s (Karley, 2009). In fact, almost half of Accra's population of 2, 291, 352 (World Association of Small and Medium Enterprise, 2012) live on the floodplain of the Densu River (Karley, 2009). The Northern Region of Ghana, where the country's food staples— tubers and grains—are produced also experiences severe and widespread floods (Oduro-Afriyie & Adukpo, 2006; Forkuo, 2011).

These floods have worsened over the last decade and have resulted in loss of lives, displacement of vulnerable persons, and destruction of vital infrastructure when they occur (Boateng, 2012; Jankowski, Weeks, & Engstrom, 2011; Mohammed & Abdul Rahman, 1998; Twumasi & Asomani-Boateng, 2002; Wharton & Tomlinson, 1999). The flood of September 2007 alone left at least 20 people dead and an estimated 400,000 residents of the Upper East Region with neither home nor means of ensuring their livelihood (McCaskie, 2008, Ross, 2007). And, the Accra floods of June 2010 killed at least 23 people and destroyed properties costing

millions of Ghanaian cedis, according to Kofi Portuphy, the coordinator of Ghana's National Disaster Management Organization (Amanor, 2010). Moreover, Addo, Larbi, Amisigo, and Ofori-Danson (2011) estimate that the flood hazard will continue to threaten lives and properties in the Dansoman area of Accra to the extent that about "650,000 people, 926 buildings and a total area of about $0.80km^2$ of land will be vulnerable to permanent inundation by the year 2100." (p. 2029). Consequences associated with flooding include the destruction of food stock and livestock in the region (Armah, Yawson, Yengoh, Odoi, & Afrifa, 2010; Codjoe, Atidoh, & Burkett, 2012; Nyarko, 2002). The floods result in low crop productivity impacting the nation's food supply (Derbilie & Kasei, 2012; Forkuo, 2011; Hedzro-Garti, 2010; Laube, Schraven, & Awo, 2012; Tschakert, Tutu, & Alcara, 2011).

In addition to floods, the country frequently contends with fires. About 1,500 severe burn cases are reported annually, which are mostly caused by petroleum related fires (Agbenorku, et al., 2010) and, about half of the forest in the country has been under threat of wildfire since 1983 (Hawthorne, 1994; Vordzogbe, 2011). These are very dangerous situations for a country in which the agricultural sector serves as safety net during adverse economic shocks (Sarpong & Asuming-Brempong, 2004), employs more than half of its labor force, and accounts for about 36 percent of its Gross Domestic Product (GDP) (Brown & Crawford, 2008). Even though there have been several ongoing efforts at controlling the fires, particularly in the North, the efforts have not had much impact in reducing vulnerability due to certain practices and human behaviors (Apusigah, 2007) such as the belief that setting bush fires drives away evil spirits (Amanor, 2002).

A lack of preparedness and success in mitigation is not exclusive to Ghana's efforts to grapple with fires—it is true across the country. There have been opportunities for Ghana to

improve its preparedness and mitigation, but it has not yet done so in a significant way. As Allotey, Arku, and Amponsah (2010) state, "At the international level, various programs and initiatives have been developed to assist earthquake-prone developing countries reduce their risk. Unfortunately, Ghana…has not participated in any of these programs" (p. 147-148). For instance, empirical research has shown that the libraries of the leading universities in the country are not prepared to respond to any of the hazard events to which they are susceptible (Adinku, 2005; Ahenkorah-Marfo & Borteye, 2010; Akussah & Fosu, 2001; Senya & Lamptey, 2011). Akussah and Fosu (2001) attribute the lack of disaster preparedness of the libraries to absence of disaster plans and lack of human and material resources. And, the story is no different in Ghana's health sector. Norman, Aikins, Binka, and Godi (2012) found that about "75% of the health facilities lack emergency preparedness plans, surge capacity planning, capability to manage triage in mass events, and mutual aid agreements" (p. 525). The lack of preparedness and mitigation is not exclusive to specific sectors but pervasive in Ghana.

> …flooding remains a perennial problem, whilst the media landscape is replete with fire occurrences, both commercial and residential, as well as wildfires. Additionally, a large number of citizenry continue to behave in ways (including building on waterways and marginal lands with impunity) that not only threaten their very lives but also pose a greater challenge to the society and the environment at large—a threat that inhibits our quest to build safer communities, hence enhancing the need to interrogate the capacity…to manage eventualities" (Oteng-Ababio, 2012, p. 5).

 Allotey, Arku, and Amponsah (2010) argue that negligent behavior towards earthquake hazard "could turn out to be Accra's demise, if radical and practical disaster mitigation measures are not put in place" (p. 151). The lack of disaster preparedness in Ghana has been said to make the management of disasters difficult (Frimpong, 2007). Ghana finds itself reacting to events in a piecemeal uncoordinated way (Allotey, Arku, and Amponsah, 2010).

Despite its hazards, vulnerability to them, and experience with events, Ghana had no formal structure or program at any level (i.e., local, regional, national) for managing disasters until the mid-90s. There was no training for government officials at any level and no designated body to manage the numerous hazards that threaten the country. However, this has recently changed, in part due to external developments.

Foundation of Ghana's Emergency Management

At the 44th session of the General Assembly of the United Nations in December 1989, the International Decade for National Disaster Reduction (IDNDR) was declared with the aim of reducing disaster losses, especially in developing countries (Housner, 1989; Leavesley et al., 1997; Lechat, 1990; Schipper & Pelling, 2006). Goals identified to support achievement of this vision included sharing methods for assessing, predicting, preventing, and mitigating natural disasters with nations around the world through programs of technical assistance and technology transfer, the development of national level disaster management programs, national demonstration projects, and education and training towards specific disasters and locations (Lechat, 1990; United Nations, 1989).

In keeping with the United Nations' objective, Ghana established the National Disaster Management Organization (NADMO) in 1996 with the passage of Parliament Act 517 (Oteng-Ababio, 2012). NADMO's organizational structure is situated within the Ministry of Interior, and is comprised of a national coordinator, 10 regional coordinators, 140 district coordinators, and 900 zonal coordinators (Odei, 2004). It is a government agency charged with providing disaster response and recovery assistance by coordinating activities of all the organizations involved in disaster management (Ministry of Interior, 2012).

The leadership of NADMO recognizes the need to educate its staff. In fact, in its Strategic Plan for 2004-2006 NADMO listed one of its goals as to "equip all NADMO staff countrywide with technical, managerial and administrative skills to perform their duties effectively and efficiently by 2005" (NADMO, 2010 as cited in Oteng, Ababio, 2013, p. 5). Despite this goal, …the organization has failed in this objective. Amongst the many reasons are staff…NADMO is handicapped in its ability to develop capacity for the implementation of adaptation and mitigation strategies" (Oteng, Ababio 2013, p. 9). Although NADMO has not been able to increase capacity to the degree it would like, the organization has attempted to see its staff improve their ability to do their job. Since its inception, the organization has periodically conducted workshops and exercises for officials of government organizations, non-governmental organizations (NGOs), and international partners, with the help of the North Dakota National Guard (NDNG).

This help from the NDNG came about through a prior existing relationship between Ghana and the State of North Dakota through the State Partnership Program (SPP), which pairs every state in the United States as well as Washington D.C., Puerto Rico, the Virgin Islands and Guam with a foreign country with the aim of "establishing and developing military interoperability, regional relationships, synchronization of effort and capacity building" (Raasch, 2011, p. 1). As part of the SPP initiative, NADMO conducted a national emergency simulation exercise to test the effectiveness of the national contingency plan in May 2011. Participants in this exercise included several government organizations such as NADMO, Ministry of Health, Ministry of Local Government and Rural Development, Ministry of Defense and National Service, Ministry of Water and Irrigation, and Ministry of Information and several external participants such as the Food and Agriculture Organization (FAO), World Health Organization,

and Ghana Red Cross Society (Inter-Agency Standing Committee, 2011). Also, with the support of the United States Africa Command (AFRICOM), Center for Disaster and Humanitarian and Assistance Medicine (CDHAM) and United States Agency for International Development (USAID), NADMO organized a tabletop exercise to test national pandemic disaster response in February 2012. Participants involved some 120 civilian and military representatives from 5 African countries, the United States, and international aid organizations (Owsley, 2012).

In addition to these exercises, the SPP and NADMO offered two disaster management workshops to a section of the Ghanaian army[2] and NADMO staff: one in December 2009 at Ho in the Volta Region (Ghana News Agency, 2009) and the other in November 2010 at Accra in the Greater Accra Region (United States Army Africa, 2010) on the use of Incident Command System (ICS) in disaster response and medical response respectively. In another effort, NADMO organized a short training course on disaster management for government officials, Ghana Armed Forces, and other stakeholder agencies in March 2010 (Portuphy, 2010). The course, entitled "Disaster Management", ran for two weeks and was, according to Portuphy (2010), a collaborative effort between NADMO, Ghana Institute of Management and Public Administration (GIMPA), North Dakota State University (NDSU), and Florida State University (FSU). Yet, since its initial offering, the training course has not been offered again. Moreover, NADMO has yet to efficiently manage Ghana's hazards and continues to receive criticisms and poor evaluation from the Ghanaian media and citizens after most hazard events (Insightgh, 2010; Gadugah, 2012; Salam, 2012).

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[2] It must be noted that up until 2013, the NDNG's training exercise activities and mission in Ghana was geared toward the Ghana Army (i.e. it was a military-to-military affair); but occasionally, NADMO's staff was invited to join the trainings because NADMO was headed by a Ghana Army official. Before 2013, the NDNG could only work with NADMO in conducting workshops that explained to NADMO staff how disasters were managed in North Dakota and not to train NADMO staff. More on the NADMO-SPP initial training arrangements is discussed in the results (Chapter 4).

Meanwhile, it appeared that NADMO and GIMPA were interested in establishing an emergency management degree program at the higher education level. Under the auspices of the Ministry of Interior, NADMO acquired a large plot of land in the Batsonaa area in Accra with the sole intent of building an emergency management center that will include a college for disaster studies (K. Portuphy, personal communication, June 6, 2011). Work on the architectural design of the facility is complete and on display at NADMO headquarters (K. Portuphy, personal communication, June 6, 2011). Construction of the building is dependent on commitment of sufficient financial resources to complete the project (K. Portuphy, personal communication, June 6, 2011).

The top administrator of GIMPA has expressed a hope that the training collaboration between GIMPA, NADMO, NDSU, and FSU continue in order to see the disaster management training course continue, expand, and eventually transition into a higher education degree program (Portuphy, 2010). GIMPA's assistant registrar, Nana Yaa Asenso-Okyere, has also declared her institution's intent to set up an emergency management center in order to help start an educational emergency management program as soon as possible (personal email communication, November 22, 2011). Notwithstanding Ghana's desire to develop a robust training and education program, there is not as yet a formal, stable training program much less an educational degree program. For a better understanding of the context in which any higher education program (training, education, or a hybrid of the two) would develop, a brief review of Ghana's education system is provided.

Ghana's Educational System

The first schools were established by European merchants and missionaries during the colonial period, and the formal education structure that evolved was modeled on the British

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system (Wright, 2012). Ghana's educational system is highly centralized and the Ministry of Education, and its agencies are responsible to respond to the needs and issues of the entire education system (Wright, 2012). Like all levels of education in Ghana, the higher educational system includes a mix of both private and public institutions. The public education sector consists of six universities, ten polytechnics, and three professional institutions, all operating under the oversight of the National Council for Tertiary Education (NCTE) (Effah & Mensa-Bonsu, 2001). The institutions offer degrees (undergraduate and graduate), certificates, and diplomas in a range of academic and professional fields (U.S. Department of State, 2012).

Governance and administration of each higher education institution is vested with an academic council responsible for matters relating to finance, development, appointments, and discipline. A typical university council consists of a chair and three other members who are each appointed by the government. Councils also include the institution's vice chancellor and representatives of the institution's faculty, students, workers' association, and alumni, as well as a representative from the Ministry of Education (Effah, 2003). To ensure high standards, the National Accreditation Board (NAB) was established by the government of Ghana in 1993 with the enactment of the Provisional Defense Council's law 317 (NAB, 2012). The board's main mandate is to examine and accredit both public and private tertiary institutions with regard to program contents and standards (NAB, 2012).

General admission into tertiary institutions is usually based on a student's score on the Senior Secondary Certificate Examination (SSCE) that is administered by the West African Examination Council (WAEC). Any student who wants to be considered for admission into any institution of higher education must take the SSCE, which first started in 1993. Prospective students apply to the tertiary institution they wish to attend and indicate three programs of study

that they are interested in pursuing at the institution. Based on their score on the SSCE, a prospective student is either admitted to the institution of their choice or not. If a prospective student is admitted, the personnel associated with the programs of study the student identified determine whether they would like to admit the student. Assuming one or more of the three programs of study the prospective student applied to actually admit the student, then the student can attend the institution. If one or more of the programs, or the institution itself, do not admit the student, then the student has to begin the application process again at a different institution. Tuition is free throughout Ghana's public education system at the tertiary level for admitted students who meet competitive departmental requirements and institutional cut off points, but others who satisfy the minimum entry requirements may be admitted on a fee paying basis (Girdwood, 1999). Public tertiary institutions in Ghana are funded largely by government sources and secondarily through student tuition fees and alumni donations (Effah, 2003; Bailey, Cloete, & Pillay, 2007).

Private universities, as the name connotes, are privately funded and therefore charge students full fees and tuition. They do not receive any kind of funding from the Ghana government, but have to meet and follow the standards for program development and minimum student admission criteria set by the National Accreditation Board (NAB, 2012). GIMPA, however, is a unique because it is a public, but self-financing institution that was established as joint project by the Ghana government and the United Nations to train public servants. GIMPA has been the main tertiary institution that has expressed interest in developing an emergency management degree program. Yet, any academic institution that might seek to start an emergency management higher education degree program in Ghana would not be different from either the private or public institutions described above.

In the context of the proceeding discussion, this study set out to explore why an EM Hi Ed degree program has not yet developed in Ghana given the country's need and interest. However, in the process of data collection, the researcher discovered that an educational degree program was not what Ghana was focused on starting at this point. While the country has some interest in developing an EM Hi Ed degree program in the future, the researcher found that Ghana is primarily interested in seeing a training program (with, perhaps, some educational aspects) develop to increase the capacity of NADMO staff. Moreover, the research found that the involvement of GIMPA—a higher education institution—and higher education institutions external to Ghana—namely, NDSU and FSU—were due to convenience and resources as opposed to any real interest on the part of Ghana in beginning a EM Hi Ed degree program at this time. Due to this discovery, the data collection and subsequent data analysis for this study explored the factors that explain the status of Ghana's efforts to initiate a training program as well as the factors that might explain any future attempt to initiate an EM Hi Ed degree program.

<u>Significance</u>

It seems intuitive that disaster management training and education are vital components to any country's effort to manage hazards, vulnerabilities, and events. Training helps strengthen capacity for effective disaster management (Hsu et. Al, 2006; MacFarlane, Joffe, & Naidoo, 2006; Paton & Jackson, 2000; Wilson, 2000). Creating awareness of disaster effects at the Hi Ed level will be of great benefit in guiding the actions and inactions of participating students. Educating tomorrow's hazard managers and scientists in appropriate programs is crucial to reducing disaster impacts (Alexander, 1991; McCreight, 2009; Kiltz, 2009). Education could be particularly influential in Ghana where the lack of preparedness and mitigation have been blamed on "…poor awareness, and a lack of appreciation of the magnitude of the risk faced by

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society at large" (Allotey, Arku, & Amponsah, 2010, p. 152). In addition, introductory EM courses in Ghana's universities would be an avenue of "potential preparation for a wide range of professional career choices" (Klenow & Youngs, 2010, p. 87). The problem, therefore, lies in how to put together and administer an effective and high quality disaster education program (Rodriguez & Aguirre, 2005).

This research investigated the notion of EM Hi Ed degree program development in Ghana. Both the EM literature and the general education literature identified factors that help or hinder higher education program development and its quality and this study focused on their presence in Ghana and the degree to which their presence or absence might explain Ghana's efforts to initiate a program in the future. In so doing, the researcher was able to identify and provide operational definitions for the key factors that appear to be relevant to understanding the development of EM Hi Ed programs whether induced from the literature or data analysis; explore the relative influence of these factors; and, transition the findings into both a conceptual model that can be used by future researchers and a practical tool that can be used by institutions interested in initiating an EM Hi Ed degree program in the future.

As previously discussed, the researcher discovered that Ghana's primary and immediate interest is to see a training program develop—not an EM Hi Ed degree program—even while the country hopes to see such a degree program develop in the future. It seems intuitive that training individuals who perform tasks and activities related to disaster management would, like education, increase Ghana's capacity to manage hazard events. The notion that training can have such an impact has been noted numerous times by both practitioners and academics (Hsu et. Al, 2006; MacFarlane, Joffe, & Naidoo, 2006; Paton & Jackson, 2000; Wilson, 2000). And, one of the foci of the International Decade for Disaster Reduction was in seeing training opportunities

for people working in the field increase (Housner, 1989; Leavesley et al., 1997; Lechat, 1990; Schipper & Pelling, 2006). There is no reason to believe, or evidence to suggest, that either training or education is more important than the other in enhancing a country's capacity to manage hazard event. It seems reasonable that both are important. Thus, the discovery of Ghana's interest in a training program now and an EM Hi Ed degree program later does not reduce the potential significance of this study but rather increase it. Not only was this study able to explore issues related to EM Hi Ed degree program development but also the factors related to the development of a national level training program. Thus, the findings of this research stand to be of great benefit to every country that seeks to establish an EM Hi Ed degree program and/or a training program.

Of course, one of the most significant contributions of this study is to Ghana and the individuals and organizations that have been, continue to be, and/or will become engaged in its efforts to begin a training and/or EM Hi Ed degree program. This study has explored the factors that are involved, or are anticipated to be involved, in these efforts. An understanding of the factors and their implications for program development should allow those engaged in Ghana's efforts to target their efforts toward manipulating the factors that have been found to be most influential to see both a training and EM Hi Ed degree program materialize in the near future. It is also anticipated that the findings of this study will be of significant value to not only Ghana, but other developing West African countries like Nigeria, Liberia, and Gambia, which have similar social and political cultures to Ghana's, and which also struggle with managing their numerous hazards and disasters through developing training/and or EM Hi Ed degree programs.

Finally, the findings of this study increase the theory and research literature available for educating students and faculty in emergency management higher education programs about EM

specific literature on the challenges of developing training and EM Hi Ed degree programs. While there exists significant literature on general program development, and a little on EM Hi Ed degree programs, there has been little, if any, actual research to test the ideas presented and factors identified in that body of work; and, the researcher has not been able to identify any empirical work related to the development of a national level training program. Therefore, this study represents one of the first attempts to explore through empirical work the issues in this area, with specific reference to a developing country.

<div align="center">Conclusion</div>

This chapter reviewed Ghana's hazards, vulnerabilities, and the status of its preparedness efforts including the extent to which Ghana partnered with internal and external organizations—including tertiary institutions—to develop some kind of training or education program for NADMO staff that would be administered by GIMPA. Chapter Two reviews existing education and EM literature related to the factors associated with successful higher education programs. Chapter Three presents the research methods used in this study. Chapters Four, Five and Six report the results of this study. Chapters Seven and Eight discuss the significance of this study's results and its implication for the EM discipline and practice.

CHAPTER TWO: LITERATURE REVIEW

Chapter Two reviews the existing body of knowledge related to the original research question for this study. Section one provides an account of the evolution of emergency management higher education (EM Hi Ed) in the United States, where EM Hi Ed was first established, and briefly discusses how an understanding of the United States experience will inform this study. This discussion is followed by an examination of the EM literature and the factors it suggests have challenged or facilitated the development of EM Hi Ed programs. As the EM literature is discussed, an analysis of the degree to which the more established education literature also suggests the relevance of these factors to building quality programs is provided.

History of Emergency Management Higher Education Program in the United States

The idea of developing higher education degree programs in EM was not one that emerged out of academia. In fact, the impetus for EM Hi Ed programs in the United States is directly linked to the Federal Emergency Management Agency (FEMA) (Marks, 2005; McEntire, 2004a; Neal, 2000; O'Connor, 2005; Winegar, 2008). In the early 1980s, officials of the newly-created FEMA saw the need for improved practice and started to develop training programs for emergency managers at all levels of government. Participants could either take self-study or in-class courses in topics such as planning, preparedness, and disaster services (Green, 2000). FEMA also proposed a partnership with the University of North Texas (UNT) to develop a training program that would be targeted at state level EM personnel (McEntire, 2004). The training program at UNT evolved into an approved degree program at the bachelor's level in 1983 at the university's initiative. Thus, UNT offered the first higher education degree program in EM to be followed by Thomas Edison State College and Rochester Institute of Technology. (Blanchard, 2005).

In 1992, President Clinton appointed James Lee Witt as FEMA's Director and Kay Goss as FEMA's Associate Director for Preparedness, Training and Exercises (Sylves, 2012; O'Connor, 2005). These appointments set the stage for a significant transformation in professionalization and higher education in EM (Marks, 2005; Roberts, 2004). With new leadership, FEMA wanted to not only identify ways to better train EM personnel to better manage increasingly complex 21st century disasters but to also educate future professionals and others. FEMA's new goal was to establish an EM degree program in every state by the end of 2001 (Marks, 2005).

To achieve this goal, Goss designated Dr. Wayne Blanchard to start what is now known as the FEMA Emergency Management Higher Education Program in 1994 (Cwiak, 2011). The EM Hi Ed Program promoted the development of programs and served as a source of expertise in advising interested schools on how to go about establishing EM programs (Cwiak, 2011). The Program also supported the development of courses including free textbooks and course materials to support program and curriculum development across the country (Blanchard, 2005). The EM Hi Ed community has repeatedly expressed gratitude for the availability and ease of access of the Hi Ed courses, the quality of the writing, and their cost effectiveness (Cwiak, 2008a).

Additionally, the EM Hi Ed Program began organizing an annual higher education conference[3] in Emmitsburg, MD for academics and practitioners to discuss specific issues regarding EM Hi Ed program development (Marks, 2005; O'Connor, 2005). And, as opportunities for the development or improvement of EM Hi Ed programs were identified the Program sponsored focus groups of academics associated with EM Hi Ed programs to explore the opportunities and consider how they might be addressed (for example: Jensen, 2012;

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[3] The first annual FEMA higher education conference was in 1997 and has been annually since.

McEntire, 2012). Due to these, and other contributions, the FEMA EM Hi Ed Program is credited with directly and indirectly contributing to an increase in EM programs beginning in the mid-90s (Marks, 2005; O'Connor, 2005; Winegar, 2008). As of 2001, there were a total of 70 EM Hi Ed programs in the United States (Blanchard, 2005).

Although the number of new programs began to increase as a result of the FEMA Hi Ed Project's efforts, the interest of academic institutions in beginning programs intensified dramatically after the September 11, 2001 terrorist attacks on the World Trade Center Towers and Pentagon (Blanchard, 2005; Jensen, 2011; Marks, 2005; McEntire, 2004a; O'Connor, 2005). According to O'Connor (2005), the attacks spurred so much interest in developing EM programs that "in only 3 years [after the attack] more than 100 new academic programs [were] offering either degrees or certificates in emergency management" (p. 5). And, as of May 2012, there were 174 institutions offering one or more EM programs (e.g. Certificates, as well as Associate, Bachelor's, Master's, and Doctoral degrees) (Cwiak, 2012). Still, EM Hi Ed is a relatively new and evolving field (Cwiak, 2008a; Cwiak & Muffet-Willett, 2009; Fuller, 2002; Kapucu & Wart, 2006; Marks, 2005; Neal, 2000; Wilson & Oyola-Yemaiel, 2001; Woodbury, 2005) and faces a number of challenges (Bellavita, 2011; Cwiak, 2010a; Fuller, 2002; May, 2011; McEntire & Marshall, 2003; McReight, 2009; Neal, 2000, 2005; Phillips, 2003; Rosenstone, 2004; Walker, 1998; Woodbury, 2005).

The rationale for exploring the background of EM Hi Ed programs in the United States (U.S.) is that the U.S. was the first country to pursue EM Hi Ed; it has aggressively pursued the development of EM Hi Ed programs across the country; and, it currently has the most EM Hi Ed programs. No other country has made significant strides in developing and maintaining multiple EM Hi Ed programs nationwide. Studies from limited efforts in Australia and Canada discuss

factors relevant to program success although these studies only serve to validate, rather than expand upon factors identified in research from the U.S. The researcher could find programs available in nine countries other than the United States including Bangladesh, Iran, United Arab Emirates (just starting), Canada, New Zealand, Australia, Turkey, England, and South Africa. The limited extent of discussion in this area is, therefore, not surprising.

While the U.S. experience with EM Hi Ed program development can be considered "successful" with over 170 institutions offering programs (Cwiak, 2012), EM program educators have nevertheless identified a range of complex factors that hinder program development and quality. On the other hand, Ghana, the country under consideration in this study, has not established any EM Hi Ed program despite its desire to do so; thus, a review of the challenges faced by U.S. EM Hi Ed programs will be helpful in identifying not only obstacles but also facilitators of success. This is not to suggest that the Ghanaian experience will or should follow the U.S. experience but it is reasonable to expect some degree of overlap.

Factors Impacting Program Development and Quality in the United States

As EM Hi Ed has evolved in the United States, there has not been any systematic empirical research on its evolution or on any aspects of EM degree program development. Nonetheless, there are a significant number of descriptive, observational, and opinion-based pieces written by EM academics and professionals that sensitize the reader to the issues that EM Hi Ed programs face as they develop and are implemented. When analyzed, this literature suggests that EM Hi Ed programs face challenges in the following areas: autonomy and institutional support, faculty issues, curriculum standardization, supporting learning materials, student issues, and academic and professional legitimacy. Thus, this literature, while not based on formal research methodologies, is of immense use to this study and is reviewed in the

following pages. The reader should be aware that while this literature review focuses on issues confronting EM programs, a few of the papers examined homeland security and disaster/ emergency management education together (see for example: Clay, 2010; Clement, 2011; Donahue, Cunnion, Balaban, & Sochats, 2010; Drabek, 2007; Klitz, 2009; McCreight, 2009). In addition, general education literature is also discussed within each section.

Autonomy and Administrative Support

For the most part, EM Hi Ed programs in the United States are not autonomous organizational units but rather sub-units within the departments of various academic disciplines. For instance, the first EM Hi Ed program at UNT was, and remains, housed within the Department of Public Administration (Drabek, 2007; McEntire, 2004) while Oklahoma State's program is in the Department of Political Science, Texas A&M's program is in the Department of Engineering, and University of North Carolina Chapel Hill's program is in the Department of Public Health (Marks, 2005). Emergency management is a stand-alone department at only three institutions currently—Arkansas Technological University, Jacksonville State University, and North Dakota State University. And, the North Dakota State University program only transitioned into its own department in 2010 having first been located within the university's Department of Sociology and Anthropology (Klenow & Youngs, 2011).

There are at least two key reasons why EM Hi Ed programs have evolved within other disciplinary departments—one reason involves perceived appropriateness, and the other reason is necessity. In many cases, it is thought that EM Hi Ed programs are most appropriately placed within another disciplinary departmental unit. The perception exists in part because the body of knowledge upon which an EM education ought to be grounded has been developed within a variety of academic disciplines (Jensen, 2010, 2011; Phillips, 2003, 2005). And, because so

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many disciplines have contributed to the body of knowledge, EM is perceived as multidisciplinary or interdisciplinary area of study (Clement, 2011; Drabek, 2007; McEntire, 2002; McEntire & Marshall, 2003; Neal, 2000) as opposed to an academic discipline it its own right (Jensen, 2011). As such, EM is often seen as best suited to be a sub-unit within a larger department of a related discipline.

Another reason that EM departments have evolved within other disciplinary departments is that it is necessary due to the resources involved in developing and maintaining an independent program. While institutions have been generally supportive of EM programs at their inception (Klenow & Youngs, 2011), institutional support does not necessarily extend so far as to provide the resources necessary to maintain what would be a small, independent departmental unit (Klenow & Youngs, 2011; Neal, 2000). Historically, even if institutions were willing to support stand-alone EM departments, some resources, such as a pool of qualified EM faculty, are not available. Since there were EM degree programs at all levels of education before there were doctoral degree holders in EM, the faculty to teach in EM programs have been historically drawn from other academic disciplines (Clement, 2011). Thus, necessity, and perceived appropriateness, have led to the inclusion of EM Hi Ed programs within a variety of disciplinary departments.

Among colleges and universities who have supported EM as a program within another disciplinary department, determining the most appropriate department to house EM programs has been a significant challenge (Cwiak & Muffet-Willett, 2009; Neal, 2000). Even among academics associated with EM there has historically been little agreement as to where within academia EM Hi Ed programs belong. For instance, Neal (2000) argues that while most EM programs are located within political science and public administration, sociology and geography

are more suitable because the majority of disaster research comes from sociologists and geographers. Yet, McEntire (2007) suggests that disaster study is closer to international relations because both disciplines are related to global affairs and deal with international non-governmental organizations.

Regardless of where EM Hi Ed programs are housed and why they are where they are, the literature suggests that when an EM Hi Ed program is a sub-unit within a larger department of another disciplinary orientation, there are numerous consequences. Klenow and Youngs (2011) stated, "a strong emergency management program requires internal support across the administrative chain" (p. 112). Yet, dependency on a larger department can be detrimental to program development and maintenance. Issues related to fiscal and administrative autonomy are common in EM Hi Ed programs (Klenow & Youngs, 2011; McEntire, 2004; Neal, 2000, 2005). Lack of program autonomy has been linked to difficulties in program expansion, faculty recruitment, and control of curriculum as well as a lack of program ability to determine its own future directions (Neal, 2000). Unfortunately, the individuals who control the EM Hi Ed program sub-unit are sometimes unable or unwilling to support the program due to opposition from the larger, more established program(s) in the department and competition for available resources (May, 2011). For instance, Blanchard (2001) noted that "department heads and faculty from traditional disciplines in many cases are not supportive when basic resources are requested" (p. 12). As Neal (2000) stated, at times

> …administrators with little or no knowledge of the field will control the destiny of the program and may make decisions not in the best interest of the disaster program. Such decisions may be innocuous (e.g., no knowledge of the disaster management field) or destructive (e.g., using the resources of the unprotected disaster program to support the larger department) (p. 427).

These issues noted by Neal (2000) have certainly been experienced by UNT's program (McEntire, 2004). Over time, a lack of autonomy and support can erode the morale in the EM program and the enthusiasm of those individuals who have historically been devoted to its success (McCreight, 2009). Moreover, when these issues are not present, as is the case for NDSU's programs currently, the benefits to the program associated with increased autonomy and streamlined decision making have been noted (Klenow & Youngs, 2011).

Beyond issues related to autonomy, general issues related to sufficient administrative and institutional support appear to be impacting a significant number of EM Hi Ed programs in a negative way. For instance, Cwiak (2010b) found that more than half of EM Hi Ed programs in her survey did not perceive institutional funding to support program development to be accessible or sufficient and more than half of EM Hi Ed programs felt they did not enjoy adequate institutional and administrative support for the development or implementation of new program initiatives. Survey data from EM Hi Ed programs has shown a slight ebb and flow of perceived institutional support for programs, but for five consecutive years in which the survey was done (2007, 2008, 2009, 2010, 2012) institutional support—particularly in the form of financial support—was among the top five challenges facing programs (Cwiak, 2012). This problem has been noted elsewhere in the literature as well (Blanchard, 2001; May, 2011; Neal, 2000; Phillips, 2005; Thomas & Mileti, 2004). The lack of institutional financial support has been said to make it difficult for EM programs to accomplish the following: conduct extensive empirical research that will strengthen the body of knowledge, fund course development, fund student internships, fund traveling expenses to conferences, and hire more and well qualified faculty (Blanchard, 2001; McEntire, 2004; Thomas & Mileti, 2004). Moreover, the inadequacy of funding opportunities has been said to limit faculty member involvement and active

participation in programs or EM professional associations, such as conferences and workshops (Cwiak, 2012).

In the general education literature, the issues of departmental autonomy and administrative support have also been linked to program quality and sustainability. Scholars have noted that departmental autonomy is crucial to program quality (Becher & Kogan, 1992; Epstein, 1974; Walvoord et al., 2000) and is one of the main sources of faculty satisfaction (Chambliss, 1994; Pollicino, 1996). The literature also notes that garnering the support of deans and other institutional leadership, such as provost and staff in the office of academic affairs, is essential to ensuring the provision of resources and attention necessary to operate programs (Kuh et al., 1991; Pierce, 2001; Welsh & Metcalf, 2003). Moreover, it has been observed that department heads and chairs struggle day-to-day to make their department's needs visible to deans and chief academic officers who have to deal with competing departmental goals and agendas (Davis, Strand, Alexander, & Hussain, 1982; Effah, 2003; Ford Foundation, 1988; Sullivan & Rosin, 2008).

The education literature makes it clear that institutional financial support is essential to supporting program faculty, students, programs, and facilities (Abbott & Barlow, 1972; Conrad & Pratt, 1985; Conrad & Blackburn, 1986; Dill & Soo, 2005; Fairweather & Brown, 1991; Jean & Wemmerus, 1988; Morgan et al., 1976; Young et al., 1989). According to Cook (2001), funding provides the equipment that faculty need in order to create new courses, collect their own data, engage in curriculum improvement, or hire new faculty. And, it has been observed that departments with more money and superior facilities are better equipped to train students in the empirical research methods and techniques that are necessary for successful scholarship (Clement & Sturgis, 1974).

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In summary, the literature suggests that where issues related to autonomy and institutional support exist, program development and quality can be threatened. These issues have certainly been viewed by EM educators and education professionals as important to understanding the status of EM Hi Ed programs in the United States. Thus, this study sought to understand if issues related to autonomy and institutional support have been involved in the Ghanaian efforts to begin an EM Hi Ed program.

Faculty Issues

The EM literature suggests that faculty issues are also important in understanding how EM Hi Ed programs have developed as well as their status currently in the United States. In fact, faculty issues have been noted as a key challenge to program development in 5 consecutive surveys of EM Hi Ed programs (Cwiak, 2007, 2008, 2009, 2010, 2012). And, faculty issues have been a topic of discussion and concern at FEMA EM Hi Ed conferences (Neal, 2000). There appear to be two primary faculty issues that have threatened, and continue to threaten, program development and quality in the United States: 1) having a sufficient number of faculty and 2) having faculty with appropriate credentials.

EM program survey results over three consecutive years (i.e. 2007, 2008, and 2009) indicated that well over a third of EM Hi Ed programs had only 1 full-time faculty devoted to the program and more than a third of programs had none (Cwiak, 2007, 2008, 2009). Moreover, annual survey results of EM Hi Ed institutions reveal that most programs are supported by part-time adjunct faculty and faculty from other departments who teach one or more classes in the EM program (Cwiak 2007, 2008, 2009, 2010, 2012). And, programs consistently report having too few faculty to maintain the quality of program they desire (Cwiak, 2010b). As Cwiak (2012) stated, "devoted faculty members are important because faculty lines assigned to a program with

a primary focus of developing, growing, and maintaining the program increase the chance of a program's survival" (p. 14).

Part of the reason, EM Hi Ed programs do not seem to have enough faculty is a lack of resources (Cwiak, 2010b, 2012). However, the literature indicates that resources provide a partial explanation at best. Also relevant to the existence of faculty issues in EM Hi Ed programs are difficulties associated with finding and recruiting qualified faculty (Cwiak, 2008a; May, 2011; Neal, 2000).

One of the reasons there have been issues finding qualified faculty to support EM Hi Ed programs is the lengthy list of desired qualifications. The necessary credentials for EM faculty are expected to be a combination of practical experience, knowledge of the hazard and disaster literature, a doctoral degree, teaching capabilities, ability to conduct research within a well-thought out agenda, write effective grant applications, and create necessary partnerships with the EM community (Blanchard, 2005; Bryant, 2001; Cwiak, 2008a, 2008b, 2012; Cwiak & Muffet-Willet, 2009; McCreight, 2009; Neal, 2000).

The addition of "practical experience" on top of traditional academic qualifications associated with faculty position in higher education has added to normal hiring challenges. For example, Neal (2000) recounts several cases of this challenge siting a case where a university advertised for an EM faculty position and fewer than five people applied with only three possessing some disaster background. This situation can force EM Hi Ed programs to hire faculty who lack important qualifications. For example, Barrax (2010) notes that Shaw University had to employ adjunct faculty with a Master's in Public Administration and some EM field experience to teach courses because their search for a tenure-track candidate with a doctoral degree in EM proved futile.

Finding applicants with strong teaching skills has been another challenge in recruiting qualified EM faculty (Neal, 2000). Most disciplines produce doctoral degree holders who have been educated in the discipline's body of knowledge that go on to teach in higher education programs. Yet, until 2009, there were no EM doctoral degree holders; and, currently, there are still only a few EM Ph.D. programs and very few doctoral degree holders (Clement, 2011; Cwiak, 2012; Neal, 2000; Thomas & Mileti, 2004). McEntire (2004) notes that UNT has had times where it was able to hire individuals with ample "practical experience" but found that those persons had trouble with meeting tenure requirements associated with research and scholarship.

When there are insufficient faculty to support a program and/or the existing faculty are inadequately prepared, EM Hi Ed programs suffer. Furthermore, faculty issues have been said to contribute to EM Hi Ed program challenges including legitimacy issues within the scientific academy (Cwiak & Muffet-Willett, 2009; Neal, 2000); legitimacy issues with the EM practitioner community (Cwiak & Muffet-Willet, 2009); difficulties in providing support to graduate students (Klenow & Youngs, 2010; Thomas & Mileti, 2004); advising undergraduate students dilemmas (McEntire, 2006); problems of low research productivity (McEntire, 2004); hindered development of EM as a unique discipline (Cwiak, 2012); and, the negligible development of theory (Jensen, 2010), among other consequences.

The general education literature also supports the role of these faculty issues in understanding program development and quality. Long-term success of higher education programs resides in faculty's devotion to both teaching (Abbott & Barlow, 1972; Dill & Soo, 2005; Fairweather & Brown; 1991; Giley, Fulmer, & Reithlingshoefer, 1986; Kuh et al., 1991; McCune, 2009; Pierce, 2001) and scholarly productivity (Abbott, 1972; Astin & Solmon, 1981;

Blair, Cottle, & Wallace, 1986; Beyer & Snipper, 1974; Clemente, 1972; Clement & Sturgis, 1974; Conrad & Blackburn, 1986; Drew & Karpf, 1981; Fairweather, 1988; Gray & Birch, 2001; Hagstrom, 1971; Kaufman, 1984; Keith, 1999; Liu, 1978; O'Rouke, 2000; Roach & Barker, 1984; Samli & Hook, 1995; Young, Blackburn & Conrad, 1987). There is a widespread consensus across academia that a doctoral education in one's chosen field is a solid prerequisite to be employed in a full-time faculty position (Beyer & Snipper, 1974; Conrad & Pratt, 1985; Fountoukidis, Hahn, & Voos, 1995; Hagstrom, 1971; Janes, 1969; Kogan, Moses, & El-Khawas, 1994) and to produce in the areas of both teaching and publication. In addition to teaching and research productivity, faculty grantsmanship (Conrad & Blackburn, 1985) and commitment to intellectual partnership (Sullivan & Rosin, 2008) are also key contributing factors to quality and sustainable graduate degree programs. However, finding devoted faculty with these qualities can be a challenge even outside EM (Ronfeldt, Loeb, & Wyckoff, 2012; Sullivan & Rosin, 2008). In fact, in a study of faculty excellence, Fairweather (1999) found that out of 30,000 faculty in 962 institutions, only 10 percent were outstanding in both publishing and instructional productivity[4].

The literature has shown that faculty issues are a critical component of program development and quality; and, moreover, that EM programs in the United States are struggling with faculty issues. The broader education literature suggests that a combination of criteria determine faculty quality and that finding and recruiting faculty of the right quality is a challenge in higher education. The extent to which faculty issues are relevant to understanding Ghana's efforts to develop an EM Hi Ed program was explored through this research.

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[4] Publishing was defined by article output and instructional productivity was defined by a combination of student credit hours generated, percentage of time spent on teaching, and the use of non-lecture learning strategies (Fairweather, 1999).

Curriculum Standardization and Accreditation

Currently EM Hi Ed programs across the United States exhibit a lack of curriculum standardization at all levels of degree programs (Fuller, 2002, Jensen, 2011; Kushma, 2012; McCreight, 2009). Reasons for the lack of standardization include the multi- and interdisciplinary approaches to curriculum development, resource issues, and disagreement over what should be taught in EM. Some within the EM Hi Ed community believe the lack of standardization is a problem that needs to be corrected through the adopting of accreditation standards and the development of an accreditation body, but not all agree.

The multi and interdisciplinary approach to curriculum structure and faculty assignments used by many EM Hi Ed programs reduces standardization below that existent in most traditional academic disciplines (Jensen, 2011). While multi- and interdisciplinary approaches to higher education can have benefits (Jensen, 2011; Cwiak, 2006), it makes uniformity across programs at given degree levels impossible (Cwiak, 2006). The application of these approaches to curriculum also leaves open the questions of whether EM programs are succeeding in educating students in basic concepts and theory integral to EM much less in as comprehensive fashion as required to succeed in the profession (Jensen, 2011). When a graduate of an EM program is hired, this lack of standardization means that it is unclear exactly what the graduate can be expected to know.

Lack of curriculum standardization can also be partially explained by resource issues (i.e., the desire to maximize resources). If programs are located within larger departments, there is a tendency for EM programs to require a number of courses in the "parent" discipline, regardless of whether the EM program has purposefully adopted a multi- or interdisciplinary approach to the curriculum (Fuller, 2002; Neal, 2000).

The diversity in EM curriculums evidenced across the country is also due to the fact that "emergency management does not have a disciplinary schema, nor does it have a generally agreed-upon curriculum model" (Klenow & Youngs, 2011, p. 109). The lack of disciplinary schema and curriculum model stems from the complexity associated with developing and establishing a standardized curriculum for EM (Drabek, 2008; Kiltz, 2011; McEntire, 2004; Neal, 2000; Phillips, 2005; Thomas & Mileti, 2004). This complexity has led to disagreement as to what topics and courses are integral to an EM education (Drabek, 2006, 2007; McCreight, 2009; McEntire & Marshall, 2003; Polson, et al., 2010; Ramsay, et al., 2010; Waugh & Sadiq, 2011).

It has been noted that developing a curriculum that adequately educates students in a range of EM topics (e.g., EM principles, hazards, group dynamics, social behavior, social problems) (Drabek, 2006; Kiltz, 2011; Klenow & Youngs, 2010; Woodbury, 2005) and in a manner that is not biased toward the United States (Phillips, 2005) is difficult. Determining whether an EM curriculum should emphasize synthesis or specialization has also been noted as a challenge (Darlington, 1999) as has figuring out whether the curriculum should target one or more sectors of EM (Phillips, 2005), be more theoretical or applied in nature (Phillips, 2005), and be more training or education focused (Darlington, 1999). Darlington (1999) seems to suggest that EM education should be applied whereas Alexander (2003) argues that an EM education needs to be broad enough that students can continue on to pursue higher levels of education in academia and/or work in the profession with their EM degree. These issues are complicated by the fact that EM Hi Ed programs often take their developmental cues from the nature of practice in the field—a field that is ever changing (Cwiak & Muffet-Willett, 2009; Muffet-Willett & Schwartz, 2009).

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As discussed, the literature suggests the lack of standardization is due to a number of factors. Yet, even the extent to which it is necessary for EM programs to have standardized curriculum is not agreed upon (Thomas & Mileti, 2004). Many have argued that developing and implementing standardized curriculums is necessary for the legitimacy of EM as a discipline and profession and should be undertaken despite the challenges associated with the task (Crew, 2001; Goss, 2011; Miller, 2011; Spiewak, 2011; Walker, 1998; Waugh & Sadiq, 2011). In contrast, Neal (2000) argues there is no need for a standardized curriculum since the degree and profession are still emerging. He suggests that flexibility is important for programmatic "ability to change with an uncertain and turbulent social environment" (Neal, 2000, p. 429).

There have been several recommendations that the curriculum issues be resolved through establishing accreditation standards and an accreditation board (Clement, 2011; Goss, 2011; Miller, 2011; Muffet-Willett & Schwartz, 2009; Neal, 2005; Phillips, 2000; Ramsay, Cutrer, & Raffel, 2010; Spiewak, 2011; Walker, 1998; Waugh & Sadiq, 2011; Winegar, 2008). Clement (2011) argues that an accreditation body could ensure that EM programs map onto current career paths and facilitate student success in the field. Others suggest accreditation of EM programs might provide the foundation needed for growth, recognition, and also serve as quality control measure (McEntire, 2012; Neal, 2000; Walker, 1998; Waugh & Sadiq, 2011).

Accreditation standards and a body have been explored (McEntire, 2012). In fact, standards and an accrediting body unique to EM have been developed and the body (i.e., the Foundation for Higher Education Accreditation) has done three program reviews to date (Goss, 2011; Spiewak, 2011). Additionally, the accreditation bodies of outside disciplines have begun to experiment with accrediting EM Hi Ed programs (McEntire, 2012). The accreditation standards,

as of now, examine program general education, EM education, and resources related to EM Hi Ed programs (Spiewak, 2011).

Yet, the issue of accreditation in general has been controversial in the EM Hi Ed community as has been the Foundation specifically (McEntire, 2012). So controversial is the topic that the FEMA EM Hi Ed Project convened a focus group in Fall 2012 to consider the basic question of whether accreditation of EM Hi Ed programs is even desirable before moving on to other questions such as what organization should have that responsibility, how it should be structured, what accreditation should entail, etcetera (McEntire, 2012). Thus, while some have suggested that accreditation standards and an accreditation body would help address the lack of standardization in EM Hi Ed curriculums across the country, it does not appear likely that it will be a short-term solution to the problem.

The problems of whether to adopt a standardized program curriculum or not, and curricula content are not unique to the EM discipline, as the issue has received attention in the general education literature as well. Schaefer (1990) argues that "one of the most basic problems in education today stems from a lack of agreement, a clear consensus, as to what it means or could mean for someone to be educated." (Schaefer, 1990, p. 1). Quality and usefulness of curriculum content can be achieved by identifying relevant student outcomes (Delaney, 1997) but, this process is not a straight forward one (Haworth & Conrad, 1997). Hubball and Gold (2007) indicate that higher education organizations, institutions, and academic units globally are grappling with the challenges of redesigning curricula, including developing and adopting institutional, professional, and programs learning outcomes. This challenge has led to a number of scholars (for example, Conrad & Wilson, 1985; Delaney, 1997; Eaton, 2006; Otter, 1992) supporting continuous and increased guidance of professional and external accreditation

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standards boards. But, Kirkwood (1985) believes that although accrediting commissions provide guideline services, and admonishment when necessary, curriculum quality and integrity can only be ensured through institution/departmental self-regulation.

This review suggests that the development and overall quality of EM Hi Ed programs in the United States has been impacted negatively by a lack of standardized curriculum. And, the education literature demonstrates that development of such a curriculum, while important, is nevertheless challenging. In this study, the extent to which Ghana's desire to develop an EM Hi Ed program has been impacted by curriculum issues was explored together with the nature and consequences of curriculum issues to the country's EM degree program development.

Supporting Learning Materials

Faculty in EM Hi Ed have complained for some time about supporting learning materials (Cwiak, 2006, 2008a, 2008b, 2010a). Three key issues enlighten the complaint: existence, accessibility, and adequacy. Part of this issue is perceived and part is real. Additionally, part of this issue has been resolved (i.e., existence of materials) and part of this issue has been resolved in part (i.e., accessibility of materials) while the adequacy of learning materials is still a significant issue hindering program development and quality.

Early in the development of EM Hi Ed programs, learning materials to support an EM education (e.g., textbooks, journals, case studies, videos, etc.) did not exist. In response, the FEMA EM Hi Ed Project has undertaken development of courses and textbooks dedicated to major topical areas associated with EM. The existence of these courses was (and is still) widely known within the EM Hi Ed academic community (Cwiak, 2010a) and access to the textbooks (along with supporting powerpoints, supplemental readings, and class activities) is free (Blanchard, 2005). The Project also culled curriculum descriptions and syllabi from existing

programs and made them available on their website for anyone to download (FEMA, 2012). Moreover, the Project has posted on its website presentations, papers, and other materials that have been a byproduct of the annual conference or have been developed to support program and curriculum development (FEMA, 2012). These materials are widely utilized by EM Hi Ed programs (Barrax, 2010; Cwiak, 2007, 2008a, 2008c, 2010a, 2012; Phillips, 2005; Thomas & Mileti, 2004).

Additionally, at least three major publishers have supported the development of series of EM textbooks (e.g., Taylor and Francis, Wiley and Sons, Inc, and Butterworth-Heinemann). Beyond these materials, there are now several scholarly journals that publish emergency management focused work that are available to support EM Hi Ed (e.g., *Journal of Homeland Security and Emergency Management, Disaster Prevention and Management, Journal of Emergency Management, Disasters, International Journal of Mass Emergencies and Disaster, Natural Hazard Review, International Journal of Emergency Management*) (Jensen, 2011; McEntire, 2004). And, there are countless scholarly journals from other disciplines that are regularly publishing work on disasters and hundreds of disaster case study and topical books written by scholars from myriad disciplines that can also be used to support learning in EM (Jensen, 2011, 2012). Thus, it seems fair to conclude that existence of materials to support EM Hi Ed programs is no longer a significant obstacle to EM Hi Ed.

In contrast, access to the materials varies. Textbooks produced by major publishers tend to be costly and ever changing (Cwiak, 2008a, 2008c). And, access to other materials through library services varies by institution (Cwiak, 2012). When accessing library resources, searching existing databases is often difficult because the databases are not designed to facilitate EM research (e.g., databases do not recognize EM search words) (Jensen, 2012). Additionally, while

numerous monographs, research reports, edited volumes, and case study and topical books exist, one has to know of their existence to access them (Jensen, 2012). Thus, the access issue is partly one of reality and partly one of perception for while "tens of thousands of pieces…lay waiting to be read by students and educators in EM…finding the body of knowledge is difficult to say the least" (Jensen, 2012, p. 8).

Finally, the quality of the existing learning support materials is a significant and current issue confronting all EM Hi Ed programs (Cwiak, 2012). Existing textbooks from major publishers have been criticized for their lack of scholarly quality (Cwiak, 2010a, 2012). Existing materials have also been criticized for being out-of-date and poorly written (Cwiak, 2010a, 2012). Moreover, textbooks and existing learning materials in other forms and formats have been criticized because they are not grounded in a comprehensive integration and synthesis of the scholarly literature (Jensen, 2011, 2012). The lack of integration and synthesis leaves the material inadequate, incomplete, and unsuited for students of EM (Jensen, 2011, 2012).

It appears that the accessibility and adequacy of supporting learning materials are an important issue that the EM Hi Ed community perceives a need to address now and into the future. The general education literature affirms that access to adequate learning materials can be challenging for higher education programs due to the time required to locate the best suited resources and the cost (Oliver, 2001). It is also suggested that lack of resources can negatively impact program quality (Bonwell & Eison, 1991; Brahler, Poeterson, & Johnson, 1999; Brevik, 1998; MacKenzie, 1970; Oliver, 2001). As Haworth and Conrad (1997) put it, "adequate resources provide an important part of the foundation upon which high-quality programs are built" (p. 143).

The existence, accessibility, and adequacy of supporting learning materials are relevant to understanding the status of EM Hi Ed program development and quality in the United States. The EM literature suggests that program development and/or quality are negatively impacted by these issues—be they real or perceived. It is reasonable to explore whether these issues are relevant to program development and quality elsewhere; thus, this research explored the extent to which issues related to supporting learning materials are important to understanding Ghana's experience with developing an EM Hi Ed program.

Student Issues

EM Hi Ed programs have encountered issues related to student enrollment and aptitude (Cwiak, 2007, 2010b, 2012; Darlington, 1999; Kiltz, 2011). Student enrollment has been a significant problem particularly for new programs (Cwiak, 2010b; McEntire, 2006; Neal, 2000; Phillips, 2003). It appears to take time and marketing for numbers of enrolled students in EM programs to reach a critical mass (Klenow & Youngs, 2010)—particularly with respect to undergraduate programs (Phillips, 2003). Consequently, a number of individuals associated with EM Hi Ed have investigated and discussed how to attract and retain students to ensure program development (see for example: Cwiak, 2010b; Kapucu, 2011; Klenow & Youngs, 2010, 2011; Muffet-Willett & Schwartz, 2009; Neal, 2000; Phillips, 2003; Polson et al., 2010; Winegar, 2008). For instance, McEntire (2006) suggests for student enrollment to increase programs need to be of high quality (i.e., provide academic rigor, a well-rounded education, offer advising and mentoring to students, etc.). Neal (2000), however, argues that this alone will not be enough to see enrollments increase and that there is no one tactic that can be employed to ensure enrollment growth. Regardless of strategies or tactics used, the literature suggests it is important for programs to see steady enrollment increases because a lack of adequate student enrollment (at

least a perceived lack of enrollment on the part of university administration) has had a variety of consequences for EM programs including the dedication of insufficient faculty lines and a lack of institutional support for program initiatives (McEntire, 2004, 2006; Neal, 2000).

The discussion of enrollment numbers seems largely confined to undergraduate enrollments; yet, the second student issue confronting programs—attracting students with aptitude for the programs—seems to apply to both undergraduate and graduate degree programs. Attracting "high quality" students is cited frequently as one of the top challenges facing EM Hi Ed programs (Cwiak, 2008a, 2010a, 2012). High quality can be understood to be those students with "communication skills, leadership qualities, critical thinking, and the ability to be innovative, to conduct research and to think like a scholar"—within the discipline and field (Cwiak, 2010a, p. 80). This issue has consistently been raised with respect to undergraduate students, but it appears that the challenge is more significant for graduate programs.

Graduate admissions committees would like to admit students who will be a good-fit and who represent the best and brightest, but determining how to identify these qualities is not straightforward in EM (Klenow & Youngs, 2011). Graduate applicants to traditional disciplinary graduate programs often have a sense of what the discipline is, have typically taken core course work in the discipline previously, and often have an undergraduate degree in the discipline (Klenow & Youngs, 2011). Yet, such is often not the case in EM. Many applicants do not have undergraduate majors in EM and often differ significantly in their views of what emergency management is, what the profession of EM should be, and on what constitutes emergency management education (Cwiak, 2010b; Klenow & Youngs, 2011).

While the EM literature suggests that attracting high quality students is a problem, the literature does not describe how a lack of high quality students negatively impacts program

development or quality. The education literature is similar in this respect. The education literature suggests that recruiting highly able or quality students is linked to program success (Astin & Henson, 1977; Blackburn & Lingenfelter, 1973; Clemente & Sturgis, 1974; Conrad & Blackburn, 1986; Dill & Soo, 2005; Fairweather & Brown, 1991; Giley et al., 1986; Keith, 1999; O'Rourke, 2000; Young et al., 1989) and that established critiera such as SAT scores (Conrad & Pratt, 1985; Fairweather, 1988; Glower, 1980; Hagstrom, 1971) and high grades (Bean, 1982) can be useful in assessing applicant quality, but the literature stops short of describing how the quality of students is associated with overall program success. The education literature also does not indicate that student enrollment is related to program development or success.

Although both the EM and education literature seem to be rather undeveloped on the topic of students issues as related to program development and quality, there is indication within these bodies of literature that student issues are relevant to understanding program status. Thus, in the context of this study, it was reasonable to explore whether student issues played a role in explaining the status of Ghana's efforts to begin an EM Hi Ed program.

Legitimacy

In the EM literature, program legitimacy is raised by both non-EM academics and EM professionals as a challenge to program development and quality (Cwiak, 2007; Cwiak & Muffet-Willet, 2009). To attain academic legitimacy, EM Hi Ed programs need to be viewed by other academic disciplines and by higher education institutions as credible and worthy of inclusion in the scientific academy (Jensen, 2012; Neal, 2000). EM Hi Ed's issues with academic legitimacy likely stem from many of the other issues already discussed in this literature review including the question of whether there exists a strong body of knowledge (Neal, 2000, 2005; Phillips, 2003) and the perceived lack of qualified faculty to support EM degree programs

(Cwiak & Muffet-Willett, 2009; Neal, 2000), lack of consensus among EM educators as to what an EM education entails (Cwiak, 2007; Neal, 2005), lack of conduct and dissemination of research (Neal, 2000), and lack of understanding as to what EM is as an academic (Jensen, 2012). While a variety of strategies to address these issues have been discussed in the literature (Clement, 2011; Jensen, 2012; Neal, 2000), the reality is that EM Hi Ed is often not perceived as legitimate in academia.

In addition to academic legitimacy, emergency management, a field directly connected to an outside world of practitioners, faces the issue of professional legitimacy. Often, EM professionals question the legitimacy of EM Hi program development (Cwiak, 2007; Cwiak & Muffet-Willett, 2009). Practitioner concerns involve the lack of standardization of EM Hi Ed programs (Spiewak, 2011; Walker, 1998), the perception that too great a focus is placed on theory and books (Fuller, 2002; Neal, 2000), the perception that needed topics are not covered within EM curriculum (McEntire, 2006), and the perception that program graduates have had inadequate preparation for a career in EM particularly as relates to experience and training (Fuller, 2002). The success of EM programs requires perceived legitimacy from practitioners because they can provide important insights into program and curriculum development, internships, employment for graduates, subject matter expertise, and "real world" applications of theory through classroom presentations, access to external exercise and training opportunities, and more (Cwiak & Muffet-Willet, 2009; McEntire, 2006; Neal, 2000).

While no EM literature exclusively focuses on issues of academic and professional legitimacy, issues with respect to legitimacy have been raised and discussed as problematic for program development and quality. Unlike the above five categories of variables, academic and professional legitimacy does not seem to be an issue with respect to program development or

quality in the general education literature. However, it should be noted that the topic of academic legitimacy is superficially discussed as a challenge by scholars in newer higher education fields such as mass communication (for example: Ciofalo, 1989) and information systems (for example: Lyytinen & King, 2004). This literature does not address the role of legitimacy *vis a vis* program development or quality at any length or to any depth; and, therefore, is not helpful to this study. Nevertheless, there have been suggestions in the EM literature that legitimacy issues matter in understanding EM program development and quality. Thus, this study examined whether legitimacy issues are involved in the Ghanaian efforts to begin an EM Hi Ed program.

<div align="center">Conclusion</div>

This chapter demonstrated that despite the existence of EM programs at more than 174 institutions of higher education in the United States, there are a variety of issues that hinder program development and quality. Many of these same issues have been identified as relevant to understanding program development and quality in the wider, general education literature. The EM and education literature reviewed here was anecdotal or opinion-based and not based on formal empirical assessment of the status of program development and quality much less research that explored factors explaining program status. This study contributes to EM Hi Ed, and the education literature more generally, by undertaking one of the first, if not the first, empirical study of program development and the issues involved. Thus, this study was able to contribute through simply conducting this type of research as well as through exploring the relevance of the factors identified in the literature to explaining program development and setting the stage for future research in this area. Next, Chapter Three describes the research methods used for this study including how the factors identified in this literature review were used to inform data analysis.

CHAPTER THREE: RESEARCH METHODS

Chapter Three is organized into five sections. The first section describes the methodological approach to this study. The second section discusses the population and sampling process for the study. The third section details the data collection procedures used. The fourth section explains the data analysis process that was utilized in this research. And, the fifth section discusses this study's limitations.

<u>The Researcher as a Participant</u>

It must be noted that the researcher is a native of Ghana, grew up in Ghana, and attended four years of higher education in Ghana. The researcher also interned with NADMO's geological hazards department in the summer of 2011. In addition, as a graduate student in the North Dakota State University's (NDSU) Department of Emergency Management, the researcher had prior relationship with, and knowledge of, a number of the external respondents. Also through her involvement in NDSU's Department of Emergency Management the researcher both observed and participated in the Department's efforts to support the development of a program in Ghana. The researcher's experience in Ghana, the Department of Emergency Management at NDSU, and interaction with some of the EM scholars and practitioners in the U.S. places her in the space between an insider and outsider (Dwyer & Buckle, 2009) or participant-as-observer situation (Gold, 1969) and her position may have both positive and negative implications for this qualitative study (Acker, 2000; Asselin, 2003; Mullings, 1999; Taylor & Bogdan, 1975; Serrant-Green, 2002). A possible issue raised by this relationship to the setting is one of detachment (Taylor & Bogdan 1975, 1998). The researcher might inadvertently describe and interpret the data based on her own personal behavior and experiences as opposed to what the data actually showed (Gold, 1969; Sandelowski, 1986). It is not uncommon for researchers in this dual role to

grapple with issues of objectivity, reflexivity, and authenticity because they already "know" too much about the respondents being studied (Asselin, 2003, Brannick & Coghlan, 2007; Kanuha, 2000). However, in this study, the researcher was able to mitigate the likelihood of going "native" through questioning and probing during the data gathering and through the use of a rigorous data analysis technique.

Apart from that, the very issues noted above as potential challenges can become assets. Being a Ghanaian and having lived in the country for over two decades gave the researcher an understanding of and familiarity with most of Ghana's values, norms, and idioms. This knowledge helped the researcher to better interpret respondents' perspectives and also identify any prejudices and exaggerations on the part of the Ghanaian respondents (Bonner & Tolhurst, 2002; Denzin, 1989; Taylor & Bogdan, 1975). Moreover, being a Ghanaian "insider" and participant in NDSU's department of emergency management enhanced the depth and breadth of understanding the sample in this study that would not be accessible to an entirely outside researcher (Kanuha, 2000; Serrant-Green, 2002).

<center>Methodological Approach</center>

The goal of this study was to explore the potential for Ghana to develop a quality Emergency Management Higher Education (EM Hi Ed) program. With little empirical work related to this topic, the researcher had to begin examining this topic with exploratory research. Due to the exploratory nature of this study, a qualitative approach was necessary to examine Ghana's pursuit of developing an EM Hi Ed program and the extent to which Ghana's current conditions support that goal.

The methodological approach to this study was informed by an interpretive constructionist perspective. Interpretive constructionist researchers have a commitment to

understanding social phenomena from the actor's perspective, to capturing how people construct their realities; and, researchers do so through qualitative research methods (Taylor & Bogdan, 1998). Qualitative methodology is research that produces detailed data in the form of people's own words and observable behaviors (Taylor & Bogdan, 1998). It demands that researchers attempt to suspend or set aside their own perspectives and views of the world to understand people from their own frames of reference, in the context of their past, the situations they find themselves in, and the meanings that they attach to things in their lives (Charmaz, 2006; Denzin & Lincoln, 2003; Marshall & Rossman, 1999; Seidman, 2006; Taylor & Bogdan, 1998). This orientation to research is central to the interpretive constructionist perspective (Taylor & Bogdan, 1998). Qualitative research is inductive and allows researchers to "develop concepts, insights, and understandings from patterns in the data rather than to collect data to assess preconceived models, hypotheses, or theories" (Taylor & Bogdan, 1998, p. 7).

Qualitative methods were the best fit for this study since the researcher needed rich, detailed data to explore the research question for this study. There were no known prior models, hypotheses, or theories on which a study using quantitative methods could be based on this topic. Qualitative methods enabled the researcher to gather detailed data from the practitioners and academics themselves, to understand Ghana's position from the participants' perspectives, and to present to the reader the views of the extent to which Ghana is likely to succeed or fail in developing one or more quality EM degree programs.

<u>Population and Sampling</u>

The population for this study was originally conceived to include all EM practitioners and academics in the United States and Ghana who have been involved in different capacities with any Ghanaian institutional considerations of developing, and/or efforts to develop, an EM

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Hi Ed degree program. At the outset of this study, the researcher had no knowledge of how many individuals comprised the population for this study, and this situation remains at the study's end because a wide range of different people have been involved with Ghana's EM program development efforts at different levels and times, both directly and indirectly. Thus, this study relied upon a combination of purposive and snowball sampling techniques to build its sample relative to this population.

Initially, purposive sampling was undertaken. Purposive sampling units "are chosen because they have particular features or characteristics which will enable detailed exploration and understanding of the central themes and puzzles which the researcher wishes to study" (Ritchie & Lewis, 2003, p. 78). The initial purposive sampling resulted in twelve participants including two from U.S. practitioner organizations, eight from U.S. academic institutions, one from a Ghanaian practitioner organization and one from an academic institution in Ghana. The researcher sought these respondents' contact information through several avenues. While some potential participants were found through searching the internet, the researcher knew of others from prior encounters. For instance, through the researcher's involvement with the activities and programs of NDSU's Department of EM, the researcher became familiar with some individuals who fit the study's population; and, thus, reached out to these individuals directly and invited them to participate.

The snowball, or chain referral sampling, technique asks individuals participating in the study to share their knowledge of anyone they know of who may possess some knowledge related to the research topic under study (Biernacki & Waldorf, 1981). Thus, the researcher asked interview participants to identify additional persons of interest for invitation to participate in the study. Three interviewees out of the initial sample referred the researcher to a combined

total of ten additional potential participants, and seven of these individuals agreed to participate. The additional seven include two from a Ghanaian practitioner organization; three from an academic institution in Ghana; and two from a U.S. practitioner organization. In total, the researcher interviewed 19 individuals and conducted 2 follow-up interviewees.

The participants for this study included EM scholars and practitioners from academic and practitioner institutions in both the United States and Ghana. The academic institutions of respondents were North Dakota State University (NDSU), Florida State University (FSU), and Ghana Institute of Management and Public Administration (GIMPA). The practitioner organizations of respondents were the North Dakota National Guard (NDNG) and National Disaster Management Organization (NADMO).

NADMO and GIMPA were included in the sample because the researcher understood them to be the first institutions to make substantial efforts to build an EM program in Ghana. The North Dakota National Guard has been involved from the beginning of NADMO and GIMPA's efforts, and put GIMPA and NADMO in touch with NDSU. In turn, NDSU became involved in Ghana's efforts. FSU personnel were contacted and interviewed because a team from FSU became involved in delivering a training curriculum in Ghana in 2009 that GIMPA and NADMO hoped would eventually transition into an educational degree program curriculum. Table 1 depicts characteristics and mode of interview of the EM interviewees.

Table 1. Description of Emergency Management Interviewees and Mode of Interviews

Attribute	Number of Interviewees
Country	
• United States	12
• Ghana	7
Method of Interview	
• Telephone	15
• Face-to-Face	4
Interviewee Background	
• Practitioner	12
• Academic	7

Theoretical Sampling

As the research was unfolding, the researcher began to wonder whether factors that seemed important in anticipating what Ghana's experience with developing an EM Hi Ed degree program were likely to be were the same or similar to those of degree programs in other fields. The researcher wanted to find out what explains the success of established degree programs that are in emerging fields in Ghana. The researcher discovered that there was a need to do theoretical sampling related to other new academic programs' development in Ghana.

The respondents from these additional programs were invited because they are in newly emerging fields of study similar to emergency management; yet, their efforts had succeeded in establishing a degree program and that is currently being offered. The characteristics of these respondents' programs make it theoretically relevant to interview these additional respondents. The respondents for this expanded theoretical sample were also identified through snowballing. The latter started with an initial referral by a family member of the researcher. Potential participants in this second sample were invited through email and/or phone.

The researcher then sought an amendment to the initial IRB. This amendment was approved. Please see Appendix F for the IRB amendment approval form. In the application for

the IRB amendment, the invitation letters and information sheet were slightly modified to appropriately reflect the reason for the invitation. A copy of the invitation letter is in Appendix G and the information sheet is in Appendix H. Also, a separate list of potential follow-up questions was developed for each of the main interview questions. See Appendix I for the list of questions for interviews with these additional Ghana respondents and a list of potential follow-up questions

Once the IRB amendment approval was received, the slightly modified invitation letters and information sheet were sent to ten faculty members associated with developing other new academic programs in Ghana. The goal was to see if the factors these faculty members reveal about their programs' development are the same or different from those of developing EM programs in Ghana. Six out of the ten faculty responded and agreed to be interviewed, which brought the total number of interviewees for this study to twenty-five. The faculty in the theoretical sample were from programs such as fire science and safety management, family and reproductive health (Public Health), renewable energy technologies, environmental management, aquatic resource management, and environmental science. The faculty and their programs come from University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST), University of Development Studies (UDS), and University of Energy and Natural Resources (UENR). Table 2 shows the breakdown of respondents by Ghana's EM program development and other degree programs in Ghana.

Table 2. Total Interviews: Emergency Management and Non-Emergency Management

Attribute	Number of Interviewees
• Emergency Management Respondents	19
• Non-Emergency Management Respondents	6
Total	25

Data Collection

Upon receiving Institutional Review Board approval, data collection began. Please see

Appendix A for the IRB approval form. Generally, qualitative researchers are concerned with

how people think and act in their everyday lives (Charmaz, 2006; Marshall & Rossman, 1999;

Siedman, 2006; Taylor & Bogdan, 1998). Therefore, qualitative researchers adopt data collection

strategies that are natural (e.g. they parallel how people act in the course of their daily life) and

unobtrusive (Taylor & Bogdan, 1998). Qualitative researchers gather information by observing,

talking with, and listening to people providing data in their ordinary settings, analyzing what

they have heard, and then conveying to others what they have learned from the perspective and

experiences of the participants in the study (Rubin & Rubin, 2005). These researchers often seek

understanding through the use of qualitative interviewing designed to mimic normal

conversations as opposed to tightly structured question-and-answer exchanges (Khan & Cannell,

1957; Rubin & Rubin, 2005; Taylor & Bogdan, 1998). To understand how participants perceive

Ghana's prospects of developing an EM program, semi-structured interviews were used to

explore the extent to which the factors identified in the literature exist in Ghana. Rubin and

Rubin's (2005) Responsive Interviewing Model, guided both data collection and data analysis.

Data collection for this study was gathered through face-to-face and telephone interviews

between January and May, 2013. Potential participants were contacted via phone and email and

invited to participate in the study. Those who were contacted through email were sent the

invitation with the information sheet as an attachment. Those invited by phone, were sent the full

information sheet via email. Appendix B has a copy of the invitation letter and Appendix C has a

copy of the information sheet. Upon their consent to be interviewed, an appointment was made

for a method of interview (i.e. telephone or face-to-face), date, time, and location that was

convenient for the participant. Only four of the interviews were conducted face-to-face. Lengths of interviews ranged from twenty-six minutes to ninety-six minutes; length was influenced by participant's availability and responses to questions.

An interview guide was used to facilitate the interviews. In keeping with the Responsive Interviewing Model described by Rubin & Rubin (2005), open-ended main questions were developed with the hope that they would give participants the opportunity to answer with depth, detail, vividness, richness, and nuance. Two interview guides were used: 1) for Ghanaian participants and 2) for individuals outside Ghana who have been involved in its consideration of, or attempts to, begin an EM Hi Ed Program. Ghanaian participants were initially asked the following questions:

- Tell me about yourself.

- Please describe Ghana's experience with disasters.

- Tell me about your institution's involvement in the consideration of or development of an EM Hi Ed program in Ghana.

- In your experience, please describe any factors that help or hinder Ghana's efforts of developing an emergency management program.

And, individuals outside Ghana were initially asked the following questions:

- Tell me about yourself.

- Tell me about your involvement with Ghana's emergency management training and/or education efforts.

- In your experience, what would you say are the factors that help or hinder Ghana's emergency management program higher education program development?

A list of potential follow-up questions was developed for each of the main interview questions. See Appendix D for the list of questions for interviews with Ghana respondents and a list of potential follow-up questions, and Appendix E for the list of questions and potential follow-up questions for individuals outside Ghana.

Although respondents were guaranteed confidentiality of their personal information and responses; the researcher made it clear to them that their institutions' names and country of residence may be used in the final write up of the data collected for this research. Moreover, respondents were also made aware that if their institutional affiliation and/or country of residence become theoretically important in data analysis, these identifiers may be referred to in reports of this study's findings. The researcher also informed them that this step would only be taken if the researcher believed it necessary. Ultimately, the researcher does not believe it necessary to break confidentiality for theoretical purposes in the reporting of this study's results.

All interviews were digitally recorded and uploaded to the researcher's personal computer. The researcher maintained sole access to the audio files and the transcribed interviews. Codes were substituted for identifying personal characteristics in the transcribed files. The researcher was the only person in possession of the codes linked to participants' information. The interview recordings were deleted once they were transcribed and once the transcriptions and codes are no longer relevant to this research, they will be destroyed as well. In the final product, neither codes nor identifying characteristics have been used.

Data Analysis

A commonly used approach to data analysis in the social sciences is the Responsive Interviewing Model proposed by Rubin and Rubin (2005). This approach was used to guide the analysis of the data gathered in this study. Following the Model, data analysis was conducted in

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two phases (Rubin & Rubin, 2005). During the first phase of analysis interviews were transcribed and coded. During the second phase of analysis the coded data was analyzed.

The first phase of the Responsive Interviewing Model began with the transcription of the interviews. While interviews were being transcribed, memos were written containing the researcher's thoughts regarding how the interview went, memorable quotes, concepts and themes that were suggested, and any other thoughts that occurred to the researcher during the transcription process (Rubin & Rubin, 2005, p. 205). When the interviews were transcribed, the researcher then summarized the content of the interviews including the main points made during the interview that addressed the research question and any identified concepts or themes (Rubin & Rubin, 2005, p. 206). The next step was to recognize, clarify, and elaborate themes and concepts in the data. These themes were organically identified through coding and then later compared to the literature-based factors.

Both the EM and general education literature were reviewed for how they could inform one's understanding of the facilitators and inhibitors to developing Hi Ed programs, especially EM. The extent to which these factors played a role in the Ghana situation was explored in the data analysis. As demonstrated in Chapter Two, there were six categories of variables that appeared to help or hinder Hi Ed program development, including autonomy and administrative support, faculty issues, curriculum standardization, supporting learning materials, student issues, and academic and professional legitimacy. Thus, an initial line-by-line coding was done and the themes that the literature had identified were used to look back on the line-by-line data to see how the themes from the literature related to the ones from the data by placing a label or code next to each data unit matching the variable or theme (Rubin & Rubin, 2005, p. 216-219). The researcher applied these codes based on the following description of their meaning:

- *Administrative location and support:* This code was used to label any data that implicitly or explicitly suggested that the presence or absence of administrative institutional support for the development of an EM Hi Ed program may be relevant to understanding Ghana's efforts as well as any data that makes implicit or explicit reference to the organizational arrangement in which a program would find itself (i.e., stand alone, within a larger department, autonomy, etc.). Any reference to institutional politics playing a part in Ghana's EM program development process was labeled under this code.

- *Faculty issues:* This code was used to label any data reflecting a positive or negative issue with the availability of faculty, recruitment of faculty, the background of faculty as well as any other general comments on the topic of faculty to support an EM Hi Ed program in Ghana.

- *Curriculum development and accreditation:* This code was used to label any data implicitly or explicitly referring to curriculum (e.g., courses, technical expertise to develop curriculum, presence or absence of curriculum standards) or accreditation with respect to EM Hi Ed program development in Ghana.

- *Supporting learning materials:* This code was used to label any data that implicitly or explicitly suggested that learning resource issues are involved in understanding Ghana's efforts to develop an EM Hi Ed program. Resource issues involved classrooms, technological support, funding, textbooks, journals, and course materials including information and communication technologies (ICT).

- *Student issues:* This code was used to label any data implicitly or explicitly suggesting that student issues are involved in understanding Ghana's efforts to develop an EM Hi Ed

program. Student issues involve the market for such a program or enrollment prospects, retention, admission criteria, and student resources.

- *Legitimacy:* This code was used to identify any data suggesting that legitimacy issues may be relevant to understanding Ghanaian efforts to begin an EM Hi Ed program including data that implicitly or explicitly referred to the support/absence of support of the practitioner or academic community (i.e., other academic disciplines outside of emergency management) for the development of an a program in Ghana including any data that may explain the existence/lack of that support.

- *History of EM program development:* This code was used to identify any data that directly or indirectly described the background of how Ghana's quest for developing EM program started, a description of the type of program Ghana wanted or wants to develop, and the definition of and differentiation between the concepts of training and education.

Through the analysis, however, it appeared as though there were some major themes that did not entirely fit with any literature-based factors and, further, that there were more factors that explain the state of Ghana's EM program development in addition to the six pre-identified codes. In all, six new themes emerged based on the following codes and their meaning:

- *Partnership:* This code was used to identify any data that directly or indirectly suggested that partnership with local or international entities was relevant or maybe relevant in understanding where Ghana is today in developing EM programs.

- *Institutional Support:* This identified any data that suggested that the existence or absence of institutional leadership support impacts Ghana's EM program development. This code includes the impact of change in leadership of relevant organizations.

- *Advocacy:* This code was used to label any data that signified that the existence or absence of an advocate who played a role in Ghana's effort to develop an EM program. This code captured data that described what an advocate is and characteristics of an advocate.

- *Funding:* This code was used to identify any data that indicated that the lack of or availability of financial resources is relevant to explaining Ghana's EM program development process.

- *Program marketing:* This code classified data that suggested that advertising or marketing of EM programs is important to understanding the status of Ghana's efforts to develop an EM program.

- *Cultural factors:* This code grouped data that seemed to suggest that some unique characteristics or behavior of Ghanaians have influence on the country's program development.

As indicated above, the researcher analyzed and coded the data for concepts and themes not presented in the literature review that may explain Ghana's current and future potential for an EM Hi Ed program and that process resulted in the last six codes described above. All of the themes found in the data and supporting evidence are presented in Chapter Five.

During the second phase of data analysis the coded data was analyzed for broader implications in two stages. In the first stage concepts and themes were sorted and summarized, listing the main points in the text associated with each category; sorted and ranked, to order information according to levels indicated in the data such as frequency or indicated importance; and, sorted and compared by how specific a concept was used to see if the coded data highlights the concepts or themes in any distinct way (Rubin & Rubin, 2005, p. 225-226). Next, concepts

and themes were combined and weighed; the complementary understandings of concepts were combined; and, the relationships between distinct concepts were inferred from the way they were described in the data, and evidence in the data was found to support or modify these inferences (Rubin & Rubin, 2005, p. 228). Finally, the different parts of the findings were integrated by being checked for accuracy and consistency and being modified if the initial interpretation was found to be inadequate (Rubin & Rubin, 2005, p. 229).

In the second stage of the data analysis phase, the findings were examined to see if the concepts and themes came together into a coherent theory by working out how they might be related (Rubin & Rubin, 2005, p. 231). This was done by examining the questioning patterns, how the concepts or themes were discussed together in the interviews, relating the data to the published literature, and simply reasoning out how the concepts and themes might be related to each other (Rubin & Rubin, 2005, p. 231-237).

The final step in the Responsive Interviewing Model is theory building by linking a set of main themes (Rubin & Rubin, 2005, p. 237). The researcher is not certain that data analysis has led to the suggestion of a full theory; nonetheless, the researcher was able to decipher the categorical variables that impact Ghana's attempt to develop both training and EM Hi Ed degree programs, the implications for intended EM programs in Ghana and, likely, other countries. In the Chapter Seven, the product of the second stage of data analysis is presented including a graphic depiction of category relationships.

<div align="center">Limitations</div>

This study was limited in three significant ways. First, the findings cannot be assumed to be generalizable to all EM degree or training programs due to the study's focus on one specific country (Stake, 1978). Second, the use of nonrandom sampling, and, snowball sampling,

specifically, may have resulted in sample bias (Taylor & Bogdan, 1998). Third, the small sample associated with this study also limits this study's generalizability even with respect to Ghana. Despite these limitations, this study has illuminated the factors that help or hinder development and of an EM Hi Ed program in Ghana. The factors noted in the U.S. EM and education literature were relevant to the Ghana case as were additional factors. Perhaps, similarity will be found elsewhere but it would require further investigation of the topic with different research methods, including studies in other countries, to ascertain whether these variables can be generalized to all countries, especially developing countries, seeking to start training or EM Hi Ed degree programs. This study can only hint at the chances of Ghana developing quality training or EM Hi Ed degree programs and suggest implications from the research for the discipline of EM

<u>Conclusion</u>

This chapter reviewed the qualitative research methods that were used for this study. Following Rubin and Rubin's (2005) Responsive Interviewing Model, telephone and face-to-face in-depth, semi-structured interviews were conducted with 25 EM practitioners and scholars in the U.S. and Ghana. The Responsive Interviewing Model used for data collection was also used to transcribe, code, and analyze the data gathered. Next, Chapters Four, Five, and Six present the study's results.

CHAPTER FOUR: HISTORY OF EMERGENCY MANAGEMENT PROGRAM

DEVELOPMENT IN GHANA

This chapter is the first of three results chapters. A key finding that the reader must be aware of before continuing on is presented in this chapter due to its significance with respect to the research question for this study. The research question for this study was based on the assumption that Ghana had been, and is currently, trying to start a higher education degree program, but it turned out that that was not the case—Ghana's efforts were towards starting a training program. Normally, an education program would offer a formal curriculum at an institution of higher education that results in the award of a minor, major, bachelors, masters, or doctoral degree in emergency management. The intent of such a program would be to expose students to the literature and research related to emergency management giving students the opportunity to learn about, critically analyze, and apply the theory central to the discipline. Based on the research question, a review of the literature was conducted to discern what factors explain EM Hi Ed program development in the EM literature and the education literature.

Yet, in the initial interviews, it became quickly apparent that what Ghana is currently trying to develop is not an educational degree program but instead a training program that would be housed within and administered by a higher education institution. Training in contrast, is intended to teach people how to conduct tasks and activities, and is mostly focused on particular topics or aspects of a field or discipline. This chapter presents the evolution of Ghana's efforts to start a training program and the reasons why confusion existed regarding the type of program the country was focused on beginning.

Ghana's interest in emergency management program development proved to be an interest in training. The leadership of NADMO felt its staff would better carry out their duties if

they were formally taught what to do. And, although NAMDO was established in 1997, as of 2003 the country had no independent formal training program that would equip staff with the skills needed to perform well in the execution of their job responsibilities. The lack of a program was expressed in the following quotation[5] by one participant.

> …normally when people know what to do it's easier you know. And even the officers at NADMO didn't have training because in Ghana we didn't have any training geared towards disaster management or in emergency management or anything.

Ghana also did not have an education program related to emergency management that would expose participants to the research and context that help explain emergency management phenomena and what can be done to bring about positive emergency management outcomes in practice. Yet, when Ghana began to explore a relationship with a higher education institution, it was not with an interest in educating NADMO staff, but training them. A review of the history of NADMOs efforts to meet the needs of their staff provides evidence of this key point.

The training that was done in Ghana depended on military training offered by the United Kingdom that taught Ghanaian army officers how to respond to mass emergencies. This training was offered on a one-time, annual basis and was insufficient for the number of NADMO staff that needed to be trained, and the training itself was inadequate in that it focused primarily on response. The reason for this situation was that the United Kingdom's trainings were specifically designed for the Ghana Armed Forces (Ghanaian military) and preparing them to fulfill their role in disasters. Priority registration and enrollment into the training were given to the Ghanaian Army over the NADMO staff.

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[5] In presenting the quotations, several measures were taken to ensure that as much as possible, participants' identities are protected. Quotations were edited for "um", "ah", and "you know" and any words that could compromise respondents' identity were replaced with ellipses. To ensure that interviewees are represented, the quotations were all ranked by interview date, and also labeled by respondents' country of residence in the initial write up. Subsequently, responses with similar opinions were reduced and the labels removed before reporting.

In an attempt to address the training gap, NADMO sought foreign assistance both in terms of human and financial resources. The State Partnership Program (SPP)[6] had already established collaborative humanitarian civic assistance (HCA) training section between the Ghana Armed Forces (GAF) and the North Dakota National Guard (NDNG). This partnership provided an avenue for NADMO to interact with the NDNG and subsequently request assistance to develop a wider range of disaster management training and more frequent offerings for the organization's staff in early 2009.

While the NDNG was willing to help NADMO train its staff and establish a disaster management training program, it could not do so directly for two reasons. First, neither NADMO nor the NDNG had the physical facilities and training logistics for the intended training program. And second, the NDNG's mission was to provide trainings for the Ghana Armed Forces but they did not have the mandate to do other types of training for other organizations. Thus, NADMO approached GIMPA with the request to organize the disaster management training program.

GIMPA was approached primarily because it is the only Hi Ed institution with a mission of working with public officials and also because personnel within NADMO had personal connections with people working at GIMPA. When NADMO approached GIMPA, GIMPA was willing to take on the challenge provided it would be able to draw on outside expertise to develop a training program.

Since the NDNG's mandate in Ghana did not include a direct partnership with NADMO much less to develop a disaster management training program, the NDNG coordinator in Ghana looked for other institutions that might support Ghana's efforts within North Dakota. One of the individuals connected with the NDNG SPP's efforts in Ghana was aware that North Dakota State University (NDSU) offered a minor as well as bachelor's, master's, and doctoral degrees in

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[6] See chapter one for detailed explanation on the SPP program and the Ghana-North Dakota relationship.

emergency management and recommended that the NDNG, GIMPA, and NADMO work with NDSU to develop a training program. One of the faculty involved with the program at NDSU was approached to begin discussions of how the organizations might work together to see a training program develop.

The NDSU faculty member was receptive to the idea, flew to Ghana in February 2009, and spent a week meeting with GIMPA and NADMO representatives about what it is that the Ghana officials envisioned, what the training would entail, and developing an informal agreement to help. The initial, short-term goal of the informal arrangement was to develop a two week training curriculum for NADMO staff and see it offered at GIMPA. A longer-term goal of the informal arrangement was to see train-the-trainer classes developed to support a more formal training program that GIMPA would administer. Some initial development of a two week training curriculum covering a number of emergency management topics was undertaken on behalf of GIMPA by NDSU faculty following the trip to Ghana and some plans were made for NDSU faulty to travel to Ghana to deliver the curriculum; however, subsequent complications and scheduling conflicts sidelined the informal arrangement between the two institutions. An individual involved with the NDNG's SPP in Ghana recommended that personnel at Florida State University (FSU) be turned to for support in offering the two week training course based on the individual's personal relationship with personnel at FSU.

The first disaster management training course was conducted collaboratively by GIMPA, Florida State University (FSU), and NADMO in early 2010. The FSU team was in Ghana for two weeks. The team was a mix of academics and practitioners. The course focused on the components of an Incident Command System (ICS), how to set up an ICS, and how to perform within the system. However, no additional collaborative training with a foreign or U.S. academic

institution has been conducted since then (i.e., between 2010 and 2013). Instead, a second training was offered collaboratively by GIMPA and NADMO with the support of the then NDNG's coordinator in late 2011. The researcher was unable to learn from respondents the rationale for this switch to more locally based training that did not involve any of the higher education institution partners it had engaged with previously.

This short history is evidence of a fact that is key to this research—Ghana's past and current efforts have focused on the development of an emergency management training program not an EM Hi Ed degree program. The involvement of institutions of higher education was a matter of convenience and the resources the institutions had to offer as opposed to any interest in educating NADMO staff or the wider populace or seeing a degree program develop. Some of the researcher's initial confusion was due to the involvement of higher education institutions in Ghana's efforts.

Within the first initial interviews, it was clear that some of the researcher's initial confusion regarding the type of program that Ghana was interested in developing also stemmed from the way in which Ghanaian participants used and understood the concepts of training and education. Among Ghanaian participants, the words were used interchangeably or the word training was used to describe what the researcher understood to be education or vice versa.

When probed for their understanding of the terms, respondents' perspectives were quite varied. While some Ghanaians understood the concepts of education and training in a manner similar to the researcher's own understanding, others defined and differentiated between the training and education using different characteristics such as program duration.

Training was viewed by some Ghanaians as being of shorter duration, usually up to six months, with a focus on skills that enable trainees to perform specific EM tasks with the award

of a non-degree certificate. Some seemed to view the main differences between education and training as the exams, formal syllabi, and homework assignments associated with education. Still others believed that there is no clear cut distinction between training and education. In fact, one interviewee emphatically stated that there is no difference between training and education. The following quotations represent the variation in the ways in which participants defined and differentiated between training and education when asked.

> …the difference may not be much except that the degree is examinable, and also our trainings for adults we do not do it like the mechanical classroom setting, with flexibility and various teaching methodology.

> I think that the difference between training and academic is the holistic approach. It's not just here's how to do it, do it and it's done.

> GIMPA wouldn't differentiate. They have two, they can go together or you can separate them. Education is mostly the academic component, the training is where you get the skills. So what we usually do, we have the um what you call it um training of trainers, TOT. So if you come there to be provided with education we can also train you to become a trainer. Yes so we usually combine the two but I would have thought that what GIMPA was trying to do in those days will fall primarily within the realm of training. I would have thought so but there would still have been an element of education if you are going for degree or certificate or whatever, that would have been the education side.

> I think those things that are actually put into action on the ground in whether it's in mitigation or response or recovery versus those things that discuss theory or discuss policy or conceptual um topics.

Obviously, the respondents did not similarly perceive the concept of education and training.

While Ghanaian respondents were able to address the issue of characteristics distinguishing training from education when directly asked, the concepts did not seem to have any real significance to them, particularly with respect to the type of program they had been trying to develop. Ghanaian respondents were first and foremost focused on seeing the capacity of NADMO staff to perform their job duties effectively increase—they wanted people to know

what needed to be done and how to do it well. The label of the program in which that would be accomplished did not appear relevant to the Ghanaians.

In contrast, the label of training or education had significance to the external organizations that have been involved in Ghana's efforts to date. Due, in part, to the varying use and understanding of the words training and education on the part of Ghanaians, the higher education institutions external to Ghana (i.e., NDSU and FSU) were not sure of what exactly Ghana wanted them to deliver. The respondents knew that based on their understanding of the terms what Ghana needed was training and, to the extent that they were involved in the development or offering of the training courses in Ghana, they identified what they planned to do/did do in country as primarily training.

> It was definitely … based on my experience of having done thousands of different trainings over the years, it was definitely a training … so we did not see it as we providing it as formal education but really basic training and general emergency management concepts as practiced here in the United States.

> …what we realized when we got to our initial discussion with GIMPA and NADMO was that what we first offered was gonna look a lot more like training…

Yet, the external respondents involved in delivering the training in Ghana did not want to impose their understanding of the concepts and what was needed in Ghana on the Ghanaians with whom they worked; and, this desire led to the inclusion of an "education spin" to the training developed and/or delivered in country. One external respondent noted,

> …so it was kind of a mixture trying to do what we thought they wanted because it was mostly you know the National Emergency Management Organization personnel were there so that's what we tried to give them. More of education spin on it but there could have been training elements in it but we weren't really worried about trying to define it, we just tried to give them what we thought they wanted.

The "education spin" referred to the perception that the course was "a little bit of both", "it's probably on the line between the two", "it was kind of a cross between the two". Yet, from data

analysis, it is clear that what the Ghanaians want initially, regardless of what conceptual label is applied to describe it, is training as the researcher and the respondents from higher education institutions understand it. As one Ghanaian put it, "…the idea is to provide people with the necessary skill so that they will be the ones who will be the driving force for ensuring that the disaster management is under control…" and another "…so broadly, to equip people who will be involved in disaster management".

Despite their interest in first seeing a training program formalize, Ghanaian's had a long-term interest in seeing degree programs at the certificate, bachelors, masters, and doctoral level develop.

> …my initial idea was to go certificate; short, short courses and when we have enough people in the system then we roll out the degree and then people can come in and patronize.

> …and we have thought of starting from a certificate program you know and work our way up gradually. Because … we didn't want to jump in straight into a degree and also a master's program. We wanted to gradually do one or two certificate programs, test the results, learn our mistakes, get the feedback, the demand, etcetera etcetera and then the following two years or three years move up the ladder and then gradually we become um establish a master's program.

The degree program that Ghanaian's would like to see evolve in the future would be an extension of the training program they develop; thus, it can be anticipated that the focus of classroom activity would be predominately on training as opposed to education even though the degree programs would ideally include elements of both. As one Ghanaian put it, the degree program would be "an educational program blend[ed] in with the practicals".

The discovery that Ghana's short-term and primary goal was to see a formal training program start and that their interest in starting an EM Hi Ed degree program was a long-term, secondary goal had significant implications for this study. The research question for the study had initially been "What factors explain Ghana's experience with developing an EM Hi Ed

degree program?" and the literature review had been conducted relative to that central question. Yet, as was discovered, Ghana had no experience with developing an EM Hi Ed degree program at this point. Upon this discovery, the researcher revised and expanded the focus of her study to explore the factors that explain Ghana's experience with developing a training program and to also explore the factors that might be anticipated to influence any future efforts to start an EM Hi Ed degree program. Therefore, it is necessary for readers to bear in mind that the responses analyzed and reported in the next chapter, are based on what actually impacted Ghana in the initial stages of developing a training program and what are perceived as possible factors that might be relevant to initiating a degree program in the future. Ghana is interested in increasing, and has a need to increase, the capacity of the individuals who work in disaster management through training and, to some extent, education. The following chapter presents the factors that the data show to be relevant to understanding their past, current, and future attempts to develop a training program to meet that need as well as any future attempt they might make to develop a degree program.

CHAPTER FIVE: FACTORS INFLUENCING EM PROGRAM DEVELOPMENT

Chapter Five is organized in two sections. The first part presents factors that emerged out of the data analysis regarding respondents' experience with the training program. The factors that emerged could be anticipated to apply to any effort to start a training and/or degree program. The second part reports on factors that participants think have impacted past efforts and/or might impact their future efforts to start a higher education program exclusively.

<u>Emergent Factors</u>

The line-by-line and focused coding of the general responses delineate seven main factors that respondents believe have negatively or positively impacted Ghana's journey towards establishing a disaster management training program in Ghana. These factors include the following: institutional support, partnerships, advocacy, funding, program marketing, and cultural factors. Each theme is described in-depth below.

Institutional Support

The concept of institutional support, its existence or absence, is necessary in explaining EM training program development process. Institutional support, as used here, refers to recognition, approval, and commitment of the leadership of any of the institutions that are directly or indirectly involved in the development of a training program. Institutional support, includes the willingness of leadership to dedicate financial resources to the cause of program development as opposed to other funding priorities within the institution. Respondents explain that the presence of institutional support was a major facilitator in the initial stages. In the case of Ghana, to date, the institutions whose leadership support is critical in developing an EM training program include GIMPA, NADMO, and other organizations that could potentially lend institutional support such as the Ministry of Education. When the leadership of both NADMO

and GIMPA approved of Ghana's training program development, they demonstrated their commitment to the efforts by making resources available, and, because of this commitment, GIMPA was able to offer two training courses to participants.

On the other hand, lack of or withdrawal of, institutional support resulted in no further offering of the courses and led to discontinuation of efforts to develop a formal training program in Ghana. The change in institutional support was mainly due to a change in leadership within both NADMO and GIMPA. These sentiments were expressed in the following quotations from Ghanaian officials.

> One of the things I've learned is that you know systems are built but if whoever heads that institution or a system doesn't have that orientation or interest, it could impact either negatively or positively on something like this. So this is also a drawback. So yes, that is a drawback.

> The leadership ... I haven't read so much about management but I think that most problems are leadership problems. The new rector … [at GIMPA] felt that it wasn't necessary and that there were a lot of programs running at the time so why start a new one. But I think its leadership.

Institutional support inhibited program development around late 2011 when GIMPA'S leadership changed. Prior to this change in GIMPA's leadership, there had been a transition in NADMO's leadership in 2010. These shifts left a gap in support to see a program develop on the part of both institutions.

> The reason it didn't come on was probably due to inaction on our part. The reason I'm saying this is that, for GIMPA, the facilities are there, we have the lecturers, and even if there are no lecturers we normally will contract other lecturers from outside. It's just the will we didn't exercise to set it up…

> …what I think is they were trying to waffle a little bit…the university at GIMPA what they did was they opened the doors to us but they didn't necessarily embrace it and that was what really what we needed…

> The thing that we saw was as government administration change, chain of management in NADMO changes, and so you get the lack of continuity, as administrations change and when you get a lack of continuity and you get management who has new priorities they

change … they try to implement new organizational directions, you know the missions can change every few years and that can be disruptive to establishing education or training program. So you know some continuity there would be good as well.

The change in leadership and the erosion of institutional support for the program within GIMPA and NADMO left both institutions unwilling to commit resources to the development of a training program.

> The initial reception from GIMPA was very good, except that they were not ready to push in resources. They didn't want to commit resources in but they wanted the partnership because I guess it would put their whatever… people think that oh this training thing, people are suffering on the ground and we need money to buy relief and you are talking about training. So a challenge of fighting for resources. Even in the same … [organization] because we have different directorates and everybody thinks their directorate needs more money.

With respect to institutional support so far the issue has been about how the involvement of two key institutions and their institutional support or lack thereof has been important in explaining where Ghana's program development is today. But so too has been the complete absence of institutional support on the part of two additional entities, and those are the Ministry of Education (MoE) and Ghana's traditional political leadership. The MoE has not been involved at all, but had they been, then they would be able to support the efforts. Respondents were of the opinion that buy-in of the MoE is key to the development of any program at a higher education institution in Ghana.

> I think first of all, from GIMPA any program that is supposed to support public service must be channeled through the Ministry of Education …The buildings were there, you see what I mean, the classrooms were there, it was only because of mismanagement that the program collapsed. So I will suggest that for a disaster management or a new program as you are talking about the first point of call will be the Ministry of Education.

Similarly, the traditional political leadership has not been involved at all, and respondents believe that lack of support of the traditional leaders is detrimental to the country's EM program development. The support of traditional leadership would be beneficial because that leadership

can provide good suggestions to developing the program and advocate for money for the program's development.

> There is one thing that we never take into account when building programs, the chieftaincy, the role of the traditional leaders, and I became conscious of this over so many … I mean as a result of many many whether accidental, by chance coincidences… in Botswana…[there are] actually house of chiefs as part of national legislation but their role is to advice nevertheless the powerful force ... Let's think of running programs which may take into account traditional participation when they can even bring their wisdom, their direction. We have committed so many errors in this country (Ghana) because we neglected the traditional leaders. They have the traditional knowledge that is helpful…

Institutional support will be required for a training program to develop in Ghana. At minimum this support is needed within GIMPA and NADMO, but some level of institutional support is required within other relevant stakeholder institutions as well (e.g., MoE, National House of Chiefs in Ghana). Given the absence of institutional support, it seems unlikely at this stage that Ghana will be successful in starting a training program any time soon.

Partnership—International and Local

If institutional support is there then partnerships are possible. From the data, it appears that the idea of partnership, its existence or absence, is essential in explaining where Ghana's training efforts are today. The concept of partnership can be understood to mean an arrangement where two or more institutions agree to work together to promote a given member's objective, or to advance mutual interest. There are formal partnerships whereby institutions or parties have a formal written agreement that outlines each member's rights and obligations; and, there are informal partnerships where parties verbally agree to work together to achieve one or more goals without formally written down rights and obligations.

With regards to the data, the concept of partnership is relevant to understanding the status of Ghana's training program development in two ways—international partnership and local

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partnership. International partnerships are any arrangements and collaborations with governments, international higher education programs, international non-governmental organizations (NGOs), and/or trainers external to a given country; whereas, domestic partnerships refer to any arrangements and collaborations with EM government agencies, academic institutions, and private businesses internal to a given country. In the Ghana case, all of these kinds of partnerships seem relevant to explaining where Ghanaian program development is today. Specifically, these various kinds of partnerships seem to have been a facilitator at certain points and inhibitors at certain points.

Formal and informal international partnerships seem to have been facilitators in the initial stages of developing an EM training program in Ghana. Respondents viewed the international partnership between the NDNG, GIMPA, NDSU, and subsequently FSU, as the reason Ghana was able to organize the first two training programs. Without these partnerships, Ghana would not have been able to carry out the training efforts that have been done to this point and will not be able to do so in the future. However, the partnerships should be ones that allow equal responsibility and contribution based on expertise so that none of the parties overrules the other, nor unnecessarily dictates directions of the program as described by a respondent below.

> …and really moving forward that would really be the ideal thing where there will be some kind of partnership agreement between … [a] university and GIMPA. You know where the presidents both sign, the symbolic thing where people take photos and go ooh we get to save our nation. That's what I think will help GIMPA. And so you could really look at that type of partnership moving forward to build academic resources and capacity right? ... I honestly see the future as us being the nexus for the facilitation of the discussion between the two partners to create that and whoever on our team—it's an international discussion—to say how do we create a partnership that endures and that's what I really see our role into the future is... The need is really at the institution level model and that model would create the enduring partnership that I think will carry not only GIMPA to the EM mission but overall will benefit Ghana and North Dakota in the process and indeed the United States.

I think that they have to establish a very, very true partnership … NADMO and GIMPA need to probably sit down and come up with list of all the roles that each would play and how they would play them and make sure that they could play those roles or deliver those roles without conflict….

Under international partnership, the data showed that the absence of a formal or informal international partnership between a foreign Hi Ed institution that has established EM program and GIMPA has become an inhibiting factor to Ghana in establishing a training program. And, that the presence of a formal international partnership is necessary for Ghana in establishing a program going forward. To the degree that this partnership has been available, it facilitated Ghana's first attempt to start a training program. But efforts to initiate a training program or the intended, future academic program continued when the partnership was not present any longer, even though GIMPA still exists and seems to be interested in continuing work toward these goals.

I think the partnership is the way to go because having worked together with the people on the other side, you realize that they are ahead of us and so it will be useful to get us into a partnership so that at least help us up to a certain level.

The need for a formal partnership with international Hi Ed institutions, respondents believe, would guide Ghanaian institutions in developing a workable curriculum, getting access to learning materials and teaching materials, and, above all, providing the opportunity for foreign faculty with the required expertise to visit Ghana and help "train the trainers" in the early stages.

You see not only do we need to partner [with] NADMO so then we can get it off the ground, we also need some other partner institutions externally. Because you see we don't have the capacity, so it would be good if we can do some kind of joining with an established institution that has faculty that you know are knowledgeable in disaster management so they can come and you know strengthen our teaching.

You can have international partnership in the early stages. It's so new in the country in spite of all the noise we've been making. So if you have a body that's more experienced in this, it helps to get it properly organized, and it also provides the avenue for monitoring.

International organizations that are an outgrowth of governments, such as USAID, also

are necessary partners to Ghana's program development. The primary interest in this kind of

partnership is because they can provide financial assistance. To date, this has been an inhibitor to

the program development because there is no formal or informal partnership between any of such

organizations and Ghana's EM training program developers. And, there has not been any form of

communication between any Ghanaian institution and these international organizations to that

effect. Yet, participants believe this type of partnership has the potential of supporting Ghana's

effort to develop EM programs.

> You have OPSGAD through USAID that maybe has a way to bring money into the
> academic side but they talk to NADMO and they don't necessarily talk to GIMPA. Or
> they don't talk to the Ministry of Education. But what you have in USAID is not only you
> have the office of disaster assistance, but you also have education so working in the US
> embassy in Ghana in Accra, you have offices that talk to the officers that you would need
> them to talk to, you know tertiary level of education or university or the ministry of
> education.

Under local partnership, the data showed that the concept of having a formal partnership

between academic institutions that want to establish an EM program and NADMO is a necessary

factor in establishing a training program now as well as an EM degree program in the future in

Ghana. In the initial stages, GIMPA and NADMO partnered informally and that partnership was

a facilitator. Their partnership was successful leading to the first two offerings of disaster

management training in Ghana.

> My theory would be that if NADMO really is the lead agency for man-made and natural
> disaster response in the Republic of Ghana, and if GIMPA is the center of excellence for
> educating people on how to respond to natural and man-made disasters, then you would
> hope GIMPA and NADMO would have a partnership or good enough relationship, where
> GIMPA would actually train people how NADMO wants them to be trained.

Respondents believed that this local partnership into the future would provide the academic institution with professional guidance and expertise for training students, internship and job opportunities for graduates, and a student base for program sustenance.

> They are gonna help because they are gonna help bring in students, they are gonna help bring in some of the students that perhaps come from their organization, they are gonna provide potential instructors for case studies, will perhaps hire these students after they get their degree because they are aware of a program which is gonna develop professionals that would help them upon graduation so these local organizations can promote the program and get their students in and also after they get their degree or certificate these organizations would then hopefully recognize the program and give them future employees of their organizations and improve the overall capacity in doing their emergency response.

Further, through a partnership with NADMO, independent academic institutions such as GIMPA would benefit from national financial resources, which they believe most academic institutions in the country badly need. A local partnership with NADMO will therefore create the avenue for GIMPA or any interested academic institution to convince designated national agencies on the need for investing in such programs.

> You probably have to partner with NADMO because they get some national resources. And you would have to convince them that this is important to spend money on because this is part of mitigation and in mitigation, every one dollar in mitigation saves three dollars in response or whatever the stats is. So I think that's probably an uphill battle.

Contrary to the call for a partnership with a foreign academic institution, one respondent was of the opinion that partnering with a credible and recognized local academic institution is more important for program development in Ghana.

> For the support of the development for one, it has to be a locally recognized higher education institution which has the credibility already established so that students are aware of them and are familiar with whatever that college or university is and it should be the host institution and I think that is key for getting a program established and started versus strictly an outside institution coming in and having its own independent program. It has to be a partnership with a locally established institution of higher education. I think that will greatly support the credibility of any new program

Partnership, both international and local appeared to be important factor that would help develop EM programs in Ghana because the numerous strengths of each of the partnering institutions would be pulled into the program. These include provision of financial resources, transfer of expertise, sharing of learning and teaching materials, and possible internship and job opportunities for graduating students. In the case of Ghana, while they have had these partnerships available, they have not been formal and this has been a problem. So to the extent that these partnerships will be important in the future, respondents suggested that they have to be formal.

Advocacy

The presence of an advocate, or a lack thereof, came up as a factor in Ghana's pursuit of a training program in Ghana. The concept of advocacy can be understood to mean an individual, or a group of individuals (e.g. stakeholder/s), who not only recognize the need for establishing EM programs and are in support of the cause, but are committed and have the ability to influence the program's development. The presence of advocates was a facilitator initially. There were at least three advocates; an individual in GIMPA, another in NADMO, and an external person from the NDNG. So at one point in the three key institutions, there were advocates, and they were critical in any progress that was made. However, these people have not remained in their institutions, and no longer play an institutionally-based advocacy role.

The absence of such advocates has become an inhibitor. Some of the respondents believed that having an advocate, who would harness and champion the effort, is what Ghana needs to realize her quest of developing a training program. A successful advocate in the Ghana case must be a committed person who is ready to devote the time and effort as well as coordinate the activities of all relevant stakeholders.

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What you need is some charismatic person that's gonna stand up and say we are gonna make it happen, will take everyone's hands and say let's get there together. That's what is going to get this done in Ghana.

…somebody who is committed to building it. You have to have that commitment, you have to have that political commitment, the political will and you have to have somebody who can sort of network and bring in support. You have to have somebody who is a good leader in building a program. And it's true for any program.

The required advocate in this case can be one, two, or many, and in different organizations—

more is better.

Basically I think first of all you have to have the right type of stakeholders including some in academia to be able to do that … Advocate you know a series of stakeholders that are interested and advocate that is going to take the leadership and make it happen. An advocate could be at NADMO, it could be at GIMPA it could be at the university somewhere, it could be someone outside you know that has contact in Ghana and encourages them to develop it, but there needs to be some advocate to start it.

The most critical role of advocates beyond motivating people is that they get things started. And,

they plant the seed and they get things going.

…one advocate who goes I am committed and maybe they offer only one course and people will start coming and go ooh look at university people interested in emergency management so we should have a minor, ooh look at people are really interested in major we should have a major, whatever, so that builds this stem.

The existence of an advocate seemed to be a huge factor in Ghana's ability to develop an EM

program. The concerns have been that there is not anyone readily available to be an advocate

neither is there anyone among the original people to do it since they have all moved to different

placements and there are new people in these positions. In so far as an advocate is not there, it

seems unlikely that Ghana will develop an EM training and/or degree program any time soon.

Funding

From the data it appears that funding played a huge role in terms of where Ghana is

today. Funding is referred to as sustained dedication of the financial resources of the institutions

that are interested in developing an EM training program and/ or education. The lack of funding

was known to make it difficult to hire faculty, pay allowances of curriculum developers, purchase teaching materials, and cover administrative costs. In the Ghana case, respondents cited the lack of funding as a major and persistent obstacle to Ghana's efforts in developing a training program. "So yes that's a big problem, the money is a big problem", "the main reason is financial which we are trying to look round to see how we can handle it", "I think the challenge was funding. I think that it had almost every probability of happening …but for the funding". They explain that the lack of funding, or the inadequacy of it, has impacted the development of the program by making it difficult to employ the required faculty, both local and foreign, who would have helped establish and maintain the program in Ghana.

> You know funding is also very important because you know the fee that we will charge participants will not be enough to cover you know the cost of all the program. Because we have to pay faculty and other costs of the program and the fees alone will not be able to match up. So I think for the starters, it will be very important to get support, I mean financial support from some organizations that are interested in getting disaster or emergency management training off the ground in Ghana.

Funding appears to be one of the most significant factors that explain where Ghana is today. The reasons for the lack of funding could be related to some of the issues that have already been discussed above—institutional support and partnership; but, what really matters is that the net result was inadequate funding. There was a strong indication from the data, that if funding had been there, maybe fewer partnerships would have been necessary. And, perhaps, institutional support would have been less relevant. Even though partnerships came and went, and even though the institutional support came and went, all along, there was a funding problem. And, the absence of this funding makes Ghana's ability to develop an EM training now and a degree program in the future unlikely.

Program Marketing

Just like the funding issue the data shows that the absence of program marketing, especially an effective effort, helps to explain where Ghana's EM training/education program is today. Program marketing refers to any activity that would inform interested parties, especially prospective students, of the availability and benefits of a program. The lack of program marketing has always been an inhibitor to the efforts. Because there has not been marketing, students have not been aware of such a program, let alone applying, which means losing the revenue from fees that potential students would have paid if they had known of the program. The data showed that some participants believed that the lack of a well-organized advertisement of the EM program has always been an inhibiting factor to establishing a training program in Ghana.

The responses show the potential effect of program marketing in two ways—effective packaging and delivery to the right stakeholder institutions or individuals. With respect to the impact of effective packaging, participants expressed their thoughts in the following quotations.

> It depends on how we will present, how we are going to package the program to the public and that is the strategy we need to develop.

> How we package it would have been one major factor to draw the crowd.

Some respondents believe that the relative novelty of the EM program in Ghana makes it important to target and be delivered to the right stakeholder institutions. These views were expressed in the quotations below.

> I wish that there is advertisement so that people from other stake holding institutions joined. NADMO will have enough personnel to run the program for I don't know how many years.

> Especially because it's a new area in Ghana. Nobody thinks of disaster management as a full blown program ok, so we would need to do a bit more of marketing to create the awareness for the need for such a program. I think that we could start … assuming

GIMPA decides, we could start with the existing institutions like NADMO and the police, military, the prisons, CEPS [Customs Exercise and Preventive Services], immigration and all that. We will start with those institutions and then broaden our scope as the years go by. And for me I think we have a ton of people within these organizations that should be trained in disaster management … and I think the challenge I see is how to package the program and market it to them. And even that one I don't see it as much of a challenge because we've already identified institutions that could be enrolled.

…not only what is the total number but how well would the recruitment and promotion of that program be to the community and to the country? Meaning you need to make sure that you have not only a great program that is developed but that the right people are involved in and getting the word out and making sure that students throughout the country, both in the capital of Accra but also throughout the countryside are aware of this program and the benefit...

Just like the funding issue, the data show that the absence of program marketing, especially an effective effort, has been a major factor in explaining where Ghana is today in terms of developing an EM program. The lack of program marketing has always been an inhibitor to the efforts. In the absence of program marketing, there were not enough students, and the fees collected were much less than the cost of programs, making it unattractive for the initial training courses to be continued, let alone being fully established as training or degree programs.

Cultural Factors

Cultural influence also impacts program development according to respondents. The term refers to any activity, norms, or behavior of a people or a nation, in this case, that directly or indirectly, positively or negatively, impact program development. In the case of Ghana, the data showed that two major types of cultural items appeared to play a role in the EM program development process—the lack of time consciousness and political upheaval.

The nature or manner of time management in Ghana was reported as a huge factor in explaining where the country is currently. Compared to more developed countries, time consciousness is very minimal or almost non-existent. Things take much longer to happen. Even when there is unflinching support of all stakeholders, execution of approved projects just takes

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longer than it might in other nations where time is perceived differently. Based on their

experience in the country, respondents argued that things move much slower in Ghana, and that

the Ghanaian relationship with time, at least partially, explains why the intended training

program is still on the ground. The following quotation explains this observation and its impact

on Ghana's EM program development process.

> Ghana is not the United States. There is a different culture, there is a different culture, there are different societal norms, things don't happen overnight in Ghana. Could they? They could, but things have to … they just don't, it's just that things operate different. And so I think what has to happen is that realistically, all that has to be in place, but I think realistically what has to happen is that it just has to keep moving forward, and it won't be overnight. I mean nothing, I don't know anything that has ever happened overnight in Ghana.

It also became clear that another cultural element—what happens in the wake of

Ghanaian changes in political leadership—has impacts throughout the country and every sector

that government touches, including training and education. In some more developed countries,

when governments change, the services that government provides and what their priorities are do

not change dramatically; however, in Ghana, when political leadership changes, things are in the

state of flux for some time and what government does and how it does it changes quite a bit.

Therefore, at any point, if an EM training and/or education program were to develop that has

institutional support of NADMO and a formal partnership, whenever government would change,

there is a potential for all that to go away. In the view of one respondent, the fact that a change in

government causes significant changes in all sectors is troubling and detrimental to developing

EM programs in the country.

> The other challenge is always going to be political upheaval, pretty big piece in Ghana. And as it true of other places, because in the United States we … when political power changes positions change. The point is change. The difference is that in Ghana the shift can be a little bit more dramatic as far as the posture. I mean it can be more profound. The challenge is stabilizing some of the basic tenets of what's happening and I think Ghana's done that over the five to six years. And you'll be a better judge of that than I am

but um US has some basic things about the country to stabilize, education—the basic expectation—things that aren't gonna change dramatically. The emergency management framework, things should not change dramatically, the agricultural framework should not change dramatically. Once those things become more stable I think many of Ghana…you know political parties come and go, some ideologies, may be are expecting more of this group people or that group of people but the main tenets stay the same then I think Ghana will be more stable.

The two main cultural items—time and political upheaval—have impacted Ghana's efforts in an inhibiting manner according to the data. The lack of time consciousness is perceived to have unduly slowed the intended EM program development in Ghana. And, political upheaval is tied to the current lack of institutional support (and subsequent interest in and support for developing a program) because leadership of key institutions like NADMO and the Ministry of Education changes with change in government.

<u>Literature Based Factors</u>

The first set of factors discussed in the preceding pages emerged naturally out of respondents' answers to the question "Please describe any needs that have to be addressed to see a program develop in Ghana". The data related to this next set of factors did not naturally emerge out of respondents' responses to the question but rather as a result of the researcher's direct probing. The probes were informed by the factors found in the literature. These factors, reviewed in Chapter Two, include the following: faculty issues, professional legitimacy, students issues, supporting learning materials, accreditation and curriculum standardization, autonomy and administrative support. Unlike the preceding section, the responses here include factors presented in the context of future efforts to start a degree program, unless otherwise noted.

Faculty Issues

The term faculty, as used in this section, is a broad term comprising instructors for training programs and faculty for a future degree program. Faculty issues comprise both the

availability of faculty to teach EM programs and the presence of the required expertise to teach

EM programs in Ghana. Faculty issues were found to be viewed widely as relevant to

understanding the Ghana case as it relates to past and future efforts but not all respondents

agreed as to how. While one group is of the view that availability of faculty has not been an issue

in the past and would not be in the future, the other group has the opposite view that not only

was faculty not available in the past, the faculty with the requisite expertise are not available and

that would also be a problem in the future. The individuals interviewed defined the notion of

expertise differently.

Those that believe that faculty will not be an issue to future degree program development

thought that not only will it not be a problem in the future; it is not a problem now. This set of

respondents thinks that the notion of expertise is flexible. They do not think it is necessary that

the faculty have emergency management expertise. They think that faculty can be pulled from

other disciplines when needed. The issue is simply that the needed faculty have to be identified,

recruited and brought into the program.

> Yah, they had one thing about GIMPA was they came to play with this very devoted
> group of faculty, passionate, excited, they had fringe work that they had done. Um often
> in emergency management you will find faculty that are tend to drift towards what EM
> has done—a research study in this, a bit written about flood, the impact on some
> population. So while this was out there and there was a group in GIMPA who were
> working on the U.N. disaster reduction thing and they had a lot of information and
> exposure, so there is a lot of passion already existing there, there were advocates in the
> house who were committed … You can get faculty who are teaching something else to
> teach emergency management so I think you can do it on the cheap but the challenge is
> getting the economic investment that they need to have.

It might seem that faculty are not available, but that is actually because they are doing other

things right now, or they do not know the need for their services; or, they might be appropriate

people, but they are just going to need some time and material to prepare.

You see the problem that Ghana faces now is that finding faculty...you may find this man here the next day he is here and all that, and there are so many skills that are scattered around. Until you have advertised and also brought this issue to the attention of the people you would not know those who are qualified to be involved in this. You will suddenly discover that oh this man said I've done this and they are all over. Apart from that, they are many, many Ghanaians in spite of the fact that they are angry with the way our system is run, there are many young scholars who want to come home.

Anybody can become faculty for Ghana's EM program, they just have to be willing and they would change their expertise, so availability of faculty is not a problem.

I think that any multidisciplinary faculty would be appropriate. You just have to have a faculty that is willing to take on that focus, a faculty member that is willing to sort of change their area of expertise or change their area of research to incorporate emergency management. You have to you know…it is my belief that faculty members are very flexible, more flexible than they sometimes think they are, and they tend to be very professional and so if they are willing to take on building a curriculum they will immerse themselves and become experts.

The respondents believe that even if an interested academic institution does not have the required faculty, they can get that from outside academic institutions and professional organizations.

Well, resources by way of human expertise, I don't think is a problem…The reason I'm saying this is that, for GIMPA, the facilities are there, we have the lecturers, and even if there are no lecturers we normally will contract other lecturers from outside…you see fortunately GIMPA because … [it] started as a management development institute; [GIMPA] always draw from the industry, getting people from the industry to come and teach. Sometimes they invite bankers, management, ahaa and normally GIMPA uses people with experience.

Moreover, the respondents in this group believe that programs just need some faculty to start, keep going, and overtime recruit more. Therefore, faculty has not been an issue and will not be in the future.

I think with the faculty at GIMPA, [it] could have started as I said, even from the certificate program. Once … [the program has] come to a good understanding of how it should or it was going to work … [GIMPA] could increase the faculty. For instance, [GIMPA] … could have started with the faculty at hand, although as I said, … [Mr. X] who was the lead person on this program is no more but I think if we're talking about if he was alive, … [GIMPA] could have started it. And [it] … could have started at a low … for instance, I know at central university there was another guy there, … [Dr. X] who

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was also interested so… [GIMPA] could have even brought him on board either on a part time based and gradually beef up [the]… numbers.

On the other hand, there were respondents that thought availability of training instructors was a problem, and the same might apply to any future degree program. Respondents with this view discussed the challenge as a need for a train-the-trainer course that would provide local expertise for the intended training program; and, that having local expertise is very important.

> When we went out there, we identified that that was the best way for them to start, because they did not have in-country expertise, so we said ok how can we do this in a way that we will do a train the trainer course? So train the trainer what it does is it would teach the people- the faculty members who would be teaching in Ghana or GIMPA how to teach the courses. And we were gonna do that by having them sit in on our teaching. So the first time we go in to do it they sit it, and the second time they team teach, and the third time they teach by themselves. Something along the model where we could transfer what we were doing to the faculty there because we knew we couldn't commit day-in day-out or even on a regular basis to go do the course work.

> What we wanted to do when we did the second training, … [Person X] and I, the idea was and we talked to … [Person Y] about this, was we wanted to do um trained teaching. We wanted to turn this program over to the lecturers.

The respondents envisage a similar challenge for any future degree program as it would be impossible to start a degree program without qualified faculty.

> I mean before you start the degree program, you must have your faculty in place, the accreditation documents require that you have certain minimum faculty members for the program… I mean there are some requirements that need to be in place. I don't know of other places but with GIMPA when … [it] started with this short program, … [GIMPA] wanted to go into the full-fledged you know disaster management program but as I keep saying … [GIMPA administrators] don't have the people and that's why I was telling you that you should hurry up and come. We don't have the people here.

This group of interviewees was of the opinion that even though people might seem to be available, they do not have the expertise and that is really important. It is not the availability that is the issue, it is the expertise. There is a problem when it comes to availability with the right combination of expertise. Even if there are people available with general knowledge, they are practitioners who do not have an academic background.

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Once again I think within the country of Ghana they have a number of practitioners who could be involved in the delivery of the training. However, they would be pretty much wearing their practitioner hats and not have that basic solid background of theory and application of basic emergency management…

Thus, so long as the program being developed was exclusively training focused on practitioners having an academic background would not be a problem. Yet since, Ghana wants to begin with training and extend it to include some educational elements, the ideal faculty would have both kinds of background.

I think obviously you have to identify some credible faculty members that have not only academic knowledge but practical experience to bring to the table when they get in front of the classroom.

This makes the faculty issue a significant one for any effort to develop a training and/or education program.

In summary, respondents seem to be divided in terms of whether faculty issues had been an obstacle and/or will be in the future. There seem to be two opinions with one group saying that availability of faculty has not been an issue and would not be going forward, while the other group believes that not only is faculty not available in Ghana, there are no faculty with the necessary expertise. This difference stems from the definition and value that each of the groups give to the concept of faculty and expertise.

Students Issues

The presence and effect of student issues was probed generally but data analysis revealed three sub-dimensions, enrollment, admission criteria, and financial resources. Enrollment refers to the availability of students for program sustenance going into the future, while admission criteria address concerns about the selection of qualified students in a future EM program. Financial challenge refers to the monetary obstacles students might face in paying for fees and other educational expenditures.

The extent to which respondents perceived student issues to be important is mixed. It does not appear to be an issue of having a pool of students that will be interested in and need the program. With regards to enrollment, some respondents think that the availability of prospective students or finding enough students to enroll has not been an issue at all in Ghana's past efforts to initiate a training program. There is a wide range of organizations and sources that future EM programs in Ghana can look to for potential students for a degree program should one be developed.

> No, no, no that wasn't the problem because the demand was there because you see apart from general students coming in who might take interest to do this in order to enter that profession or career, there were already established institutions such as the police, the army, the fire service, NADMO itself, regional administrations, local government, district assembly personnel, etcetera, etcetera, who had expressed interest so in terms of this is only in Ghana. So if we were to stretch it to West Africa or Sub-Saharan Africa, the demand is there and once they saw that oh yes, it was a good program, the people or the personnel who came out were doing or performing well on the job, I'm sure more people would have subscribed for it so for the demand I don't doubt it.

> No, that wasn't going to be an issue. In fact, there is one PhD holder in NADMO, his name has escaped me, who told me that we should seriously look at that and fashion out something because he felt the demand is huge because he runs the program for the military for NADMO. He is a trained emergency management somebody. Yeah he has PhD in something. In fact, he was one of the resource persons in our last training program.

> I think it's probably… I think in my estimation from the very beginning when we had the first class…I think in … [the] first class …[they] had about 15 students in Ghana, it's a popular field and I think that's probably universal across the country and across the world based on my experience. I have travelled quite a bit in different parts of the world and it seems to be a hot topic everywhere. So I don't think there would be a shortage of students

However, some of the interviewees who talked about enrollment as part of student issues explain that it is not straightforward to say that enrollment will not be an issue in the future. These respondents suggest that there is the need to advertise, educate, and take measures that would ensure continuity of enrollment. Continuous availability of students cannot be determined

based only on current professional participants, such as NADMO staff, as sufficient if the

program was only a training one. Those respondents with this opinion had the following to say.

> As for enough, there is enough. But I wish that there is advertisement so that people from other stake holding institutions joined. NADMO will have enough personnel to run the program for I don't know how many years.

> Do you know that truthfully speaking, every petrol station has to have a fire management and that will require training so it's only a question of education, the awareness, you know making people conscious of why we need a program of this nature. So no, students will not be a problem at all.

> You know it's a hot wash that I saw that there was the capacity to perhaps begin a formal education program there was huge need for the most basic information from the participants that attended the class as well as when they brought us out on various field trips to the other side of the town outside of the capital. Because there currently is no program like that, there would definitely be interest, but sustainability is another issue. Whether there is enough people to enroll I don't know.

> When asked about the impact of admission criteria, respondents did not see it as an issue

so far. This is because Ghana has not been actively trying to start an EM Hi Ed degree program.

Therefore, participants of the training programs were selected only by virtue of being personnel

of NADMO and other government agencies.

> It was for the NADMO staff. … [the] initial target was the people who were already in emergency management, who were already in the National Disaster Management Organization. That was… [GIMPA's] immediate target before… [it] was] going to open up to the public. But I think GIMPA got excited because they heard there was none in the sub-region and it could be an international thing but … [the] target was the NADMO officers.

 In so far as Ghana would ever go on to develop an actual degree program, respondents indicate

that there will be potential issues about admission criteria based on academic merit. There has

not been an admission problem to date, but into the future, maybe it will be an issue. The

problem will be to find people with academic merit to succeed in a program. And, in the future

then there may be some issues that would have to be addressed in terms of admission criteria.

Initially it will depend on the level—was it certificate, first degree or masters level? Each of these diplomas will have its own criteria so it will depend, it wasn't going to be a blanket you know requirement. If you are already a NADMO personnel and you wanted to come and do a certificate program it's easier for you because we know you have the practical knowledge then gradually if you could move on to a degree, a first degree program and because perhaps you've done certain courses in the certificate program, … [GIMPA] would exempt you depending on your strength in terms of GPA and all that.

I will say that for the…if it's at the level where we award certificate, then qualifications from our SSS [Senior Secondary School] will be ok or let's say three years, a post qualification from any of the institute but specifically we would have admitted NADMO staff from all over the country. In fact, I think that was the initial process because NADMO staff are almost everywhere in the nation. So I think training the NADMO staff alone is a requirement but admission requirement could be anything above SSS if they are coming for just certificate will be ok. Even we have that system at GIMPA where they train people to obtain the certificate right, then later on they come for the diploma. They have a special certificate program, they call it certificate in management administration. When you get that, that one runs for I think eight months, when you get that certificate they can admit you to a degree course program at GIMPA.

Well I think some of the criteria…is not easy to quantify as students by grade point average. But on the other hand, I think academic success doesn't always correlate directly to practical success. So if you have somebody who doesn't score high doesn't mean the person shouldn't be given the advantage. I think you have to use recommendation process also. You know somebody can be interested but does not have the skills there has to be a dual scale and I understand that it's very subjective. But I don't know, I think that's the only way to do it.

Student funding issues or the ability to pay for tuition and other educational expenses has not been an issue in the past because it has a practitioner-based training program sponsored—to the extent that any training has been conducted—by organizations outside higher education.

…but the major thing is how the individual will pay for herself or himself to attend the course. That's why NADMO decides to pay for …[its] staff at a point in time. ...[NADMO] used government resources, … [NADMO paid] for them to acquire the knowledge which we need immediately.

In the future, according to these respondents, if Ghana were to start a degree program, funding for students is likely to be problematic.

I don't think that they would be successful in collecting a lot of fees from individuals because I don't know that the people have a lot of money in the public service to be able to put a lot of it in education you know.

Students' financial resources or the ability for students to afford cost of education appeared as a major challenge that future EM degree programs in Ghana would have to address. The cost of higher education and people's ability to pay appears to be a major roadblock, which may prevent potential students from seeking any type of higher education, whether certificate or degree.

There seemed to be a general agreement that students face a challenge in affording higher education. "I just don't know how easy it's going to be to find the resources to pay for the classes on regular basis", "there is a challenge with people being able to find money to go to school. I mean counting people who you are wanting to educate", and "talking about individuals enrolling, it would be problematic for that. In fact, people were complaining that GIMPA's school fees were too high. I think that could have been a constraint here. Because in Ghana you know we are on the poverty line".

In summary, students issues, specifically enrollment, appear not to have been a problem in Ghana's past efforts. This is because past efforts have been geared more towards training with pre-identified source of students—NADMO staff. The same applies to admission criteria and student funding because the main criteria was being a NADMO employee who had full funding from NADMO. However, respondents believe that Ghana might have difficulty with determining workable admission criteria and students might have significant financial challenges if and when the country decides to offer EM Hi Ed programs in the future.

Supporting Learning Materials

Supporting learning materials is one of the literature-based factors that the researcher probed during the interviews. It has been perceived as an issue that helps explain where Ghana is today in terms of its efforts to start a training program and will remain a challenge into the future. The challenge here relates not to availability of learning materials, it is more to do with

difficulty of access inhibiting degree program development. Learning materials in this context

refers to textbooks, scholarly articles and/or information and communication technologies (ICT)

that aid in teaching and learning.

One set of respondents believe that the existence of, and access to, learning materials

have not been obstacles in the process of developing a training program in Ghana, and will not

be in the future as it would progress toward a degree program. Those with this opinion made

references to available resources that Ghana could use, some local and others foreign, to prove

that availability of learning materials has not been an issue in the past and will not be going

forward.

> the challenge for Ghana with textbook …I'm gonna say that Ghana would be using stuff like … stuff that combine the UN. There are number of UN publications that would be meaningful, humanitarian because here's what Ghana really does, they were really focused on the decade for disaster relief you know that mission? So all of the UN initiatives and the publications that come out of the UN initiatives are gonna be more relevant than American generated books right? But there are many UN publications that would be valuable.

> Oh it shouldn't be difficult, after establishing the curriculum and exactly what you want them to know, exactly what you want them to learn, it's easy to get the materials for them. I don't think it will be any difficult because in disaster management so many works have gone into disaster management in Ghana here and other places so I don't think it will be very difficult.

Further, other interviewees believe that availability of learning materials will not be a challenge

to Ghana in the future if the FEMA Higher Education Program's myriad resources could be

accessed by Ghanaian institutions. Since the FEMA resources include curricula, there would be

no need for Ghana to reinvent the wheel developing curricula from scratch. Respondents suggest

that the FEMA Higher Education Program has almost complete learning and teaching resources

that could be adopted and adjusted to suit Ghana's needs.

> I think that if there was a partnership struck between FEMA and NADMO which is a very good possibility, if we get that, so I think we could do that. I think it's possible that

FEMA would open you know…I'm sure they have online training, they have online textbooks, you know I think the individual. … if we had that partnership and FEMA allowed NADMO access to their training database, then the individual can have access to all the textbooks and information that he will need to complete the course.

So here's what the issue with curriculum. There are over 20 courses that FEMA has put together so those long semester courses the curriculum is place, it has everything from the syllabus, to the reading, everything. Now, for the USA right? Now let's be fair is EM international or is it country specific? That's the challenge right? Emergency management I would argue as a professional is international. The key tenets go across every border. The FEMA higher education material may be in many places USA centered however, in there are key tenets of emergency management that are international so that is required of those materials for the Ghanaians… the FEMA materials actually have learning examples in them.

Another set of the respondents who think that availability of learning resources has not been a problem in Ghana add that there is, however, a challenge with internet facilities and internet access, which could impact availability of electronic learning materials to students and faculty. They agree that availability is not an issue but, access is viewed as a challenge. And, it is a challenge because Ghana's lacks the needed internet facilities and access, and this might be a challenge in the future as well.

You know materials don't have to be so costly anymore you know, because of the internet and you know there is no problem. I will say a little problem using the internet in Ghana you know…the other good thing is because of you know the command of English in your country and the universal availability of references in English is a good thing. If it was a country where the language was a little different then there wouldn't be a lot of educational resources of books or things that can be read but because this doesn't seem to be a problem in Ghana that makes it relatively easy

Probably resources in terms of ICT [Information Communication Technology] because at that time ICT wasn't the best, well they thought they had it but having worked abroad I knew it wasn't.

Other respondents believe that both availability and access to learning materials have been a challenge in the past for any type of training or education program in Ghana, let alone EM, which is relatively new. Moreover, the general challenge with internet facilities and access

will worsen the ability to access electronic resources. Therefore, access to supporting learning materials will be a challenge for future EM academic programs in Ghana.

> …that's a big challenge, because even for traditional or established programs textbooks and research materials are not easy to come by. So having a new program such as disaster management it was going to be a big headache in terms of resources books etcetera.

> …they had no general texts, case study, no reports, accessibility of the internet was limited so even that global resource was not as available as in other western countries so I think any program that develops, the instructors would have to be able to provide most of that information for the students because of the capacity and ability of students to get that information locally.

In general the data shows that access to supporting learning materials has been a challenge in the past and will be for future EM programs in Ghana. However, opinions about the issue of availability are quite diverse and closely tied to respondents' view of Ghana's difficulty with information communication and technology. Those who consider only hard copies of learning materials seem to view learning materials as non-available to Ghana in the past and going into the future. While those who identify electronic materials believe that availability will not be an issue, except for access to internet.

Professional Legitimacy

In the future, for Ghanaian programs to succeed, professional legitimacy will be necessary. Professional legitimacy can be understood as the recognition and approval of an EM higher education program by a country's EM practitioner community. In the case of Ghana, professional legitimacy has not been an issue in the past because there has not been an EM degree program yet and the training program it has sought to begin has been driven by practitioners. But, it appears that there will need to be professional legitimacy for two main reasons.

First, if the practitioner community feels it has been involved in the program's

development, they will have buy-in into the program, and they could improve the quality of the

program that is being offered. If they are not involved and engaged, then the program is not

going to enjoy the level of professional legitimacy that it would have otherwise. The

practitioners have to be engaged in the program's development itself. Specifically, NADMO has

to be engaged in program development, if not the program will seem less legitimate.

> There are theories that can be taught from the stand point of GIMPA you know that
> would help the local people in performing their emergency management duties and there
> are also local emergency managers and the local people who participate in emergency
> management activities that can add to their real world experience, academics, and that
> will assist in making training and education better.

> You have to have the support of the disaster management agency of the Nation, they have
> to endorse the program that the university or the academic organization is providing.
> They don't only have to endorse it but they have to help them find participants, you have
> to have some way to deliver the message nationwide that works.

> …so I think NADMO should be responsible to foster an academic world and to oversee
> the practitioner world. so we are trying to establish something brand new and make it
> work right away, I think that the relationship between NADMO and GIMPA, so that
> GIMPA understands and the academic world understands what is emergency
> management or disaster management in Ghana, what is the need in Ghana.

> Well, maybe I would say yes but only in the perspective that it's their employees that are
> the prospective students. They also want to make sure that all the emergency managers in
> the country you know meet certain guidelines and standards and that sort of thing so I'd
> say they have an interest in it…

Second, there will need to be a match between what NADMO needs and what students

are receiving in terms of training and/or education for the program to be perceived as legitimate

by practitioners. The academic institutions need to produce students that can be employed into

NADMO, through internships or paid positions. The data showed that existence of professional

legitimacy has the potential for practitioner community to provide students with internship

opportunities, and to employ graduates upon completion.

NADMO wants to be able to get people who know what they are doing without having to invest tons of more time, they can direct more attention to their operational piece. So they just want to be able to support—they don't wanna to be tasked with educating right? So that's kinda where they are coming from so if you could do that.

Apart from strengthening their capacities, if students come out of these institutions, they are also going to work in areas. Some of the areas will border on disaster risk reduction. How well are they equipped to function in that institution? How well are they equipped to function so as to benefit the whole Ghana in terms of disaster risk reduction knowing that one act of disaster can erode all the gains the country has made.

Well, the only thing I can say is there needs to be a partnership between NADMO and one or more higher education institutions over there to really kind of flush out what an education program is, what type of core competencies they need to be teaching students so that graduating students can then go out and help the nation improve their disaster management capabilities and that's gonna be key. It can't be something that is just dictated by higher education because they will miss some of the needs and it can't be something dictated by NADMO because they need the higher education institutions in implementing the education and provide it so I think environment wise that partnership is going to be key.

Respondents believe there will be the need for institutions with the interest of starting EM Hi Ed programs in Ghana to gain professional legitimacy in order to ensure buy-in from the practitioner community, which would help guide the program development and maintenance, and also provide internship and job opportunities to prospective students of the programs. Professional legitimacy would also ensure sharing information on current practices and knowledge gained from research between the academic and practitioner communities.

Curriculum Standardization and Accreditation

Curriculum standardization can be used to explain the decision to either adopt standardized curriculum or customized ones in the effort to establish EM education programs, while accreditation refers to the approval of EM programs by national academic accrediting bodies. The issue of accreditation and curriculum standardization is another factor that did not emerge out of the data. The researcher probed for the responses because the literature suggested the issue of accreditation and curriculum standardization might be important. Therefore, the

researcher probed directly whether or not this factor has been an issue in the past or might be in the future. Curriculum standardization and accreditation do not seem to be an issue in Ghana's past efforts. The reason that accreditation and curriculum standardization have not been an in the past is because Ghana has not been trying to develop a degree program. But if the country ever does in the future, respondents reported there might be issues with accreditation but not with curriculum standardization.

The decision to adopt a customized or standardized curriculum does not seem to be much of an issue for future programs. However, seeking accreditation for new programs might be difficult for future programs because the accreditation process is a multifaceted one which requires that most of the challenges reported earlier, such as faculty issues and institutional support, be resolved before seeking accreditation.

With respect to curriculum standardization, interviewees stated that not only has the decision to adopt a standardized curriculum not been an issue, but there is no need for standardization whether by interested academic institutions in Ghana or EM academic institutions globally. The only part of Ghana's EM curricula that respondents thought needed to be universal were courses that teach basic tenets or principles of EM. Respondents believe that other than the principles, future EM programs in Ghana should customize curriculums to suit the type of academic institution (e.g., Public Administration), and the geographic hazards of the local area. Hence, programs would fundamentally differ in the curriculum content from one institution to the next.

> Oh no what you should bear in mind is that whatever disaster management program you want to put in place must be structured to meet the needs of the particular country, so in this case Ghana. So that should be the rationale behind not what the institution wants. It has to meet the needs of Ghana so the standard one would have to be amended or restructured to take into account other factors which are relevant to Ghana.

You know Ghana has variety of threats, natural hazards threats and they would differ depending on what part of the country you were. Every part would be different, different chasm, different threats in the coastal parts around Accra. So I would imagine that each jurisdiction would need to have customized curriculum that would help educate and train on their particular threats.

Well there should be the standard, however, each school will have its orientation like you remember like even the GIS stuff there is a standard that may impact each school depending on its orientation somehow, would do one or two things differently but the fundamentals, the principles would be the same. So for standardization yes, but there should be flexibility for a school to do things according to their orientation.

In summary, respondents are of the view that curriculum standardization for future programs in Ghana is unnecessary and that it would not be a problem. In contrast, obtaining accreditation appears as a looming hurdle in program development process. This is because the accreditation requirements span a variety of concerns from having the required infrastructure, competent faculty to program out-come and benefit to society. In the Ghanaian case, although the National Accreditation Board (NAB) requires that any program developed at the higher education level must have faculty, a convincing program benefit, and curriculum (NAB, 2012), respondents could not state emphatically if that has been a problem in the past since the EM Hi Ed program development has not been actively pursued. However, going into the future, respondents believe that the accreditation process might be a cumbersome but necessary process to ensuring quality education, beneficial programs, and international recognition. They added that in as much as the process seems complex, it all boils down to following procedures and abiding by the standards of the NAB. Besides, only programs seeking to award graduates with higher degrees like bachelors and beyond are required to seek accreditation.

I mean there are some requirements that need to be in place. First, you have to develop the program, tell them what the course contents are, what would be the course outcome you know in terms of capability, competency and all that. So all these things must be put in place, get accreditation before you can start the program.

Well, it depends, with due respect oh if you go with not fully prepared program, not clearly articulated and all that then obviously you will run into problems. They look for, and I have participated in a number of accreditation things. So I can tell you the things that they look for. There need to be an established faculty, evidence that you have a very strong faculty to run the program. They need physical structure to see whether you are ready to run. Thirdly, more importantly, they want to see that you have resources. These are very critical.

Well, accreditation has to ensure that you don't get…somebody will say I'm running a university when in actual fact, he doesn't even have maybe infrastructure. So accreditation is there for checks. Even here, once we came here, the government appointed two officers and we have to show our programs and submit them to the accreditation board for approval before we started. And we all agree that it is a very useful exercise otherwise we cannot have international recognition for our education. And as I'm saying once you have the green light from the Ministry of Education, all these will fall into place. In fact, [sometime back in] GIMPA, all those programs we have been planning for years, we were asked to resubmit them for accreditation. Because they thought that the curriculum were not properly written. So surely but don't be worried about accreditation. Once you are doing the right thing they will always pass through. My contact with them shows that we have very experienced educationists in Ghana.

The data show that curriculum development and accreditation have not been an issue in past efforts due to the type of program that the country was striving to establish. That is, Ghana's past efforts have been more towards disaster management training than education. Meanwhile, respondents believe that curriculum standardization will not be an issue or even necessary if only future Ghanaian programs cover the basic EM principles and that accreditation will be a difficult but doable task when degree program would be pursued.

Autonomy and Administrative Location

Autonomy issues refer to challenges in the establishment of EM programs as stand-alone or independent departments, while administrative location issues are related to challenges of the opposite scenario where programs are placed under other more established programs or departments of academic institutions. The issue of autonomy and administrative location is another factor that did not emerge naturally out of the data. The researcher probed for these responses because the literature suggested there are difficulties in running EM programs under

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another department as compared to an independent program. Based on that, the researcher

probed to ask directly whether or not autonomy had been an issue in the past training program

efforts and whether it would be an issue for future EM education programs. The data shows that

challenges associated with administrative location and autonomy have not surfaced in Ghana's

past efforts since these issues are more related to degree programs, which have not been Ghana's

focus. Nonetheless, respondents speculated about the potential challenges that Ghana might face

running EM programs independently or dependently.

Respondents believe that there might be challenges as well as benefits of running future

EM programs under another department versus going solo. These issues include managerial

challenges and the availability of resources. Therefore, respondents would not recommend one

method over the other.

> I think anytime you branch things out into different branches, you have to put somebody in charge of the branch and then if there is that thing of pride and you have people that want to protect their program, and there is a potential for them, the different programs overtime start competing with each other for whether it's resources or money for their program, and that's why maybe it would be good to have it completely separated but on the other hand, you can gain efficiency by not separating it.

> It would depend on the department. There is pros and cons I mean you know. There is definitely pros and cons to both scenarios. There is being under somebody else, and there is being independent. There is a lot of responsibility in building a program that is independent of another administration, there is pros and cons to both scenarios.

Although the participants would not specifically choose developing programs autonomously over

being embedded within another department, when asked, respondents seem to be more in favor

of placing future EM programs in Ghana under other departments, at least in the beginning. And,

the majority of respondents deem public administration as the best fit. The responses in favor of

public administration stem from the fact that GIMPA is a management and public administration

institute which has shown interest in developing an EM program and that a number of the

respondents in this study work for the institute. In addition, respondents with this opinion believe

that emergency management is more of a function of public services and government

organizations.

> I do like it within public administration, I do think it's a good fit in a public administration program but it really depends on the program. You know GIMPA is an incredible vehicle in building an emergency management program and they definitely have the resources, the name, and acknowledgement but it could be anywhere that seems appropriate.

> Maybe it could be under public administration, because you are governmental agency, you are under the Department of Interior and you should understand the laws in Ghana, you should understand how to administer the program, it could be a stand-alone program but there can also be a doctorate, a masters degree, you know different levels and um it could be a stand-alone program that certifies you in emergency management. And there could be another masters degree that you gain as a more broader it goes beyond emergency management but it also talks about government and laws and so that your midlevel managers in NADMO more aware of you know the political situation in Ghana, the funding situation you know.

> So they were looking to pull all those people, so that government people…so that makes sense to them to be in the public admin and that's fine because all programs start in different places. In the United States we have many programs in addition to public admin and for the purposes of Ghana then right now to be honest, that's where they have the biggest need for emergency management they really aren't even looking at the nonprofits right now. Because those have been brought in by humanitarians right? Outside groups, outside nonprofits are coming in. What they are looking at is government capacity so public admin.

Probing revealed that, interviewees believe that issues regarding autonomy and

administrative location have not come up in Ghana's past efforts due to the type of program that

the country has been trying to establish. That is, Ghana's past efforts have been more towards

disaster management training than development of an education program. However, respondents

think that establishing EM programs as stand-alone or under another department has their

peculiar challenges and benefits. Most respondents suggested that future Ghanaian EM programs

will be better placed under the department of public administration if and when the need arises.

<u>Conclusion</u>

Ghana's efforts, to date, have been geared toward developing a disaster management training program with the intention that, a successful training program would allow the country to slowly learn and build capacity to eventually develop one or more degree programs. The efforts towards the supposed training program have proven futile, which respondents attribute to the following six factors: institutional support, formal partnerships, advocacy, funding, program marketing, and cultural factors. A second set of six factors emerged in discussions of past experiences: the potential of a future EM degree program probing informed by the EM and the general education literature. The factors probed included faculty issues, students issues, supporting learning materials, professional legitimacy, accreditation and curriculum standardization, and autonomy and administrative location. The practical and theoretical implications of these findings for the emergency management discipline are discussed in the next chapter.

CHAPTER SIX: FACTORS EXPLAINING OTHER PROGRAMS' DEVELOPMENT

As the research was unfolding, the researcher learned about other newly emerging fields other than emergency management (EM), which have succeeded in establishing degree programs and are currently offered in Ghana. Specifically, the researcher became aware of the Fire Science and Safety Management Program at the University of Energy and Natural Resources (UENR) which started in 2011; the Family and Reproductive Health program at the University of Ghana (UG) which started in 1995; the Renewable Energy Technologies program at the Kwame Nkrumah University of Science and Technology (KNUST) which started in 2010; the Environmental Management program at the University of Development Studies (UDS) which started in 2008; the Aquatic Resource Management program at the University of Development Studies (UDS) which started in 2008; and the Environmental Science program at the University of Ghana which started in 1998. The researcher was interested in why these programs began and the factors that helped their process and some challenges that they faced. The researcher was also interested in how these factors might compare with the past efforts to start a training program and future efforts to start a degree program.

In all, six interviews—one interview from each program—were done to explore this topic. The results of the interviews with faculty members in these other programs are reported in three sections in this chapter. The first section presents the factors that emerged out of the data analysis with respect to respondents' experience regarding factors that made it possible for their programs' establishment. The second part of this chapter describes inherent challenges to the programs. And, the third part compares the factors of these other six programs to EM program efforts in Ghana.

<u>Factors Supporting the Programs' Development</u>

Data analysis of the general responses delineates mixed factors that influenced the development of these programs. Although the sample includes only six programs, each appear to have slightly different combination of factors that contributed to their success. But, on the whole, five main factors contributed significantly to the establishment of these new degree programs. These factors include funding, international partnership, advocacy, institutional support, and institutional criteria.

Funding

Funding, as used by respondents, referred to financial resources that helped them in the initial stages to organize stakeholder meetings, hire new faculty, and also pay allowances of those who developed the general program and curriculum. Respondents also reported that funding was very essential in the efforts. The programs could not have started if it were not for the initial availability of funds.

> My dear if it wasn't for that we couldn't have done it. That was about half a million Euros. It was a lot of money, and we couldn't have done it because um it wasn't only this program; actually there were four activities, short courses, renewable um this um …there were about four activities and every activity had budgets that we had to use because there was money for every activity. And um every activity couldn't have been done without the funding. So these funding are very good for Africa. So without the funding I don't think … we couldn't have done it.

The funding support seemed to be a consistent need irrespective of the program. According to one respondent, funding was needed in the development stages because the program is able to generate fund to sustain the program. As one official stated,

> After the funding, we are self-sustaining at the moment because it's a fee paying program. Students pay to do the program so that is how we get the money to run this program. It's a fee paying program.

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The data show that the sources of the funds that enabled the programs' development came from both external and internal organizations. For some of the programs "it was financed by ACP education which is a European funding body" while for others, "[Ghana] government supported us financially to build the lab and also to recruit staff for teaching". These funding situations did not have to be available on the basis of a partnership between the academic institutions or departments and the funding bodies. For some programs, it was a one-time funding opportunity provided to support the programs' development. However, there were some programs that had to partner with outside institutions to access funds among other things, as reported in the following section.

International Partnership

Partnership with external institutions seemed to have resolved a number of the factors that were needed to get the programs started. Partnerships with regards to these programs fell along a continuum from a minimal sense where a foreign institution provides a one-time lump sum for programs' development all the way up to the other end of the continuum where the external partner helps in developing curriculum, shares teaching and learning materials, and provides financial support. Respondents recounted that their program partnership with more established external institutions was an immense contribution because they received funding support that helped in starting their programs.

> There was funding from … [a major U.S. university] during its establishment. So because there was funding, the funding facilitated the um development of that program and you wouldn't be surprised that it was one of the few departments that put their act together and had a comprehensive resource, course models, course outlines, and then um even admitted most of the students um in the school of public health. Um that was possible because of the funding. Most of the students who were admitted a few years ago were sponsored through that.

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The international partnership, apart from financial resources, also provided some of these newly established Ghanaian programs with curricula, transferring and sharing of learning materials, and teaching guidelines to faculty members. Respondents found the collaboration and access to these resources very helpful since they did not have to reinvent the wheel in every aspect of the process, but adopt most the things and adjust them to fit their needs.

> …there is also other universities from outside Ghana who contributed to the development of the program that are being taught here. I think … [University X] for example, has shared some of their course materials, um the course outline, the course readings with the faculty at the department …And so that was important, the fact they are established in development of the program, doing collaboration with them and learning from them I think is important. You may just have to extend a little bit of your time contextualizing what is already being taught there so that um you may do some little adaptation. You adopt it and then adapt it to your setting. And so it's important to collaborate with those who are already having similar programs elsewhere.

Partnership with external academic institutions seemed important in providing access to funding and learning materials. It also created an avenue for faculty members to receive guidelines from more established programs. However, the idea of partnering and making contacts to enable access to these benefits required the presence of one or more committed advocates or stakeholders.

Advocacy

Despite the fact that funding, and partnership in some cases, were seen as major factors that helped these programs to develop, some respondents added that true commitment and the presence of an untiring advocate also played a significant role to get their programs established. Commitment was mostly available through a dedicated stakeholder who went the extra mile, by doing everything possible within his or her capacity to make that happen.

> I think one thing I can say is that dedication. For instance, this … [X] program, everybody had his own activity and this was my area and I wanted to make it work. So I think you know the enthusiasm of myself ok, then from the whole group you know. One person has to be determined to help with the idea. I think that is what I can say. Because

many people thought that it won't work…and it has worked. So I will say that maybe because I wanted to make it work. You need a dedicated champion. Somebody will think that it's a collective responsibility but there is always one person who goes the extra mile, and when everybody has gone home then you are behind it in the office doing the extra.

A committed advocate was necessary in ensuring that some of these programs got off the ground. Advocates worked tirelessly to bring all stakeholders together, write proposals and solicit for funds, and do most of the clerical work that laid the ground for the programs' to gain institutional support when there was not yet staff for the programs. Having had an advocate, respondents believe, there is the need to gain the support of the academic institutional heads in order to carry the objective forward.

Institutional Support

The presence of institutional support seemed to be another significant factor without which establishment of any program is impossible. Institutional support in this case refers to approval of academic boards and other heads of the academic institutions. Respondents believe that development of their programs was possible because of institutional support. This type of institutional support is mainly earned after going through a series of program reviews and scrutiny. Nonetheless, it was necessary for the leadership to provide their consent and blessing because nothing can be done without this kind of support.

> As I said, nobody can do anything in the university unless you get the approval of the academic board or the extended so to speak and that's the foreign body [external to the university but within Ghana] before it goes to the main council, but it wasn't that difficult.

> KNUST always supported us because before you do these things, all the MOUs we had with other schools, we have to go through the KNUST so KNUST always support and they have to approve our program and all that…

For some of the programs, the institutional support extended beyond approval from the leadership; they also had financial support which the participants believe was helpful to their

program developing. For instance, one respondent was of the view that "… the leadership has been in support. I think definitely without their support it would have been difficult, they supported us financially".

Institutional support appeared inevitable to any program's development. The support in this sense consists of either mere approval from the leadership of the academic institutions and/or their support in terms of committing financial resources to the programs' development. But there was a way to gaining the institutional support, which some respondents believe was a necessary factor to earn institutional support. This factor—institutional criteria—is presented in the following section.

Institutional Criteria

Every university in Ghana has a set of procedures that individuals associated with degree programs must complete in order to be considered for approval. Accordingly, the data show that there were institutional procedures that the programs had to follow to ensure institutional approval and subsequent support. In most cases, the procedure involved meeting several criteria including the ability to present a convincing need assessment for the program.

> The fact is that we were able to defend the need that we need this kind of program at the university here so you have to go to the authorities and defend your project.

> What we have to do is first examine whether the program will be relevant to the economy. You also have to look at whether there are expertise in the area. If there are no expertise at the moment, then how do you cope with the teaching and accreditation? You also find out whether you have the structure, we have laboratory, we have um the required resources and materials to help start the program.

Apart from proving the need for such programs, the procedure also ensures a proof of readiness in terms of the programs' teaching and learning resources. These include developing curriculum and course outlines, identifying learning materials, and evidence of availability and access to expertise that would teach the proposed courses.

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To develop a program we have to look for personnel. And once we got that out of the way, we had to also develop the manual. In fact, the course manual also comes under the teaching. I think under the teaching, I'm not sure how we actually categorize it. So the course manual, course license also comes under the teaching. You have to also get people to draw the outline for every program. And also look for people to actually write it. Once you get the courses written, then you have to get a hard copy and soft copy because of electronic delivery to the concerned individuals.

I think the institutions have the will to approve it but they have certain procedures that must be followed. I think in the interest of producing a quality product, in other words, the program must be good.

The ability to meet existing institutional criteria appears very useful in the programs'

development. But despite the fact that these programs have surpassed the development stage and

are running, some participants view the process as unnecessary red tape which unduly slowed the

program development process. The series of procedures that the new program had to undergo

before getting approval from the leadership of their intuitions seemed tedious to some

respondents. The data show that although these requirements were established based on good

intentions that will ensure development of only good quality programs, the measures tend to

cause unnecessary delays and challenges to the process.

> The main one has to do with the procedural delays in the development of the courses. So for example, if you um develop a program and by a program let's say bachelor of public health, or PhD in public health, as a program you would go through a series of um first, getting the proposal developed and then received by public administration and so there is education committee board at the school that will review the pack and once that is done, it has to go to another level still within the school, the school's board. That is the second level of review. After that level of review, it then goes to the college level. Um at the college it's reviewed and then finally sent to the university's academic board. And there is another level of review. So I have just summarized all these reviews but sometimes it can take years for um these processes to be complete … I think in the interest of um producing a quality product, in other words, the program must be good. And so those checks and balances have turned up to be rather inimical to the development of those programs. So they may be interested in promoting program development yet, those checks and balances that they have consciously put to ensure that the final product is of quality end up to be bottleneck.

Yet, the process gives program advocates and stakeholders the opportunity to earn institutional confidence and perhaps financial support, by proving the need for the program as well as the readiness to offer such higher education programs. And, although these new programs were successful in starting, the reader needs to be aware that these programs still face serious challenges that make them seemingly unsustainable.

<div align="center">Challenges to Program Sustenance</div>

Even though the programs were successful in starting, it must be noted that these programs may disappear. Only the minimum requirements were met to get started; and the supportive factors that were there when the programs started are not there now. The data show three main challenges that threaten the growth and/or sustenance of these programs are the following: faculty issues, access to learning materials, and student issues.

<div align="center">*Faculty Issues*</div>

A lack of sufficient expertise to teach the courses was a challenge in the beginning and continues to be even when the programs have started offering degrees to students. Only the minimum number of the supporting factors seemed to have been present to get some of the programs started. Despite the fact that these programs are off their feet and running, respondents explain that there are struggles of getting the required number of faculty. This appears to be a general problem in Ghana's higher education.

> At the school of public health, it's relatively young so, a little over ten years so, and of course it's also typical of a number of departments at the University of Ghana, we are short of faculty. So thinking about program development sometimes the number of faculty results in lack of motivation or demotivation in developing new courses. The few staff are already struggling with the courses that they are teaching right now.

Although the challenge of assembling enough faculty seemed universal to programs in the country, the data show differences in reasons for such shortages. For some programs, it is the

relative newness of their programs in Ghana that explains the shortage. Some respondents even

believe this lack of expertise in their field is an issue for the whole African continent and not

only Ghana. Therefore, the programs need to send members overseas to acquire knowledge and

the expertise in the fields to be able to teach.

> The challenge is to have um local capacity. Since you know we've never had bachelors degree in the program we need to send people abroad to have them trained. Then we can bring them on board. That is the only thing.

> …because it is … [program X], because it is a course as well like one of the conventional programs that we do here in Africa, but these technologies are quite sophisticated… I think one of the problems that I have encountered through the application of this… [program X] is the lack of expertise. Not only in Ghana, in Africa we don't have the expertise. That is why this technology has not been widespread. And so we developed the program to help build the capacity you know in this … [X] technology … we are limited in terms of capability. We have a few of our people that are outside studying these things but are not looking to returning home so we try and poach them. That's what we are doing.

Other respondents attribute their inability to attract and recruit the needed faculty to the location

of the institution. It is believed that geographical location of the programs seems to be too rural

and unattractive to most people with the requisite knowledge in the country.

> Even up to now it is an issue, it is very difficult to get faculty because, where we are situated there are not so many experts always available, so we try to develop from our own formal students who have gone out for training, sometimes in the country, sometimes outside the country and trying to create the necessary stand…

And, for some programs faculty issues are somewhat tied to funding issues through inadequate

compensation and poor conditions of service.

> people are not motivated to come into the academic field because of a number of reasons, financial related reasons. Um you will recall that um the lecturers in Ghana went on a strike because dissatisfaction with remuneration. And this is chronic. It's perpetual and so that alone will seem as demotivation for people who are probably interested in coming not to come.

> The ability to recruit and retain the required number of faculty appears to be a challenge

that has been with these programs from the beginning, and will continue to be, for a while. The

reasons for this situation, however, are quite varied and differ from one program to another. While some participants view the cause as a result of the sheer novelty of their programs, others believe it is a general problem in Ghana which is directly related to low salaries and unsatisfactory terms of employment.

<p align="center">*Learning Materials*</p>

The data analysis shows that knowledge of, and availability of learning materials did not seem to be a problem for these new programs that are established in Ghana. The programs have identified several electronic sources and databases of foreign institutions with which they have some type of relationship and/or agreement that allow students and faculty to access the external learning resources.

> Our library has very good electronic resources in terms of databases, access to various libraries and so on. In terms of paper books we also have some but that one I think is becoming kind of outmoded with students, but in general we have resources that um what do you call it, can be accessed electronically and I think they are quite good up to the PhD level.

> For textbooks I will say we have enough textbooks but we have links with libraries outside, we talk with some of the universities that we have collaboration with which provides huge help.

> These days thanks to internet we have a lot of information and the university is linked to several libraries. I cannot mention them now but very reputable libraries and students use the e-library and then the lecturers also recommend books and then the lecturers also write lecture notes that the students can use. And then we have a lab.

> Some of the resources that are used in the U.S. universities are actually available here and so for um articles, relevant journals in the courses that are being taught here, um universities have an agreement so both students and lecturers have access to um current articles that are published in um most of the international journals…

It is, however, the access to these identified resources that seemed to be the main hurdle with regards to learning resources. Since most of the learning resources for the programs are electronic and external to Ghana, as explained by respondents, there is a need for good internet

facilities and access, but that is not the case in the institutions where these programs are established.

> The problem though relating to the access has to do with internet facility. We do have internet but um sometimes um it's very erratic and so you may have internet today and tomorrow you do not have.

> Internet connectivity is also a big issue especially in this part of the world where there is frequent power switch when you are in the middle of the class. We also have a problem of bandwidth so people will be connected and all a sudden they are not hearing anything, the line goes off or the internet goes off so these are some of the challenges...

While most of the programs seem to have a good idea about sources of learning materials and have already made arrangements to enable access by students and faculty, the issue remains of poor internet connections. This has become a challenge mainly due to the fact that most of the learning resources are increasingly becoming electronic.

Student Issues

Student issues for these programs primarily involve difficulty of affording tuition and other program related costs. Respondents believe that enrollment has never been an issue, and they do not foresee any shortage in the number of prospective students. In fact, they think that more than enough students apply to their programs.

> The challenge we have though has to do with not being able to meet the needs of the many qualified applicants who apply to our program. Our program is one the few that are most thought of anytime so we sometimes less than fifty percent of those who apply to the program. We don't have problem with enrollment.

> We don't have problem with enrollment except the normal ones which are with every university in Ghana, and I think not only in Ghana, that is those who are going for social study programs are normally more than those going for sciences. And I think that problem is common across everywhere. But in terms of we having shortage of people to apply, we don't have that kind of problem.

Similarly, setting admission criteria has not been difficult since the programs have predetermined and fixed requirements for admitting students. Although the requirements vary slightly from one

program to the other, they seemed to be well detailed and there is no problem with identifying

qualified students.

> We set it up with what we call CWA, we use the cumulated weighted average so any student that has CWA of less than 55 will be given like a little examination and basically a little interview. If you get less than 55 CWA or CWA of less than 55, we will interview you and give you the test. We will give you the test first and if you pass then we interview you…

> This is a science and engineering university and the students who are going into the school of natural resources must have um credits in physics, biology, maths, and integrated science and English. These are the basics one needs to have before you can enter the school.

> We cut across all. We have criteria for those who are working and want to improve upon their knowledge and those who are just coming from SSS[Senior Secondary School]. We can get people who are already working and have diplomas, unless they already have bachelors then we give them a post graduate diploma or masters.

The main challenge with regards to student issues involves the difficulty for students to pay and

the difficulty for the programs to access scholarships or financial aid to support their students.

The challenge of accessing funds to support their students seems to have been a continuous one

despite the fact that the programs have been in operation for awhile. The funds, according to

some respondents, are mostly needed to support graduate students.

> …and the financial hurdles in running the course...most often students ask, are there any avenues for scholarship or fellowship? These have been difficult but at the moment we are thinking about how to assist. We've had general collaborations with Canada, and UK, Netherland, and Germany, so we hope to get some of that…

> …it's a major problem. Actually at the PhD level, there are a number of very qualified applicants who are turned down by virtue of the fact that they haven't provided enough evidence to support their application and their ability to financially support themselves during the course. So it's a major problem. And I think the other thing is that the fees have been reviewed upwardly. It is not like the amount you are asked to pay in the U.S. and other places, but the little that they are asked to pay um is still difficult to come by. So it's a major problem. And in the universities here we don't have lot of funds from the university supporting applicants…

> Some [students] may not even be working in companies so they are paying the fees themselves, and I think that is an issue … But what we do for them is that um for

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instance, last year we came up with a payment plan as some kind of credit over a period of time so that they can pay.

The other new programs in Ghana developed due to funding, partnerships, institutional support, and advocates in the initial stages, but it seems that at least funding is not continuous, making it difficult for them to support their students. And, the students are not in a position to support themselves, according to the respondents. This situation seems problematic for the continuity and growth of these programs. In order to properly evaluate the likelihood of future EM degree programs not only starting but also thriving in Ghana, the next section compares these facilitators and inhibitors to those found in the EM experience to determine what cues need to be taken from their success and challenges.

<div align="center">Conclusion</div>

Irrespective of the challenges that might be faced in efforts to develop an EM degree programs in Ghana and the fruitless attempts to get even a training program started, at least six other new degree programs have been successful in starting in the country. The data show that factors that were present to make these programs start include funding, international partnership, advocacy, institutional support, and ability to satisfy institutional criteria. These factors will be critical to degree program development in Ghana but they are also more broadly necessary in terms of other new disciplines. In addition to these factors, the results show that EM program development has at least two unique issues to grapple with, which are professional legitimacy and autonomy and administrative location. Moreover, although these programs have been able to start, there are challenges that make their continuity and growth uncertain in the country, and these challenges are very likely to impact the success of any EM degree program that may start in the country. The significance of the results from the data related to the other degree programs

in Ghana is interpreted in the following chapter in addition to the significance of the results from

the data related to Ghana's interest in initiating a training and/or degree program.

CHAPTER SEVEN: DISCUSSION

A country of approximately twenty-five million people (World Bank, 2011) and per capita gross national income of $3,300 (CIA, 2013)[7], Ghana grapples with persistent socio-economic vulnerabilities and several hazards—both man-made and natural. The country's vulnerabilities include a high illiteracy rate of 35.5 percent (Blunch & Verner, 2000; Ghana Statistical Service, 2008), high poverty rate of about 33.3 percent (Adjasi & Osei, 2007; Awumbila, 2006; Lund, Dei, Boakye & Opoku-Agyemang, 2008; Grant & Yankson, 2003; Whitehead, 2006; World Bank,1995; World Bank, 2010), and an above natural unemployment rate[8] of 11 percent (CIA, 2013; World Bank, 2013). The main hazards that Ghanaians interact with include perennial floods (Addo et al., 2011) and fires (Agbenorku et al, 2010), earthquakes (Amponsah, 2002), pests and insect infestation (Kovacs & Spens, 2009; Tanzubil & Yakubu, 1997), and epidemics (Leimkugel et al., 2005). But despite these hazards and vulnerabilities, Ghana has had a history of struggle to prepare effectively and mitigate these hazards (Adinku, 2005; Ahenkorah-Marfo & Borteye, 2010; Akussah & Fosu, 2001; Allotey et al., 2010; Frimpong, 2007; Oteng-Ababio, 2013; Senya & Lamptey, 2011). Meanwhile, some Ghanaian educators and EM practitioners have signaled the desire to address these issues through emergency management training and education program development as a means of indirectly reducing Ghana's vulnerabilities by increasing the capacity of NADMO staff.

The desire to start EM training and education programs in Ghana began at least three years before this study started. Ghana's past efforts were directed at initiating a training program and the country has a long-term goal to develop one or more Hi Ed degree programs. The initial

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[7] The per capita gross national income of $3,300 for the year 2012 is about 7 percent of United States' per capita gross national income (World Bank, 2013)

[8] The Natural Rate of unemployment is the acceptable rate of unemployment, which is due to the process of job search and job preferences, rather than economic downturn (Salop, 1979).

training program was intended to allow Ghana to test the waters, gradually build internal

expertise, and lay the foundation for a full-fledged degree program, while meeting the immediate

training needs of the practitioner community—the NADMO staff. Yet, Ghana has made no

progress in starting—and there is no current effort underway to start—a training program much

less a degree program.

This study found a range of factors that explain why Ghana has yet to develop a training

program. These factors would need to be addressed if the country is to see a training program

develop in the near future. This study also found that these same factors as well as a number of

additional factors would need to be addressed if the country is to see a degree program develop

at some point. The factors and their significance for any future effort to begin a training and/or

degree program are discussed in the section to follow. Specifically, section one discusses the

significance of the emergent factors affecting EM program development in Ghana; and, the

second section discusses the significance of the literature-based factors as well as the unique

factor discovered from the interviews with other degree program representatives for EM program

development in Ghana. The third section discusses the theoretical significance of this study's

findings while the fourth section suggests how the findings of this study might be practically

applied.

<u>Emergent Factors Influencing Training and Degree Program Development</u>

The factors were grouped into two main categories so as to differentiate between the ones

that emerged naturally from the data and those that were either probed or directly inquired about

by the researcher based on what the literature indicates influences higher education program

development. The factors that emerged unprompted were different from those found in the

literature in large part due to the fact that Ghana's past efforts were not directed toward

developing EM degree programs although it was found that these factors would likely need to be addressed before developing either or both a training program and educational degree program in Ghana. The main factors that emerged without prompting were institutional support, partnership (international and local), advocacy, funding, program marketing, and cultural factors. This section will focus on four of these factors, partnership, institutional support, funding, and advocacy because two factors, program marketing and cultural factors, can potentially be addressed through first addressing one or more of the other four factors.

In the Ghana case, it would seem that the existence of an advocate is the critical factor that would propel the development of either, or both, a training and a degree program in Ghana. The type of advocate needed is not just a person, or group of persons, that generally supports program development but a person that has a vision of what a program in Ghana would look like, the elements that would be required to realize that vision (including the factors identified in this research), and the knowledge, skills, and abilities to facilitate the development of the required elements.

Among the factors that the advocate would need to facilitate is the development and sustainment of institutional support within key organizations. At minimum, realization of a training program will require institutional support in NADMO and at least one other domestic organization that would be able to provide facilities and other resources for program development. GIMPA—a higher education institution—has been the organization engaged previously, but GIMPA would not necessarily have to be organization engaged going forward. GIMPA was approached because it serves public officials, because individuals involved had pre-existing relationships with people at GIMPA, and because GIMPA was perceived to have the facilities and resources that would be required to offer a formal training program. GIMPA is the

ideal organization for NADMO to engage with because the country desires an eventual degree program in addition to a training program. Yet, since its priority is to see a training program develop, an advocate could look to other domestic organizations where the necessary institutional support could be built if institutional support does not exist within GIMPA and efforts to build support fail. When Ghana desires to begin a degree program, institutional support will have to exist within more organizations than those related to training. At minimum, NADMO, one or more higher education institutions in Ghana, and the Ministry of Education will have to support the effort.

Institutional support will be critical for training and degree program development. It will have to exist at a high level within involved organizations because funds and other resources will have to be committed initially and on an ongoing basis to the program(s) that develops. High level support will also be a means of overcoming the cultural factor of time that emerged from the data. When those in upper administration in organizations in Ghana support programs, they can direct staff within their organizations to act quickly. The support will also have to exist at lower levels in the Ghana case—particularly within the government organizations if a program is to develop and endure. Support at lower levels will be required so that progress toward program development can continue even when political upheaval follows Ghanaian elections. Lower level supporters can provide support and retain institutional memory regarding previous progress and work to engage new officials as they replace old ones. An advocate could potentially nurture commitment at more than one level by identifying and reaching out to the appropriate contacts at each institution, effectively articulating a vision for the program and how the organizations fit into that vision, introducing various organizational representatives to one another, and engaging the organizations in partnerships.

Partnerships, in addition to, and building on the existence of institutional support in key organizations, will be required to see a training and/or degree program materialize. Ghana's past efforts to initiate a training program were grounded in informal partnerships between GIMPA, NADMO, and foreign organizations. These partnerships were viewed as necessary by respondents. And, the data demonstrates that the partnerships were valuable in allowing the country to begin to explore the development of a training program and offering two successful training courses. Yet, these partnerships were not sustained; and, when they were not sustained, the pursuit of a training program ceased.

Part of the reason these partnerships fell apart was an erosion of pre-existing institutional support in the organizations involved and part of the reason was the informal nature of the partnerships. The rights and responsibilities of the parties involved were not articulated clearly or in writing. The appropriate individuals at the organizations involved did not commit their organization to the partnerships in a formal way. Hence, it is unsurprising that there existed confusion regarding what the Ghanaians' expectations were, "when we first met with them I was not very clear on they wanted", "it was probably very difficult because we were given very little guidance from our host in terms of exactly what they were looking for so the parameters were very general". It is also unsurprising that partnerships came and went (e.g., the NADMO/GIMPA partnerships with NDSU and FSU) in the absence of a formal agreement. If partnerships are necessary going forward, as respondents perceive them to be and the data suggests, then it is also necessary that they are formal ones. This is true for any training program that might develop and it is true for any degree program that might develop.

In the Ghana case, an advocate will be needed to build institutional support and facilitate formal partnerships. This individual/group of individuals would need to see what institutions

need to be engaged and where partnerships are required. This individual/group of individuals would need to identify and work with the appropriate individuals within the necessary institutions to build internal support for program development as well as the articulation and formalization of partnerships with other organizations. When the institutional support exists and partnerships form, the partnerships can potentially address two other key factors identified through this study including funding and program marketing.

Funding issues seem to be a significant factor that has been, and, likely, will be, an obstacle to program development in Ghana. Funding is the key to curriculum development, paying faculty, and maintaining facilities in which a training/degree program would be offered. Funding is also key to marketing any program that would develop to prospective students. Program marketing could be completely addressed through a formal partnership between NADMO and the organization where the training is housed as NADMO could advertise the training to its staff throughout the country. NADMO advertisement to its staff will continue to be important if and when a degree program will develop, but it will not be enough. Additional efforts, outside NADMO, to communicate the program's existence to prospective students will have to be made and these efforts will be costly. Yet, funding for program marketing much less anything else related to developing a training program is not available. Funding is insufficient for the organization's existing programs (Appiah, 2013). Funding is in short supply in higher education institutions (Effah, 2003). Funding is in short supply in the Ministry of Education (Amekuedee, 2005). Funding is generally in short supply throughout the whole of Ghana (Adams, 2006). As one respondent stated, "Ghana is trying to do so much with so little".

In the absence of financial difficulties, some of the other factors may not be necessary (or at least not to the same degree). For instance, if there were enough funding engaging institutional

support would not be much of an issue because supporting the training and/or degree program would not require pulling the money from somewhere else within the organization. And, some forms of partnership would not be necessary if funding were available and sufficient.

Of the factors that emerged from the data, it is funding that necessitates the formalization of partnership with organizations outside of Ghana (including the existence of institutional support in advance of the partnership) if a training and/or degree program is to start. In the Ghana case, an advocate will be needed to survey the landscape of organizations outside Ghana and assess which one, or ones, might be best suited to a partnership with Ghana. As with the advocate's role with domestic organizations, he/she would need to approach the organizations, sell a vision and how they can be involved, connect key organizations, and help facilitate formalization of partnerships.

Fortunately, engaging in partnerships with outside organizations is not unusual in Ghana and is certainly not unusual in higher education. Ghana has a long history of academic institutions partnering or affiliating with foreign institutions (Cobbah, 2010). Almost all Ghanaian higher education (Hi Ed) institutions collaborate with external academic institutions or have strong affiliations with outside institutions (Cobbah, 2010). In fact, higher education in Ghana started with an affiliation with United Kingdom universities. The first university in Ghana, the University of Ghana, established in 1948, was originally an affiliate college of the more established University of London, which supervised its academic programs and awarded degrees (Cobbah, 2010). Several individual departments of the University have partnered with departments within foreign academic institutions (Cobbah, 2010). Therefore, it has become part of Ghanaian culture to partner with external academic institutions in developing and maintaining

academic programs. This historical fact suggests that Ghana will be successful engaging with an outside institution to meet its funding needs when it begins to pursue a degree program.

Six factors emerged from the data, but four of the six—advocacy, institutional support, partnerships, and funding—seem to be the most significant to address if a training program is to develop in Ghana. These factors have been facilitators in the past when they were present and inhibitors when they were not. The researcher anticipates that before a training program will develop each of these four key factors would need to be addressed. Additionally, these factors would also have to be addressed if a degree program is to develop. Because these factors are not currently present in Ghana, it is unlikely that a training or degree program will develop.

The analysis to this point has been based solely on the emergent factors discovered through data analysis. Unfortunately, the prospects for both training and degree program development appear less likely when the influence of the literature-based factors and the unique factor discovered in the interviews with representatives of other degree programs are also analyzed in conjunction with the emergent factors.

Other Factors Influencing Training and/or Degree Program Development

The factors discussed to this point emerged out of respondent discussion of Ghana's past efforts to start a training program. In addition to the factors that emerged out of the data, there were other factors based on the literature that were examined through direct questioning or probing. Data analysis confirmed that some of the literature-based factors are relevant to understanding both Ghana's past efforts to begin a training program and its future efforts to start a degree program. The factors that seemed not to have much significance in the Ghana case in so far as they have not hindered program development and are likely not to do so in the future include professional legitimacy, autonomy and administrative location, curriculum

standardization, and supporting learning materials. One of these factors, professional legitimacy, is a non-issue because it has already been addressed. The remaining three non-issues are simply that they are not issues of concern for the respondents in this case. In contrast, faculty issues will likely have to be addressed before any training program will develop; and, in addition to faculty issues, student issues, academic legitimacy, and accreditation, will likely need to be addressed before a degree program can develop. Data from interviews with representatives of the other six new educational degree programs added one additional factor—satisfying institutional criteria that would be relevant for the development of a future degree program. The following discussion builds on the previous section by analyzing the each of these factors (in light of the literature where appropriate) and their relative significance to Ghana's past and future efforts.

According to the EM literature, professional legitimacy is known to be an important feature of program development (Cwiak, 2007; Cwiak & Muffet-Willet, 2009). A lack of professional legitimacy is so important that its absence has been suggested to be a threat to EM program development in the United States (Cwiak, 2007; Cwiak & Muffet-Willett, 2009). The buy-in of practitioners is critical because they support programs by providing insights into program and curriculum development, internships, employment for graduates, subject matter expertise and "real world" applications of theory through classroom presentations, access to external exercise and training opportunities (Cwiak & Muffet-Willet, 2009; McEntire, 2006; Neal, 2000). While the literature noted this issue with respect to higher education degree programs, it seems relevant to Ghana's past attempt to start a training program.

NADMO was engaged as a partner in the effort in many respects. NADMO initiated the effort to start a program and pursued the development of the partnerships with GIMPA and the NDNG toward that end. The organization saw the development of a training program as a means

of increasing the capacity of its staff to do its job and in so doing reduce the country's vulnerability. Representatives of the organization were involved in all of the initial efforts to see the program start. Thus, the goal of starting a training program was "professionally legitimate" from the outset and had a program begun as a result of the initial efforts it would likely have continued to enjoy this type of legitimacy so long as NADMO remained intimately involved and felt that the training was meeting the needs of its staff.

NADMO has also indicated an interest in the development of a degree program in the future. The researcher would anticipate that so long as there is institutional support of and partnership with NADMO, any attempt to develop a degree program and throughout the development process, the degree program would enjoy professional legitimacy. The issue of professional legitimacy, while important and relevant, does not seem to be a key factor explaining why there is no training program as yet in Ghana nor does it seem to be a key one that would need to be addressed going forward.

In the EM literature, autonomy and administrative location issues explain difficulties related to the departments under which EM programs are established including a lack of financial support for purely EM program activities and control over curriculum (Klenow & Youngs, 2011; McEntire, 2004; Neal, 2000, 2005). Despite the suggestion in the literature, this factor does not seem relevant to the Ghana case now, and it is unclear how it would be in the future. There were no known past issues with autonomy and administrative location related to Ghana's past efforts since the focus has been on starting a training program, and a training program would be administered separately from a department even if it were to emerge within a higher education institution in Ghana like GIMPA. So long as Ghana's focus would be on starting this type of program this issue is likely not to arise. Issues of autonomy and program administration are more

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related to developing degree programs. While respondents offered some comments on the topic and several suggested it would not be problematic for a degree program to be offered within a department of another discipline, the issue did not seem to resonate. Since there has been no attempt to begin a degree program much less operate a program under the auspices of a broader department, it is unsurprising that this factor did not come out strongly in the data. The researcher does not necessarily think that this factor would be highly influential even if a degree program was underway, and respondents had more experience contending with autonomy and administrative issues because the presence of institutional support would have resolved any administrative problems.

Early commentators have suggested that EM programs in the United States are not standardized (Fuller, 2002, Jensen, 2011; Kushma, 2012; McCreight, 2009) in part due to the absence of a disciplinary schema and curriculum model for EM (Drabek, 2008; Kiltz, 2011; McEntire, 2004; Neal, 2000; Phillips, 2005; Thomas & Mileti, 2004). This issue has been discussed and debated by individuals related to U.S. degree program development, but in the Ghana case it did not seem to have relevance. Again, Ghana was not trying to begin a degree program so the notion of disciplinary concerns was far removed from respondent reality. And, the effort that was undertaken previously was with the aim of starting a single, national training program; thus, the issue of standardization across degree programs at multiple institutions was not relevant. Furthermore, with respect to the future development of degree programs, it again appears that standardization is not likely to be an issue. Ghanaians did not put an emphasis on standardization and in fact described how the curriculum of programs should vary from location to location.

In the literature, the existence and accessibility of supporting learning materials have been long standing issues confronting EM higher education programs (Cwiak, 2010a). Existence and accessibility of learning materials has not been an issue that Ghana has had to address in its past efforts to initiate a training program because any attempt to develop such a program was done in conjunction with partner organizations. The partner organizations involved agreed to provide both the training and training materials required. In so far as Ghana is able to develop formal agreements with partner organizations in the future, supporting learning materials would not be an issue hindering training program development particularly if Ghanaians were able to keep the materials used in the initial training sessions offered by outside partner organizations, modify/expand/revise the materials, and use and reuse them in future course offerings. In the absence of partnerships, supporting materials for a training program could possibly be an issue; however, it would not be due to existence of materials, but accessibility.

Similarly, while future degree programs would have to address the challenge of accessing learning materials, availability would not be an issue. Full courses and other materials to support a degree program are available for download and adaptation for use in Ghana from the FEMA Higher Education Program website, open access journals, research centers, quasi-governmental organizations, nongovernmental organizations, etcetera. Faculty associated with any degree program that would develop would be responsible for selecting materials to support their courses; thus, as long as knowledgeable faculty are hired, there should not be a problem finding appropriate, existing materials. Access would be an issue for both the development of a training program and/or degree program due to inadequate technological infrastructure and poor internet access in Ghana (Bates et al., 2011; Twidi, 2008), but the issue would not be insurmountable as materials can be downloaded, saved, and, once saved, manipulated and used at will.

Supporting learning materials do not appear to be an issue that would significantly hinder the development of a training program so long as Ghana is able to rely upon training materials from partner organizations in the initial stages. Supporting learning materials also do not appear to be a significant problem that would hamper efforts to initiate a degree program once available materials are accessed—assuming that faculty involved in the degree program know of the materials and where to find them.

In the EM literature, faculty issues in EM Hi Ed programs stem from problems finding and recruiting qualified faculty (Cwiak, 2008a; May, 2011; Neal, 2000). Part of the problem is because there are only a few EM Ph.D. programs and very few doctoral degree holders have been produced by these programs (Clement, 2011; Cwiak, 2012; Neal, 2000; Thomas & Mileti, 2004). Similarly, the general education literature identifies faculty issues and adds that those issues are relevant for understanding program development and quality. Long-term success of higher education programs resides in a faculty's dedication to teaching (Abbott & Barlow, 1972; Dill & Soo, 2005; Fairweather & Brown; 1991; Giley, Fulmer, & Reithlingshoefer, 1986; Kuh et al., 1991; McCune, 2009; Pierce, 2001).

In examining Ghana's past attempt to begin a training program, there existed a faculty issue. There was an insufficient number of individuals within Ghana who were available and had the requisite expertise to act as instructors for a training program. Yet, respondents saw this issue as resolvable through partnership with one or more organizations outside the country that could help address the lack of in country instructors by "training-the-trainers". In the absence of formal partnerships that included a "train-the-trainer" element, faculty would be likely a significant issue hindering training program development in the future.

In contrast, might be a problem for future degree programs. A training program, or at best a hybrid training/education degree program, might be successful using practitioners and/or faculty from other discipline as instructors. Yet, the National Accreditation Board (NAB) requires programs to show proof of having hired or being able to hire qualified faculty. Instructors with only a practitioner background and/or non-EM degree might not be sufficient for NAB's approval. Until Ghana resolves this faculty issue, developing an EM degree program is unlikely.

Student issues were another factor explored with respondents because the EM literature had suggested it may be important to program development. Student issues, as used in the literature,were related to the following concerns: admission criteria (Klenow &Youngs, 2011), enrollment, and student aptitude (Cwiak, 2007, 2010b, 2012; Darlington, 1999; Kiltz, 2011; Klenow &Youngs, 2011). In its past efforts, Ghana has not experienced any of these student issues. The training it was trying to develop was being pursued in partnership with NADMO for its staff. In so far as the country again attempts to initiate a training program, any student issues that might arise could be prevented by a formal partnership between the organization offering the training and NADMO wherein NADMO would agree to market the program and pay for student attendance (or make sure that student attendance is paid for by other means).

Student issues would be potentially significant for Ghana should Ghana decide to initiate a degree program. For example, while admission criteria could be minimal, this issue would at least have to be addressed as the criteria would need to be advertised and used to separate admitted students from those not admitted. What aptitude is required for students in the degree program—not just for the purposes of admission but also for the purposes of curriculum design.

Yet, these issues are largely procedural and bureaucratic and are likely to be easily resolved with forethought and minimal effort.

Unfortunately, not all student issues are likely to be this simple. Funding, emerged as a critical issue with respect to marketing and tuition. For example, money would be required to widely market the program to prospective students. To be successful, a degree program would likely need a greater pool of applicants from which to draw than NADMO could either provide or fund. Yet, respondents believe that a future EM Hi Ed program in Ghana has prospects of significant enrollments should a program develop. Advertising can be accomplished through partner organizations (again, a partnership with NADMO would be appropriate); yet, if that advertising is expected to be viewed by individuals outside the partner organizations themselves, then funding will be required to support such communications (e.g., radio commercials, flyers). Funding would also be a student issue in the sense that student ability to pay for tuition and other fees may prevent the programs from having sufficient enrollment. This would most likely be an issue exclusive to graduate degree programs since the costs of education for the majority of students at the undergraduate level who have been accepted into a higher education institutions is covered by the Ghanaian government.

In summary, student issues would not likely be a problem with respect to developing a training program in Ghana. Student issues—specifically those related to enrollment—are, however, likely to be a problem with respect to a degree program. Yet, enrollment is only the surface issue. Deeper analysis reveals that the enrollment problem that Ghana will face is related primarily to funding for marketing and financial support for students. Should funding be available (mostly likely through outside partnerships) to support the degree program's development, then student issues are likely not to be a problem.

Another concern that would need to be addressed if a degree program is to ever begin in Ghana is academic legitimacy. The literature suggested that to attain academic legitimacy, degree programs need to be viewed by other academic disciplines and by higher education institutions as credible and worthy of inclusion in the scientific academy (Jensen, 2012; Neal, 2000). In this research, respondents acknowledge this need although not referring to it as such and explaining that academic legitimacy is earned differently in Ghana. Academic legitimacy is conferred to Ghanaian degree programs by the Ministry of Education. Under Ghana's educational system, the Ministry of Education gives support to and provides resources for programs that it deems legitimate. Thus, to the extent that there is institutional support within the Ministry for a degree program that degree field is considered legitimate.

Accreditation has been viewed in the EM literature as a means of earning both professional and academic legitimacy in addition to having the potential effects of standardizing curriculum and improving program quality (Muffet-Willett & Schwartz, 2009). References to accreditation in the literature revolved around the notion of accrediting EM degree program curriculum and programs as opposed to the more general accreditation that colleges and universities seek. Accreditation was not a relevant factor with respect to Ghana's past efforts and it will not be so long as Ghana's focus remains on beginning a training program. If, and when, the country's focus becomes degree program development, accreditation would need to be addressed, but not for the reasons that the literature suggested—it would be to obtain approval from the NAB. All degree programs have to be accredited through the NAB in Ghana to ensure high quality higher education in the country (Materu, 2007).

Data from the interviews with representatives of other degree programs revealed that EM program development in Ghana is not entirely unique in terms of the challenges that have

been/would be faced in the startup stages. Partnership, advocacy, institutional support, and funding appeared to be supporting factors that were available in varying extents that ensured the development of these other new programs, and the lack of all these have been identified as explanation to why Ghana has not been successful in the pursuit of developing an EM training program much less a future degree program. It is important, therefore, to note that these new programs were successful in starting because of the factors mentioned above.

In addition to confirming the relevance of these factors, the data from these interviews suggests that one additional factor will need to be addressed before any degree program would be able to start in the future. This factor is unique to the development of a degree program. There are seemingly cumbersome institutional procedures which these other programs had to go through before getting their institutions' approval to start. This was not one of the factors the data showed in the case of the efforts towards starting EM degree program in Ghana, which goes back to explaining the fact that Ghana's efforts to date have been towards starting EM training programs. Therefore, in addition to the common factors identified above, development of future EM degree programs in Ghana would have a 'new' issue to overcome, that is, satisfying institutional criteria. Satisfying institutional criteria would include demonstrating a need for the degree program, sufficient faculty, an overall curriculum concept, individual courses, and more.

From Idea to Reality: Getting a Program Started in Ghana

This study found that there are a series of factors that likely need to be addressed before either a training or degree program will develop in Ghana. Since Ghana's primary focus is on initiating a training program, it is worth focusing first on synthesizing all of the factors this research has suggested will be required to see such a program move from being an idea to a reality. Data analysis suggests that advocacy, institutional support, and partnerships are the

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primary factors that must be in place for a program to begin. Should key factors exist, this research suggests that cultural factors can be mitigated, if not overcome, and that funding, faculty issues, supporting learning materials, and program marketing can be addressed. Figure 1 depicts the relationship of these variables to training program development in Ghana. The orange shading indicates factors that emerged from the data and the yellow shading indicates factors the literature suggested were relevant and found to be so in data analysis.
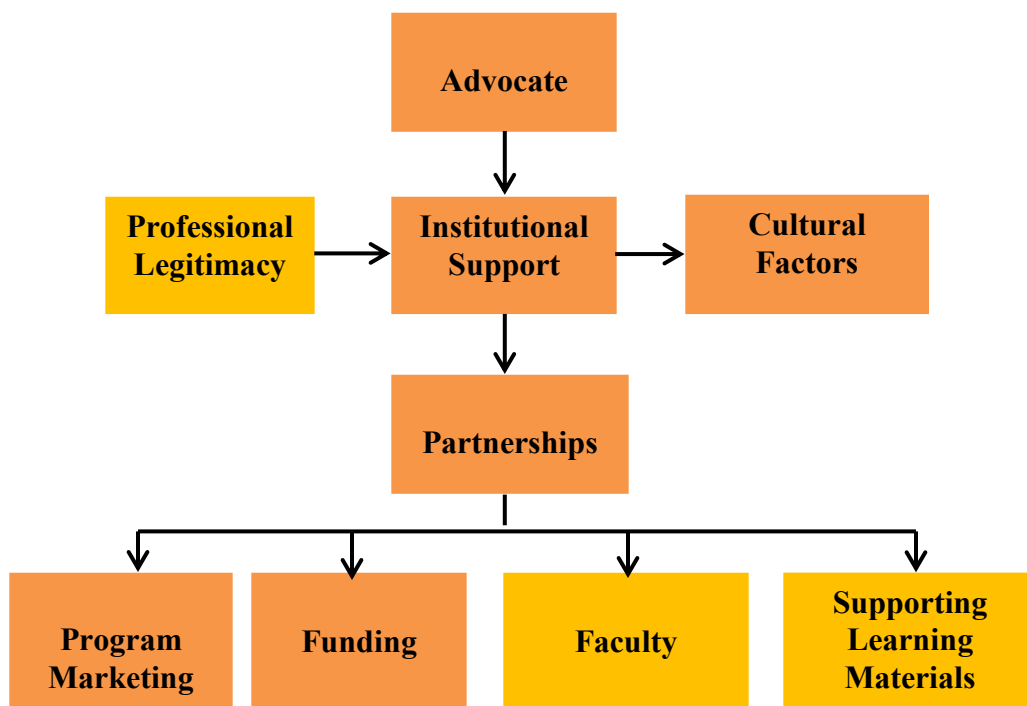
Figure 1. Sequencing of Factors Needed to Develop a Ghana's Training Program Based on All Relevant Factors Identified

There is no advocate, or advocates, championing the development of a training program in Ghana currently; and, there certainly is a lack of an advocate with the ideal combination of knowledge, skills, and abilities for facilitating the institutional support and formal partnerships that are needed to see the other necessary training program elements develop. Without an advocate, the initial efforts to see a training program develop seem to have stagnated.

Institutional support has eroded and there is no indication that it will reemerge without a catalyst. And, partnerships will not be arranged without institutional support. Thus, due to the absence of an advocate, it seems unlikely that a training program will develop in the near future.

The prospects for degree program development in the future are more bleak. The key factors discussed above—advocacy, institutional support, partnerships—seem as though they must be present first. From these three key factors, funding and student issues, program marketing, faculty, and professional legitimacy will flow. And, when all of these factors exist, a degree program will likely be able to satisfy institutional criteria and be accredited. It seems as though there are more factors that will have to be addressed to see a degree program develop in Ghana. Not only are these factors not present in Ghana currently, there is no desire to see a degree program develop at this time. Thus, it seems reasonable to suggest that it will be some time before a degree program would develop in the country. Figure 2 depicts the relationship of these variables to degree program development in Ghana. The orange shading indicates factors that emerged from the data and the yellow shading indicates factors the literature and interviews with other degree programs suggested were relevant and found to be so in data analysis.

Getting the program started would not be the end of the story where these factors are concerned. Should they be successful in starting a training program or a degree program, these programs would still be at risk should all of the factors that led to their initiation not be sustained. As the interviews with other degree program representatives revealed, sustaining these factors is a struggle and cannot be assumed. Although the other degree programs were able to identify enough faculty to start the program, they have had a difficult time maintaining and/or expanding the faculty. And, programs had students come in but they realized that the students do

not have money at least at this particular level to complete the programs, and the programs do

not have the financial capability to support the students.
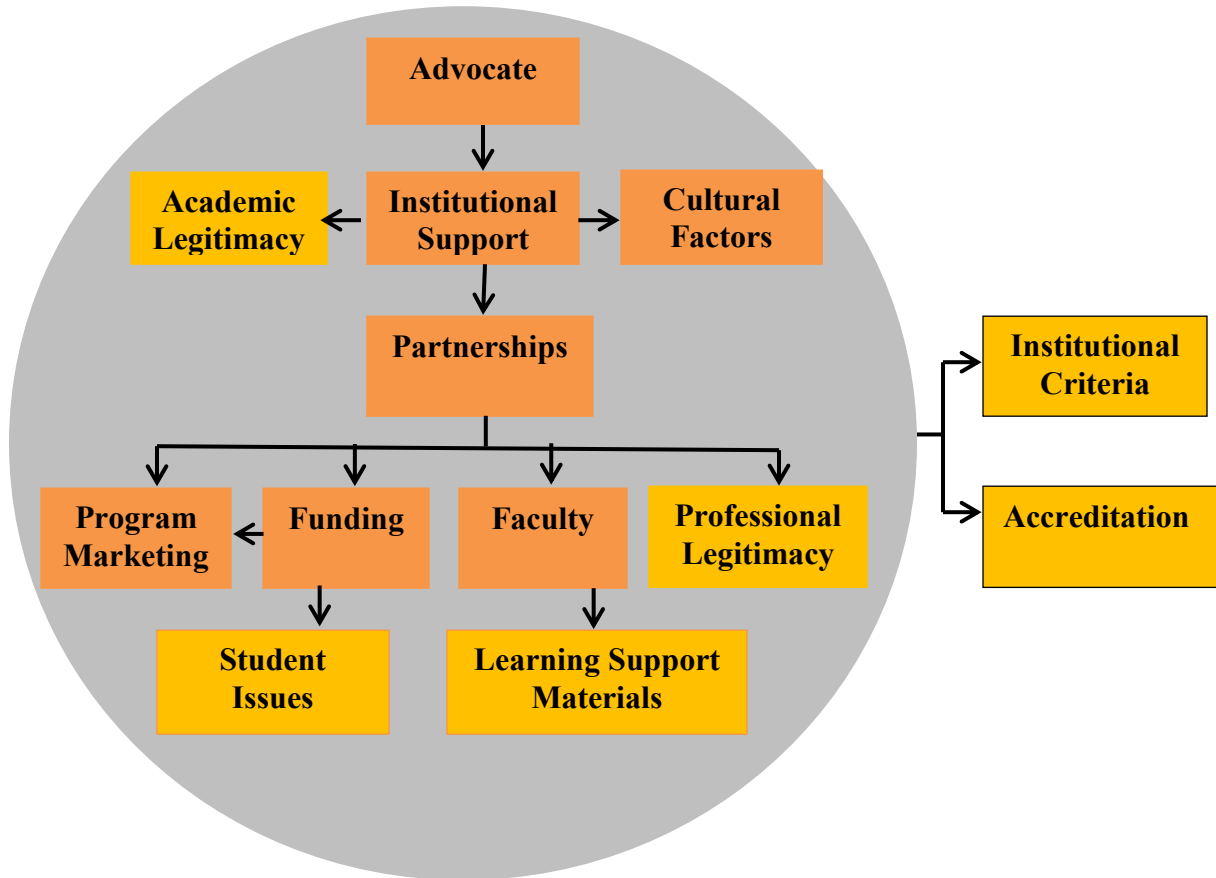
Figure 2. Sequencing of Factors Needed to Develop a Future Degree Program Based on All Relevant Factors Identified

Also, learning materials are available and the programs have agreements with external

institutions to use the materials. Unfortunately, faculty and students cannot access them due to

lack of efficient internet facilities. And so, these programs might have started and these factors

might have initially seemed to be there but as these programs have gone on, it has become

difficult to maintain. This analysis implies that both a training and degree program may only be

successful so long as all of the factors identified in this research are initially present and

maintained. Fortunately, this research has suggested that in Ghana the key variables can be

tackled one at a time—as opposed to all at once. If one or more advocates emerge, they can first address the issue of institutional support and once garnered the issue of partnerships can be addressed. And, once partnerships are in place—particularly formal ones—most of the other factors can be addressed. Slowly and purposefully, Ghana can begin to transition the idea of a training and/or degree program to a reality.

<div align="center">Future Research using the Factors</div>

This study began with the research question "what factors explain Ghana's experience with developing an emergency management higher education program?", and an analysis of the literature was conducted to see what factors were involved. However, through the initial interview process it was found that this might not be the right question to be asking in Ghana— what they understood their mission to be was to first start a training program and they envision later building on a training program and developing a degree program. With this discovery, the researcher expanded her focus to examine the factors involved in developing a training program in Ghana in addition to those likely to be involved in developing a degree program. It was discovered that many of the same factors are likely to be involved although more factors seem to relate to degree programs than to training programs. It was found that the inductive[9] analysis of the factors suggested as relevant to program development in the emergency management and education literature resulted in identification of several factors relevant in Ghana. And, it was also found that these factors are interrelated and need to be present in a time-ordered, or hierarchical way.

The researcher anticipates that the same factors will likely be relevant to efforts in other countries to start a training program and/or degree program in EM, particularly if they have

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[9] The variables emerged from analysis of the general commentary that the authors offered, and at no point were the variables presented as factors in the data.

similar socio-economic conditions and cultures. Yet, the researcher expects that the relationship of the factors and the necessary time-order/hierarchy may be different than in Ghana. Furthermore, the factors induced from the literature and found not to be relevant in Ghana may actually be relevant to other country's efforts. Moreover, curriculum standardization and accreditation seemed logical together as one factor based on the literature review, and in keeping with the literature, the two were referred to as one in the results. However, the data analysis revealed two separate variables—a) curriculum standardization and b) accreditation. Thus, the two should be separately investigated in future research.

These issues should be explored through future research. Prior to this study, there were no known, empirical studies of the factors related to the development of national level training programs or degree programs—not in the emergency management literature and not in the education literature. Thus, this study's exploration, identification, definition, and analysis of factors related to both types of programs are significant contributions to the literature. While the researcher's analysis did not lead to the suggestion of a full theory, it did lead to the development of a list of factors and their definitions that could be used as the basis for future research on training and/or degree programs.

Any continuing research in this area should apply qualitative methods, rather than quantitative, to explore all these factors while remaining open to possible new themes, because we are not ready for quantitative research. We are not ready to start testing if these dimensions and sub dimensions are present and if that predicts the creation of programs. We need more qualitative work because we cannot be confident that there are not more relevant factors that would emerge in other settings. There is the need for more qualitative research that would look at

the original set of factors and the ones from this study, and then explore if there are additional ones.

<u>Practical Application of the Factors</u>

This study has significant implications for practice in addition to those for theory and research. Given the absence of a robust literature, and the fact that only about nine EM degree programs have been able to start in the rest of the world apart from the United States, this research can help inform how future programs develop. The relative novelty of both EM training and degree programs and state of the literature make the factors of this study, together with those of the literature, can be thought of as a checklists for institutions, departments, and scholars who may be looking into establishing EM programs in the future. There is no doubt that these factors may not apply to all settings, but at the same time, it is not mere coincidence that both the literature and findings of this study have some common factors from entirely different settings. Most of the factors found in the literature were identified from developed nations, while those of this study were from a developing country.

One of the major findings of this study is the fact that Ghana's effort to date has been to try and get a training program started whether in a higher education institution that would run the training program or somewhere else, to lay the foundation for a degree program. This strategy potentially has significant implications for the numerous countries around the world which do not yet have an EM training or degree program. There is the need to examine what the country wants to achieve with the intended EM program. Will it be to immediately equip EM practitioners to better perform their job? Or will it be targeting a well-rounded degree program that will educate significant number of the country's population? Or both? If starting a full-fledged degree program takes more effort and resources to start, countries seeking to mitigate

their hazard impacts could start with developing a training program. This finding sets the stage

for EM scholars and practitioners to consider if it would be more beneficial for countries to first

consider one of three ways of developing EM programs; 1) developing only training program 2)

developing only a degree program or 3) starting with a training program and then roll out into

full degree program. Determining which strategy to adopt depends on the needs of the country in

terms of factors that can help or hinder the process.

     For practical application, this research provides three checklists for persons and

institutions interested in developing and sustaining EM training and or degree programs in the

future. The first is found in Appendix J, which provides a checklist of issues for countries to

consider to flesh out whether their primary interest is in a training program or a degree program.

If, based on this analysis, their interest is in training, then the checklist provided in Appendix K

that sensitizes nations to issues to consider in the development of a training program might be

helpful. Whereas, those nations or institutions interested in developing a degree program, may

find the checklist of issues to consider in Appendix L helpful. For example, the checklist

suggests they need to ask if they have a societal culture that can impede the program's start or

prospects of maintenance. An additional checklist is provided in Appendix M to assist struggling

degree programs in identifying the root cause of the issues they are experiencing. The list of

questions can help identify where the problem is. For instance, has the program lost an advocate

or funding. All three checklists are based on the factors suggested by the literature and/or

discovered to be of importance in this research on the Ghana case.

     Furthermore, this study provides definitions of the factors so as to guide users in what

exactly they need to be measuring or looking for when they use the three checklists. The

definition of factors is presented in Appendix N. It will therefore be very useful to at least

evaluate these factors in the consideration of developing an EM program, irrespective of the setting since both the literature and this study have found these to be critical factors in both the United States and Ghana. The practical significance of this research is that it will help EM program developers identify the variables that should be studied in other cases.

<div align="center">Conclusion</div>

Using qualitative research methods, this study explored factors that explain where Ghana is today in the efforts to develop an EM degree. By interviewing EM practitioners and scholars who have been involved in the efforts, it became known that Ghana was actively trying to develop disaster management training and eventually intended to develop an education degree program. Nonetheless, this study was able to identify themes and concepts, built into factors, that explain facilitators and obstacles of Ghana's pursuit of a training program as well as what might influence the country's future pursuit of an EM education degree program. It was found that not many differences exist between the factors that the literature says impact EM program development and those found in the interview data.

The significance and implications of these factors for future research and program development were also discussed in this chapter. While there may be more factors than the ones found here, these are very important foundational tools to consider any future EM program development.

CHAPTER EIGHT: CONCLUSION

This study set out to investigate Ghana's pursuit of developing an EM degree program using qualitative methods. Specifically, Rubin and Rubin's (2005) Responsive Interview Model was used in both the data collection and data analysis. This study found that Ghana's efforts to date have been towards trying to develop an EM training program to meet the country's immediate need of educating NADMO staff and other government officials to better manage disasters. The intention is that the non-degree program would serve as a foundation for developing an EM degree program. Nonetheless, the country has not been successful in developing a training program due to a number of factors. In order to succeed in developing the initially intended training program in Ghana, one or more of the interdependent factors needs to be resolved. The factors were institutional support, partnership, advocacy, funding, program marketing, and cultural factors. These factors are relevant to not only understanding why Ghana has not started its desired training program but also to understanding what would be resolved in any future attempt it makes to pursue a degree program. Should a degree program be pursued additional factors will be relevant including faculty issues, students issues, supporting learning materials, legitimacy, accreditation, institutional criteria. Until both sets of factors are addressed it is unlikely that a degree program will emerge.

This study has significantly contributed to the limited literature on higher education program development, especially Emergency Management (EM). This study has identified inductively out of the literature the factors that seem to be relevant in explaining Emergency Management (EM) program creation and maintenance, together with operational definitions of the factors. It has empirically confirmed and also added to the list of factors that explain EM

degree program development, while also demonstrating value of the literature-based factors to understanding national level efforts to begin formal training programs.

To make the factors easy to use in practice by those interested in developing and sustaining EM degree programs in the future, this research has provided two checklists sensitizing those involved to issues to consider. One is a checklist for institutions to consider before they ever attempt to start a program. The other checklist will be useful for programs that have already started but are suffering or not doing well.

The findings of this research have practical significance in the area of developing EM degree programs on at least three levels. The results can help EM program developers and scholars determine whether or not the conditions are ripe and when it is appropriate for program development. For existing programs that are suffering or not doing well, the factors can be used to identify where the problem is. Finally, within the EM Higher Education (EM Hi Ed) community, these findings can inform concerted efforts to identify what the key components of programs are that matter for evaluation. Furthermore, this research also resulted in the development of a checklist for persons interested in developing a national level training program.

With only a handful of EM programs in the rest of the world, together with the absence of prior empirical research in this area, this research is very significant in informing how future training and education programs can develop. In fact, the findings of this study have broader application beyond the EM discipline. While the general education literature supported the fact that the literature-based factors discussed in Chapter Seven were relevant in evaluating program quality, there was hardly any empirical study that examined factors that facilitate or hinder higher education program development. Moreover, the researcher was unable to find empirical studies that isolated the key factors and tested them in any organized way. Although this study

has not done that, it has begun to explore the value of the factors that were found in both the general education literature and the EM literature. The findings of this study have led the researcher to make the following recommendations of future research.

Depending on what a country desires—either training or education program—there are different factors that need to be in place. Developing training programs have different needs from developing education programs. For example, most of the issues relating to faculty, students, curriculum standardization, learning materials, and autonomy and administrative location would not apply to developing training programs. Therefore, there needs to be a distinction between EM training and education. The two require different combination of the factors found in this study. Also, the extent and level of the factors would differ. For instance the faculty needed in one case is different from the other. Similarly, the curriculum needed for training is different from that of a degree program.

If a training program is desired, then faculty to hire will predominantly be practitioners. On the other hand, a degree program that seeks to educate students on in-depth research literature, foundations and principles, will need to hire faculty with doctoral degrees. The same applies to an issue like curriculum development and standardization. Programs focusing on education will need to have curriculum that reflects the scientific body of knowledge related to EM, while training can just have some regulations, laws on planning guidance, and government documents. In short, the focus of a program shifts the kind of materials used in the classroom and the curriculum content. Arguably, training programs will be easier to standardize than degree programs. There is a need for future research that will examine whether or not the conceptualization of training and education differ from country-to-country, as it did in Ghana.

Such a study would find out if this notion is unique to Ghana or it is something that is widely

true in EM for other countries.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL

NDSU **NORTH DAKOTA STATE UNIVERSITY**

701.231.8995
Fax 701.231.8098

Institutional Review Board

Office of the Vice President for Research, Creative Activities and Technology Transfer
NDSU Dept. 4000
1735 NDSU Research Park Drive
Research 1, P.O. Box 6050
Fargo, ND 58108-6050

Federalwide Assurance #FWA00002439

Wednesday, January 09, 2013

Jessica Jensen
Emergency Management
Putnam Hall 102D

Re: IRB Certification of Exempt Human Subjects Research:
     Protocol **#HS13129** , **"Developing Higher Education Programs in Emergency Management:**
                Ghana's Experience"

Co-investigator(s) and research team: **Mariama Yakubu**

Certification Date: 1/9/2013   Expiration Date: 1/8/2016
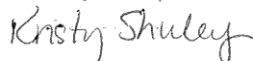Study site(s): **varied**
Funding: **n/a**

The above referenced human subjects research project has been certified as exempt (category # 2) in accordance with federal regulations (Code of Federal Regulations, Title 45, Part 46, *Protection of Human Subjects*). This determination is based on protocol and consent/recruitment materials (received 1/9/2013).

Please also note the following:
- If you wish to continue the research after the expiration, submit a request for recertification several weeks prior to the expiration.
- Conduct the study as described in the approved protocol. If you wish to make changes, obtain approval from the IRB prior to initiating, unless the changes are necessary to eliminate an immediate hazard to subjects.
- Notify the IRB promptly of any adverse events, complaints, or unanticipated problems involving risks to subjects or others related to this project.
- Report any significant new findings that may affect the risks and benefits to the participants and the IRB.
- Research records may be subject to a random or directed audit at any time to verify compliance with IRB standard operating procedures.

Thank you for your cooperation with NDSU IRB procedures. Best wishes for a successful study.

Sincerely,

Kristy Shirley

Kristy Shirley, CIP, Research Compliance Administrator

NDSU is an EO/AA university.

APPENDIX B: INTERVIEW INVITATION LETTER

Note: This invitation was sent by email. It looked as follows:

From: North Dakota State University
Center for Disaster Studies and Emergency Management
Dept. 2351
P.O. Box 6050
Fargo, ND 58108-6050
(701) 231-5595

Dear [*Potential Participant Name*],

I am writing to request your participation in an exploratory study on Ghana's experience with developing an emergency management degree program. Some higher education institutions in the country have shown interest in developing an emergency management degree program; and, I understand that you have been involved in some way with those efforts.

I am exploring Ghana's experience because no empirical research has explored the factors involved in the development of emergency management programs much less the development of such programs in Ghana.

I am eager to hear about Ghana's journey toward establishing emergency management degree programs and your involvement in the process. If you would be willing to participate in this project, please contact me to schedule a convenient time for a short phone interview. The interview should take approximately one hour.

Please take a look at the attached document with information about the project. Afterwards, should you have any questions, feel free to contact me by phone at 510-2604966 or email at mariama.yakubu@ndsu.edu. You may also contact Dr. Jessica Jensen, who is assisting with this project, by phone at (701) 219-4293 or by email at ja.jensen@ndsu.edu.

I thank you in advance for your participation in this research project and look forward to speaking with you about your experiences.

Sincerely,

Mariama Yakubu

NDSU

North Dakota State University
Department of Emergency Management
Center for Disaster Studies and Emergency Management
Department 2351
P.O. Box 6050
Fargo, ND 58108-6050
(701) 231-5595

"Higher Education Programs in Emergency Management: Ghana's Experience"

Information Sheet

Research Study:
You are being invited to participate in an interview for a research project entitled "Higher Education Programs in Emergency Management: Ghana's Experience." This study is being conducted by Mariama Yakubu from North Dakota State University, Department of Emergency Management and the Center for Disaster Studies and Emergency Management.

Purpose of Study:
The purpose of this research is to explore Ghana's experience developing an emergency management higher education program.

Basis for Participant Selection:
You are being invited to participate in this research project because of your past, current, or potential involvement in the consideration of developing or efforts to develop an emergency management higher education program in Ghana.

Explanation of Procedures:
Should you choose to participate, we will arrange a time of your choice between December 12, 2012 and February 1, 2013 for an interview. The interview will take approximately one hour depending on your availability and the information you share.

The interviews will be conducted in person or over the telephone and will be recorded using a digital recorder to assure that I accurately use the information you provide.

Potential Risks and Discomforts:
There should be no potential discomfort or physical, social, psychological, legal, or economic risk to you due to your participation in this study.

Potential Benefits:
The literature suggests that Ghana faces several hazards, some of which are perennial and are arguably, not efficiently managed. Some tertiary institutions, including the National Disaster Management Organization (NADMO), have expressed interest in establishing emergency management degree programs as a means to deal with hazards more effectively. But, this vision is yet to be fulfilled and there has not been any empirical study as to the likelihood that it will.

Your participation in this project will increase the information available to educate students and faculty in emergency management higher education programs as well as Ghana and other developing countries which may be interested in developing emergency management programs.

Assurance of Confidentiality:
There are several important considerations that will be given to those who participate. First, confidentiality will be guaranteed. Second, the interviews will be digitally recorded. Digitally recorded interviews will be uploaded on to the interviewer's personal computer. The sound file will then be transcribed and codes assigned for identifying personal and geographic characteristics. The researchers for this project will be the only people in possession of the interviews, paper listing the codes, and their link to participant information. Once the recordings, transcriptions, and codes are no longer relevant to this research, they will be destroyed. In interview transcriptions, researcher notes, and the final product, codes rather than identifying characteristics (personal or geographic) will be used. Your personal information will be kept confidential. Your name and your institution or organization will not be used in any reports. Aliases will be substituted instead (i.e. Jane Doe of Institution A).

Voluntary Participation and Withdrawal from the Study:
Your participation is voluntary and you may quit at any time. Your decision whether or not to participate will not affect your present or future relationship with North Dakota State University or any other benefits to which you are otherwise entitled. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time.

Offer to Answer Questions:
You should feel free to ask questions now or at any time. If you have any questions, you can contact me, Mariama Yakubu, at mariama.yakubu@ndsu.edu or my dissertation advisor, Dr. Jessica Jensen, at (701) 231-5762 or ja.jensen@ndsu.edu. If you have any questions about the rights of human research participants, or wish to report a research-related problem or injury, contact the NDSU Institutional Research Board (IRB) Office at (701) 231-8908 or ndsu.irb@ndsu.edu

APPENDIX D: INTERVIEW GUIDE FOR GHANA INTERVIEWEES

Higher Education Programs in Emergency Management: Ghana's Experience

Introduction Script: *Before we begin, I want to make sure that you are comfortable with a few things. Are you comfortable with the fact that you have been selected for participation in this research due to your involvement in Ghana's effort to establish emergency management degree programs; that your participation in this project is voluntary; that you can let me know if you want to stop participating anytime; that while the confidentiality of your personal information and responses is guaranteed, your institution's name and that of your country of residence may be used in the final write-up of the data collected for this research; and, that our conversation is going to be digitally recorded? Do you have any questions before we begin?*

1. Tell me about yourself.

   Potential Follow-Up Questions:
   - ☐ What is your professional background.
   - ☐ Please describe your professional experience.
   - ☐ Why are you involved in emergency management?
   - ☐ What is your educational background?
   - ☐ Please describe your teaching experience including years of teaching
   - ☐ What is your motivation for being in academia?
   - ☐ Is your current position full-time or part-time?

2. Please describe Ghana's experience with disasters.

   Potential Follow-Up Questions:
   - ☐ Why is Ghana impacted by disasters?
   - ☐ What do you think can be done to decrease Ghana's vulnerability to disasters?
   - ☐ What role, if any, do you think training and education might play in decreasing vulnerability?

3. Tell me how your institution has been engaged in the consideration of or development of an emergency management higher education program in Ghana.

   Potential Follow-Up Questions:
   - ☐ Describe your role in the process of considering or developing an emergency management higher education.
   - ☐ Describe what the process has been like (e.g., easy or difficult).
   - ☐ To what extent have other institutions in Ghana, outside of your own, been engaged in the consideration of or development of an emergency management higher education program?

4. How likely it is that Ghana will develop an EM Hi Ed program in the near future?

    Potential Follow-Up Questions:
    ☐ Why?
    ☐ What makes it likely/not likely?
    ☐ Please describe any obstacles to program development.
    ☐ Please describe anything that you think will support the development of a program.
    ☐ Please describe any needs that have to be addressed to see a program develop.

5. Is there anyone you know of that has been invited in the consideration of or development of an emergency management higher education program that it might be helpful for me to speak with?

    Potential Follow-Up Question:
    ☐ Do you have contact information for [individual's name]?

6. Is there anything else related to Ghana's efforts to develop an emergency management higher education program that you would like to share?

Institution or Organization Represented:			Interview Date:	
Country:			Time Started:	Time Finished:
Gender:	Education:	Experience:	Background:	

APPENDIX E: INTERVIEW GUIDE FOR EXTERNAL PEOPLE INVOLVED

Higher Education Programs in Emergency Management: Ghana's Experience

Introduction Script: *Before we begin, I want to make sure that you are comfortable with a few things. Are you comfortable with the fact that you have been selected for participation in this research due to your involvement in Ghana's effort to establish Emergency Management Degree programs; that your participation in this project is voluntary; that you can let me know if you want to stop participating anytime; that while your confidentiality is not guaranteed, your name and your institution's name will not be used in the final write-up of the data collected for this research; and, that our conversation is going to be digitally recorded? Do you have any questions before we begin?*

1. Tell me about yourself.

    Potential Follow-Up Questions:
    - What is your professional background.
    - Please describe your professional experience.
    - Why are you involved in emergency management?
    - What is your educational background?
    - What kind of experience do you have with the provision of training?
    - Please describe your teaching experience including years of teaching.
    - What is your motivation for being in academia?
    - Is your current position full-time or part-time?

2. Tell me about your involvement with Ghana's emergency management training and/or education efforts.

    Potential Follow-Up Questions:
    - How did you come to be involved?
    - Describe your role in the process of Ghana's consideration of or development of an emergency management higher education program.
    - Describe your institution's role in the process of Ghana's consideration of or development of an emergency management higher education program.
    - Describe what the process has been like (e.g., easy or difficult).
    - To what extent are you and/or your organization currently involved? Why?
    - To what extent do you think you and/or your organization will be involved in Ghana's efforts to develop a program into the future? Why?
    - To the extent you are aware, how have other organizations in the United States been engaged in Ghana's efforts to start an emergency management higher education program?

3. How likely it is that Ghana will develop an EM Hi Ed program in the near future?

   Potential Follow-Up Questions:
   - Why?
   - What makes it likely/not likely?
   - Please describe any obstacles to program development.
   - Please describe anything that you think will support the development of a program.
   - Please describe any needs that have to be addressed to see a program develop.

4. Is there anyone you know of that has been involved in the consideration of or development of an emergency management higher education program that it might be helpful for me to speak with?

   Potential Follow-Up Question:
   - Do you have contact information for [individual's name]?

5. Is there anything else related to Ghana's efforts to develop an emergency management higher education program that you would like to share?

Institution or Organization Represented:		Interview Date:	
Country:		Time Started:	Time Finished:
Gender:	Education:	Experience:	Background:

Institutional Review Board   ...for the protection of human participants in research

North Dakota State University
Sponsored Programs Administration
1735 NDSU Research Park Drive
NDSU Dept #4000
PO Box 6050
Fargo, ND 58108-6050   231-8995(ph) 231-8098(fax)

received
5/9/2013
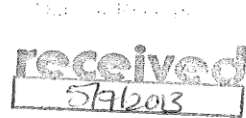
Protocol Amendment Request Form

Changes to approved research may not be initiated without prior IRB review and approval, except where necessary to eliminate apparent immediate hazards to participants. Reference: SOP 7.5 Protocol Amendments.

Examples of changes requiring IRB review include, but are not limited to changes in: investigators or research team members, purpose/scope of research, recruitment procedures, compensation scheme, participant population, research setting, interventions involving participants, data collection procedures, or surveys, measures or other data forms.

Protocol Information:

Protocol #: **HS13129**   Title: **Developing Higer Education Programs in Emergency Management: Ghana's Experience**

Review category: ☐ Exempt   ☒ Expedited   ☐ Full board

Principal investigator: **Jessica Jensen, PhD**   Email address: **ja.jensen@ndsu.edu**
Dept: **Emergency Management**

Co-investigator: **Mariama Yakubu**   Email address: **mariama.yakubu@ndsu.edu**
Dept: **Emergency Management**

Principal investigator signature, Date: _____ 5/7/13 _____

In lieu of a written signature, submission via the Principal Investigator's NDSU email constitutes an acceptable electronic signature.

Description of proposed changes:

1. Date of proposed implementation of change(s)*: **05/13/2012**
   * *Cannot be implemented prior to IRB approval unless the IRB Chair has determined that the change is necessary to eliminate apparent immediate hazards to participants.*

2. Describe proposed change(s), including justification:
   The researchers discovered that there is a need to do a theoretical sampling related to other academic program development, and so the researchers will contact five to ten faculty members associated with developing other academic programs in Ghana to interview them to see if the factors they reveal about their program development are the same or different.

3. Will the change involve a change in principal or co- investigator?
   ☒ No - skip to Question 4
   ☐ Yes:
   - *Include an Investigator's Assurance (last page of protocol form), signed by the new PI or co-investigator*
   - *Conflict of Interest disclosure.* Does any investigator responsible for the design, conduct or reporting of the project (including their immediate family members) have a financial, personal or political interest that may conflict with their responsibility for protecting human participants in NDSU research? (*SOP 6.2 Conflict of Interest in Human Research, Investigator and Research Team*)

     ☐ No – As PI, I attest that I have conferred with my co-investigators and key personnel and confirmed that no financial, personal or political interests currently exist related to this research.
     ☐ Yes – Describe the related financial, personal or political interests, and **attach documentation of COI disclosure and review** *(as applicable)*.

     Financial, personal or political interests related to the research (the sponsor, product or service being tested, or a competing product or service) may include:
     - compensation (e.g., salary, payment for services, consulting fees)
     - intellectual property rights or equity interests
     - board memberships or executive positions
     - enrollment or recruitment bonus payments
     (Refer to *NDSU Policy 151.1, External Activities and Conflicts of Interest,* and *NDSU Policy 823, Financial Disclosure – Sponsored Projects* for specific disclosure requirements.)

   Note: If the change is limited to addition/change in research team members, skip the rest of this form.

4. Will the change(s) increase any risks, or present new risks *(physical, economic, psychological, or sociological)* to participants?
   ☒ No
   ☐ Yes: *In the appropriate section of the protocol form, describe new or altered risks and how they will be minimized.*

5. Does the proposed change involve the addition of a vulnerable group of participants?
   Children: ☒ no   ☐ yes -- include the *Children in Research* attachment form
   Prisoners: ☒ no   ☐ yes – include the *Prisoners in Research* attachment form
   Cognitively impaired individuals: ☒ no   ☐ yes*
   Economically or educationally disadvantaged individuals: ☒ no   ☐ yes*

   Provide additional information where applicable in the revised protocol form.

6. Does the proposed change involve a request to waive some or all the elements of informed consent or documentation of consent?
   ☒ no
   ☐ yes – include the *Informed Consent Waiver or Alteration Request* attachment form

7. Does the proposed change involve a new research site?
   ☒ no
   ☐ yes – include a letter of permission/cooperation, IRB approval, or grant application or contract

Protocols previously reviewed by the full board: Minor changes (not involving more than minimal risks, or not significantly altering the research goals or design) may be reviewed by the expedited method (allow 10 working days). Those changes determined by the IRB to be more than minor will require review by the full board (due 10 working days prior to next scheduled meeting).

APPENDIX G: INTERVIEW INVITATION LETTER FOR INDIVIDUALS IN OTHER

HIGHER EDUCATION PROGRAMS

Note: This invitation was sent by email. It looked as follows:

From: North Dakota State University
Center for Disaster Studies and Emergency Management
Dept. 2351
P.O. Box 6050
Fargo, ND 58108-6050
(701) 231-5595

Dear [*Potential Participant Name*],

I am writing to request your participation in an exploratory study on Ghana's experience with developing an emergency management degree program. Some higher education institutions in the country have shown interest in developing an emergency management degree program; and, I believe that your experience with developing another new program in a higher education institution in Ghana, will be of immense contribution to this research by comparing your experiences to those shared in developing emergency management programs in Ghana.

I am exploring Ghana's experience because no empirical research has explored the factors involved in the development of emergency management programs much less the development of such programs in Ghana.

I am eager to hear about your involvement and experiences establishing [Program Name] at the [Institution Name] If you would be willing to participate in this project, please contact me to schedule a convenient time for a short phone interview. The interview should take approximately one hour.

Please take a look at the attached document with information about the project. Afterwards, should you have any questions, feel free to contact me by phone at (510)-2604966 or email at mariama.yakubu@ndsu.edu. You may also contact Dr. Jessica Jensen, who is assisting with this project, by phone at (701) 219-4293 or by email at ja.jensen@ndsu.edu.

I thank you in advance for your participation in this research project and look forward to speaking with you about your experiences.

Sincerely,

Mariama Yakubu

NDSU

North Dakota State University
Department of Emergency Management
Center for Disaster Studies and Emergency Management
Department 2351
P.O. Box 6050
Fargo, ND 58108-6050
(701) 231-5595

"Developing Higher Education Programs in Emergency Management: Ghana's Experience"

Information Sheet

Research Study:
You are being invited to participate in an interview for a research project entitled "Higher Education Programs in Emergency Management: Ghana's Experience." This study is being conducted by Mariama Yakubu from North Dakota State University, Department of Emergency Management and the Center for Disaster Studies and Emergency Management.

Purpose of Study:
The purpose of this research is to explore Ghana's experience developing an emergency management higher education program.

Basis for Participant Selection:
You are being invited to participate in this research project because of your past, current, or potential involvement in the consideration of developing or efforts to develop a relatively new higher education program in Ghana, which will be compared to the experiences in developing emergency management higher education programs in Ghana.

Explanation of Procedures:
Should you choose to participate, we will arrange a time of your choice between May 13, 2013 and June 1, 2013 for an interview. The interview will take approximately one hour depending on your availability and the information you share.

The interviews will be conducted in person or over the telephone and will be recorded using a digital recorder to assure that I accurately use the information you provide.

Potential Risks and Discomforts:
There should be no potential discomfort or physical, social, psychological, legal, or economic risk to you due to your participation in this study.

Potential Benefits:
The literature suggests that Ghana faces several hazards, some of which are perennial and are arguably, not efficiently managed. Some tertiary institutions, including the National Disaster Management Organization (NADMO), have expressed interest in establishing emergency management degree programs as a means to deal with hazards more effectively. But, this vision is yet to be fulfilled and there has not been any empirical study as to the likelihood that it will.

Your participation in this project will increase the information available to educate students and faculty in emergency management higher education programs as well as Ghana and other developing countries which may be interested in developing emergency management programs.

Assurance of Confidentiality:
There are several important considerations that will be given to those who participate. First, confidentiality of personal information and responses will be protected. However, it is important that potential participants are aware that if institutional affiliation and/or country of residence become theoretically important in data analysis, their responses may be referred to in reports of this study's findings by institution and/or country. This step will only be taken if the researcher believes it is necessary. Second, the interviews will be digitally recorded. Digitally recorded interviews will be uploaded on to the interviewer's personal computer. The sound file will then be transcribed and codes assigned for identifying personal and geographic characteristics. The researchers for this project will be the only people in possession of the interviews, paper listing the codes, and their link to participant information. Once the recordings, transcriptions, and codes are no longer relevant to this research, they will be destroyed.

Voluntary Participation and Withdrawal from the Study:
Your participation is voluntary and you may quit at any time. Your decision whether or not to participate will not affect your present or future relationship with North Dakota State University or any other benefits to which you are otherwise entitled. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time.

Offer to Answer Questions:
You should feel free to ask questions now or at any time. If you have any questions, you can contact me, Mariama Yakubu, at mariama.yakubu@ndsu.edu or my dissertation advisor, Dr. Jessica Jensen, at (701) 219-4293 or ja.jensen@ndsu.edu. If you have any questions about the rights of human research participants, or wish to report a research-related problem or injury, contact the NDSU Institutional Research Board (IRB) Office at (701) 231-8908, 1-855-800-6717 or ndsu.irb@ndsu.edu

APPENDIX I: INTERVIEW GUIDE FOR INDIVIDUALS IN OTHER HIGHER EDUCATION

PROGRAMS

Higher Education Programs in Emergency Management: Ghana's Experience

Introduction Script: *Before we begin, I want to make sure that you are comfortable with a few things. Are you comfortable with the fact that you have been selected for participation in this research due to your involvement in Ghana's effort in the development of a Degree program in Ghana; that your participation in this project is voluntary; that you can let me know if you want to stop participating anytime; that while your confidentiality is not guaranteed, your name and your institution's name will not be used in the final write-up of the data collected for this research; and, that our conversation is going to be digitally recorded? Do you have any questions before we begin?*

1. Tell me about yourself.

   Potential Follow-Up Questions:
   - What is your professional background.
   - Please describe your professional experience.
   - How did you become involved in the development of ---------program?
   - What is your educational background?
   - Please describe your teaching experience including years of teaching.
   - What is your motivation for being in academia?
   - Is your current position full-time or part-time?

2. Tell me about your involvement with Ghana's higher education program development.

   Potential Follow-Up Questions:
   - How did you come to be involved?
   - Describe your role in the process of developing the ---------program.
   - Describe what the process has been like (e.g., easy or difficult).

3. Please describe the factors that helped in the development of your program?

   Potential Follow-Up Questions:
   - Why?
   - What made it likely/not likely?
   - Please describe any obstacles to program development.
   - Please describe anything that you think supported the development of this program.
   - Please describe any needs that were addressed to see your program develop.

4. Is there anyone you know of that has been involved in the development of other higher education program that it might be helpful for me to speak with?

    Potential Follow-Up Question:
    ☐ Do you have contact information for [individual's name]?

5. Is there anything else related to your experience with developing the ----program that you would like to share?

Institution or Organization Represented:		Interview Date:	
Country:		Time Started:	Time Finished:
Gender:	Education:	Experience:	Background:

APPENDIX J: A GUIDE TO CONSIDER WHEN DECIDING ON THE TYPE OF PROGRAM

TO DEVELOP

This study found that Ghana's efforts have been towards starting a training program that would equip the country's emergency management practitioners, especially NADMO staff. The intended training program would also serve as feasibility study that would lay the foundation for starting a degree program. Thus it is recommended that before deciding on which type of EM program to develop, countries should consider the following checklist of needs assessment.

☐ Before considering developing any form of EM program, the country's mission of the benefit of the program must be well spelt out.

☐ Spelling out the objectives and potential benefits of the program to be developed would determine if the program should be a training, education, or both training and education program.

☐ If the country's aim is to only train EM practitioners to better manage disasters, then training maybe ideal, and the factors that affect training program development should be addressed.

☐ If the objective is to start a degree program but are not yet ready, then training program can be first developed. For instance, in the absence of the human capacity (i.e. qualified faculty to develop curriculum and also teach EM degree programs) and resources to roll out full degree program, countries should consider first starting with a training program.

APPENDIX K: EVALUATING WHETHER TO START AN EMERGENCY MANAGEMENT

TRAINING PROGRAM: QUESTIONS TO CONSIDER

Institutional Support
This study has shown that where there is a lack of institutional support, efforts towards program development can be fruitless. This study on an attempt to start a training program in Ghana shows the hindering effect of lack of institutional support and the opposite effect when there was institutional support. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to institutional support.
- Where do you intend to house the program?
- Will it be run by an academic institution, practitioner organization, or an independent training organization?
- Will your program have support of the leadership of the institution in which you intend to establish it?
- If yes, will the institutional support be backed by commitment of necessary resources to the program?
- Will your program have support of the leadership of all stakeholders if need be?
- If yes, will the support of the stakeholders be backed by commitment of resources should you need them?

Partnership
Partnership, including the type (i.e. formal or informal) appeared as a necessary variable for program development because of some benefits that accompany it. Specifically, formal partnership with a more established EM program has several benefits such as curriculum sharing, access to learning materials, and access to instructors among others. It is therefore, recommended that before beginning a program, one has to consider the following questions related to partnership.
- Will your program need partnership to develop?
- If your program is going to need partnership to be able to develop, are they going to be domestic partnership, international partnership, or both?
- If you are going to need partnership, will it be enough just to have it informal arrangement, even though you might have that risk of people not honoring what they agree to, or do you need a formal one?
- If you need a formal one, have you documented it?
- Has it been signed off by the appropriate people from each institution?
- What role if any will formal partnership play?
- What role if any will partnership with domestic practitioner institutions play?
- What role if any will partnership with international practitioner institution play?
- What role if any will partnership with an international training institution that has established an EM program play?

Advocate Impact

This study has shown that where there is a lack of committed and influential advocate(s), efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of advocate and the opposite effect when there was at least one advocate. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to advocate impact.

☐ Does the program have a committed advocate(s)?

☐ If yes, can the advocate(s) be influential in pushing the program development?

Funding

This study has shown that where there is a lack of funding or resources that will ensure payment of allowances to design the course(s) and pay for other administrative costs, efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of funding. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to funding.

☐ Are there enough funds to cover costs related to the program's development?

☐ If there are no existing funds already allotted to the program's development, are there avenues to access funding that will pay for curriculum development and other costs?

☐ Are there measures taken to assure that funding sources are approached and any necessary requirements met?

Program Marketing

This study has shown that where there is a lack of marketing that will ensure that potential students and stakeholders are aware of the program and thereby ensure enough student enrollments, efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of program marketing. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to program marketing.

☐ Have effective measure(s) of selling the program been identified?

☐ What measure(s) is/are they?

☐ How is their effectiveness determined?

☐ Are there resources to afford the associated cost of marketing?

Cultural Factors

This study has shown that the presence or absence of some cultural values, norms, or behaviors of the people of a country can negatively impact efforts towards program development. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of time consciousness and political upheaval on program development. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to cultural factors.

☐ Is there any societal culture of your country that can impede program development?

☐ If yes, have you identified which ways it can affect the program's development?

☐ Have you identified ways and means of mitigating its effect?

Faculty Issues
The Emergency Management literature has suggested that finding faculty with the requisite qualification to teach classes can be difficult for program's development mainly because of the relatively newness of the emergency management profession and discipline. This research study on an attempt to start a program in Ghana confirmed the lack of instructors or expertise and the potential of it hindering an emergency management training program development. Thus, it is recommended that before you begin your program, you consider the following series of questions related to faculty.

- Have you identified any faculty/expertise with the requisite practical background and experience?
- If not, have you identified faculty/expertise from closely related professions such as fire, police, etc. who are ready to switch and commit to the program?

Supporting Learning Materials
The Emergency Management literature has suggested that availability and access to learning materials used to be challenging to emergency management program, and are still challenging although to a less extent. This research study on an attempt to start a program in Ghana confirmed the difficulty in accessing learning materials. Thus, it is recommended that before you begin your program, you consider the following series of questions related to availability and access to learning materials.

- Do you have sufficient training materials available to support a complete training program, including multiple courses or modules?
- Are the materials available?
- Are the materials accessible?
- Will you be able to count on the materials being accessible into the future?

Professional Legitimacy
The Emergency Management literature has suggested that professional legitimacy is beneficial in a sense that program's acceptance by practitioner community can help provide participants (especially if the program is to be run by an independent academic institution or organization other than the main practitioner organization) with internship and job opportunities. Professional legitimacy can also help guide program administrators and instructors on the requirements of the job market. This research study on an attempt to start a program in Ghana confirms potential benefits that professional legitimacy might provide to a future program in Ghana. Thus, it is recommended that before you begin your program, you consider the following series of questions related to gaining professional legitimacy.

- Have you thought of how to earn professional legitimacy?
- What are the plans for earning professional legitimacy?
- How does your program intend to build good relationship with emergency management practitioners and organizations, especially local ones?

APPENDIX L: EVALUATING WHETHER TO START AN EMERGENCY MANAGEMENT

DEGREE PROGRAM: QUESTIONS TO CONSIDER

Training or Education/Degree Program?
This study has shown that how the goal of a program is conceptualize has tremendous implications for resources and other factors of the developmental process. Thus it is recommended that before starting a program, all the interested parties or stakeholders and individuals involved need to be clear on the goal of the intended program.
- What is it that you understand the goal of your program to be?
- Is it training or education or is it a hybrid?

These are key issues to think of because either way has implications. For each, there are implications for paper work, faculty, learning materials, costs, etc.

Institutional Support
This study has shown that where there is a lack of institutional support, efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of lack of institutional support and the opposite effect when there was institutional support. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to institutional support.
- Will your program have support of the leadership of the academic institution in which you intend to establish it?
- If yes, will the institutional support be backed by commitment of necessary resources to the program?
- Will your program have support of the leadership of professional organization(s) if need be?
- If yes, will the support of the professional organization be backed by commitment of resources should you need them?

Partnership
Partnership, including the type (i.e. formal or informal) appeared as a necessary variable for program development because of some benefits that accompany it. Specifically, formal partnership with an academic institution that has a more established EM program has several benefits such as curriculum sharing, access to learning materials, and faculty development among others. A partnership between an academic institution and a practitioner organization was also found to be helpful to starting a new program. It is therefore, recommended that before beginning a program, one has to consider the following questions related to partnership.
- Will your program need a partnership to develop?
- If your program is going to need a partnership to be able to develop, are they going to be domestic partnership, international partnership, or both?
- If you are going to need a partnership, will it be enough just to have it informal arrangement, even though you might have that risk of people not honoring what they agree to, or do you need a formal one?
- If you need a formal one, have you documented it?
- Has it been signed off by the appropriate people from each institution?
- What role if any will formal partnerships play?

☐ What role if any will partnership with domestic practitioner institutions play?
☐ What role if any will partnership with international practitioner institutions play?
☐ What role if any will partnership with international academic institution that has established an EM degree program play?

Advocacy

This study has shown that where there is a lack of a committed and influential advocate, efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of advocate and the opposite effect when there was an advocate. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to advocacy.

☐ Does the program have a committed advocate(s)?
☐ If yes, can the advocate(s) be influential in pushing the program development?

Funding

This study has shown that where there is a lack of funding or resources that will ensure payment of allowances to develop curriculum and pay for other administrative costs, efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of funding. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to funding.

☐ Are there enough funds to cover costs related to the program's development?
☐ If there are no existing funds already allotted to the program's development, are there avenues to access funding that will pay for curriculum development and other costs?
☐ Are there measures taken to assure that funding sources are approached and any necessary requirements met?

Program Marketing

This study has shown that where there is a lack of marketing that will ensure that potential students and stakeholders are aware of the program and thereby ensure enough student enrollments, efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of program marketing. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to program marketing.

☐ Have effective measure(s) of selling the program been identified?
☐ What measure(s) is/are they?
☐ How is their effectiveness determined?
☐ Are there resources to afford the associated cost of marketing?

Cultural Factors

This study has shown that the presence or absence of some cultural values, norms, or behaviors of the people of a country can negatively impact efforts towards program development. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of time consciousness and political upheaval on program development. Therefore, it is recommended that before you begin your program, you consider the following series of questions related to cultural factors.

☐ Is there any societal culture of your country that can impede program development?

☐ If yes, have you identified which ways it can affect the program's development?
☐ Have you identified ways and means of mitigating its effect?

Faculty Issues

The Emergency Management literature has suggested that finding faculty with the requisite qualification to teach classes can be difficult for program's development mainly because of the relatively newness of the emergency management discipline. This research study on an attempt to start a program in Ghana confirmed the lack of qualified faculty and the potential of it hindering future efforts of Ghana starting an emergency management degree program. Thus, it is recommended that before you begin your program, you consider the following series of questions related to faculty.

☐ Have you identified any faculty with the requisite academic and practical background?
☐ If not, have you identified faculty from closely related discipline who are ready to switch and commit to the program?

Students Issues

The Emergency Management literature has identified a couple of student issues that can to some extent negatively impact program development, such as criteria for admitting high quality and dedicated students, while ensuring significant enrollment levels. This research study on an attempt to start a program in Ghana also finds that, in the future, high enrollments and students ability to pay for the programs might be problematic for emergency management degree programs. Thus, it is recommended that before you begin your program, you consider the following series of questions related to admission criteria, enrollments, and students financial support.

☐ Have you thought of the criteria for admitting high quality and dedicated students into the program?
☐ If so, are the criteria varied enough to accommodate students from different backgrounds?
☐ What measures will be put in place to ensure desired enrollments?
☐ If there are measures in place, are they feasible?
☐ Are there resources to help implement the measures?
☐ If needed, are there financial aid program that can help support brilliant and dedicated but needy students?

Supporting Learning Materials

The Emergency Management literature has suggested that availability and access to learning materials used to be challenging to emergency management program, and are still challenging although to a less extent. This research study on an attempt to start a program in Ghana confirmed the difficulty in accessing learning materials. Thus, it is recommended that before you begin your program, you consider the following series of questions related to availability and access to learning materials.

☐ Do you have text books and journal materials available to support a full degree program, including multiple classes?
☐ Are the materials available?
☐ Are the materials accessible?
☐ Will you be able to count on the materials being accessible into the future?

Professional Legitimacy

The Emergency Management literature has suggested that professional legitimacy is beneficial in a sense that program's acceptance by practitioner community can help provide students with internship and job opportunities. Professional legitimacy can also help guide program administrators and faculty on the requirements of the job market. This research study on an attempt to start a program in Ghana confirms potential benefits that professional legitimacy might provide to a future program in Ghana. Thus, it is recommended that before you begin your program, you consider the following series of questions related to gaining professional legitimacy.

☐ Have you thought of how to earn professional legitimacy?
☐ What are the plans for earning professional legitimacy?
☐ How does your program intend to build good relationship with emergency management practitioners and organizations, especially local ones?

Curriculum Standardization

The Emergency Management literature has suggested that curriculum development, including standardization has been challenging and a long standing debatable issue for EM programs. This research study on an attempt to start a program in Ghana confirmed the potential challenge of developing a workable curriculum for future degree programs although standardization did not appear as a challenge or necessary for future programs in the country. Nonetheless, at the individual program level, it is recommended that before you begin your program, you consider the following series of questions related to curriculum development.

☐ Do you have curriculum materials available to support a full degree program, including multiple classes?
☐ Is that curriculum available?
☐ Is that curriculum accessible?
☐ Will you be able to count on that curriculum being accessible into the future?

Autonomy and Administrative Location

The Emergency Management literature has suggested that where issues related to autonomy and administrative location are found, program development can be stymied. Thus, it is recommended that before you begin your program, you consider the following series of questions related to the issues that come with autonomy, which can lead to a lost on program visibility, leverage, and growth.

☐ Where has it been determined that your program will be housed?
☐ Are you aware of any consequences to the management of the program that will result from being housed in that department?
☐ Are you able to be your own department?
☐ Have you thought of the consequences of being in your own department?

APPENDIX M: DIAGNOSING EMERGENCY MANAGEMENT DEGREE PROGRAM

DIFFICULTY

Training or Education/Degree Program?
This study has shown that how the goal of a program is conceptualize has tremendous implications for resources and other factors of the developmental process. Thus it is recommended that if a program is not doing well, all the interested parties or stakeholders and individuals involved need to be clear on the goal of the definition and the direction of the program. This can be achieved by answering the following questions.

- Does everyone involved in the program understand the difference between running a training versus an education program ?
- How are stakeholders ensuring that the program stays on the established goal without veering to the other?

These are key issues to think of because training and degree programs have different needs. For each, there are implications for paper work, faculty, learning materials, costs, etc.

Institutional Support
This study has shown that where there is a lack of institutional support, programs can suffer or even disappear. This study on an attempt to start a program in Ghana shows the hindering effect of lack of institutional support and the opposite effect when there was institutional support. Therefore, it is recommended that if your program is doing well, you consider the following series of questions related to institutional support.

- Does the program still enjoy the support of the academic institution's leadership including the support of the stakeholder institutions that helped it start?
- Has there been any change in leadership in your academic institution that is directly or indirectly affecting your program's policy?
- Has there been any change in the leadership of the stakeholder institutions that is directly or indirectly affecting your program?

Partnership
Partnership, including the type (i.e. formal or informal) appeared as a necessary variable for program development because of some benefits that accompany it. Specifically, formal partnership with an academic institution that has a more established EM program has several benefits such as curriculum sharing, access to learning materials, and faculty development among others. A partnership between an academic institution and a practitioner organization was also found to be helpful to starting a new program. On the other hand, discontinuation of the partnerships impacted negatively on the program's development. It is therefore recommended that if programs are struggling one has to consider the following questions related to partnership.

- If a partnership was in place at the beginning, was it a formal one with written down rights and obligations of all parties?
- Are members, including those of your program, fulfilling their part of the agreements?
- If informal partnership was in place at the beginning, are all parties of the partnership still involved and fulfilling their part?
- What can be done to make any informal partnership formal?

Advocate Impact

This study has shown that where there is a lack of a committed and influential advocate, efforts towards program development can be fruitless. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of advocate and the opposite effect when there was an advocate. Therefore, it is recommended that if your program is not doing well, you consider the following series of questions related to advocacy.

☐ If any, has the program lost an advocate?
☐ Are the advocates committed and have the ability to make effective changes?

Funding

This study has shown that where there is a lack of funding or resources that will ensure payment of administrative costs and allowances to help faculty and students in attending professional conferences and other related activities, program growth tend to suffer. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of funding. Therefore, it is recommended that if your program is not doing as well as projected, you consider the following series of questions related to funding.

☐ Has the program lost funding?
☐ Has the program severed relationship with its prior source of funding?

Program Marketing

This study has shown that where there is a lack of marketing that will ensure that potential students and stakeholders are aware of the program and thereby ensure enough student enrollments, program maintenance and growth can be challenged. Students enrollments are backbone of program growth. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of program marketing. Therefore, it is recommended that if your program is not doing so well, you consider the following series of questions related to program marketing.

☐ How is your program ensuring continuous enrollment of students?
☐ If there was a marketing plan in the beginning, is it being properly executed?
☐ If any, is the marketing method or tools being evaluated for effectiveness?

Cultural Factors

This study has shown that the presence of some cultural values, norms, or behaviors of the people of a country can negatively impact efforts towards program development. This study on an attempt to start a program in Ghana shows the hindering effect of a lack of time consciousness and political upheaval on program development. Therefore, it is recommended that if your program is not doing well, you consider the following series of questions related to cultural factors.

☐ If any negative cultural factors have been identified, are there any measures to mitigate the effect?
☐ How effective are any previous mitigating measures?

Faculty Issues

The Emergency Management literature has suggested that finding faculty with the requisite qualification to teach classes can be difficult for program's development mainly because of the relatively newness of the emergency management discipline. This research study on an attempt

to start a program in Ghana confirmed the lack of qualified faculty and the potential of it hindering future efforts of Ghana starting an emergency management degree program. Thus, it is recommended that if your program is struggling, you consider the following series of questions related to faculty.

- Are there enough faculty to ensure growth of the program?
- Are the faculty committed to the discipline of emergency management?
- Does the program have support and resources to help faculty grow?

Students Issues

The Emergency Management literature has identified a couple of student issues that can to some extent negatively impact program development, such as criteria for admitting high quality and dedicated students, while ensuring significant enrollment levels. This research study on an attempt to start a program in Ghana also finds that, in the future, high enrollments and students ability to pay for the programs might be problematic for emergency management degree programs. Thus, it is recommended that if your program is not doing well, you consider the following series of questions related to admission criteria, enrollments, and students financial support.

- Are admission criteria ensuring that good and enthusiastic students are being enrolled?
- Are student enrollment levels enough to maintain the program?
- Is the program loosing students i.e. student drop outs?
- What are measures are in place to ensure that students stay in the program and graduate?
- If students are finding it difficult to pay, are there funding opportunities and possibility of access?

Supporting Learning Materials

The Emergency Management literature has suggested that availability and access to learning materials used to be challenging to emergency management program, and are still challenging although to a less extent. This research study on an attempt to start a program in Ghana confirmed the difficulty in accessing learning materials. Thus, it is recommended that if your program is not doing as well as you anticipate, you consider the following series of questions related to availability and access to learning materials.

- Do students and faculty have continuous access to learning materials?
- Are there adequate facilities for accessing electronic learning materials for both students and faculty?
- How familiar are the students, and maybe faculty, with the means of accessing learning materials?

Professional Legitimacy

The Emergency Management literature has suggested that professional legitimacy is beneficial in a sense that program's acceptance by practitioner community can help provide students with internship and job opportunities. Professional legitimacy can also help guide program administrators and faculty on the requirements of the job market. This research study on an attempt to start a program in Ghana confirms potential benefits that professional legitimacy might provide to a future program in Ghana. Thus, it is recommended that if your program is not well received by the practitioner community and you identify that there is a need for that, you consider the following series of questions related to gaining professional legitimacy.

☐ If professional legitimacy was in place at the beginning, does the program still have that?

☐ If not, what is being done to ensure practitioners appreciate the program?

Curriculum Development

The Emergency Management literature has suggested that curriculum development, including standardization has been challenging and a long standing debatable issue for EM programs. This research study on an attempt to start a program in Ghana confirmed the potential challenge of developing a workable curriculum for future degree programs although standardization did not appear as a challenge or necessary for future programs in the country. Nonetheless, at the individual program level, if your program is not doing as well as you would like it to do, you consider the following series of questions related to curriculum development.

☐ Is the curriculum meeting the needs of students' career goals?

☐ If not, is the curriculum being evaluated for what needs to be added and/or taken away?

☐ Do you review your curriculum regularly to see how it can be improved?

Autonomy and Administrative Location

The Emergency Management literature has suggested that where issues related to autonomy and administrative location are found, program development can be stymied. Thus, it is recommended that if you want to strengthen your program, you consider the following series of questions related to the issues that come with autonomy, which can lead to a lost on program visibility, leverage, and growth.

☐ If your program is a stand-alone department, is it doing well in accessing funds to run the program?

☐ If your program is a stand-alone department, is it able to administratively manage the program as desired?

☐ Is your program challenged in any way being a stand-alone department?

☐ If it is housed in another department, is your program suffering from lack of control by program advocate and faculty?

☐ Do faculty have the flexibility of implementing ideas that could grow your program, if it is housed in another department?

APPENDIX N: DEFINITION OF FACTORS

FACTOR	DEFINITION
Institutional Support	Recognition, approval, and commitment of the leadership of stakeholder institutions, including their willingness to dedicate resources to program's development and maintenance.
Partnership	Any arrangement involving two or more institutions, local and/or foreign, that agree to work together to promote a given member's objective or to advance mutual interest with formally written rights and obligations of members. Partnership could also be informal, although informal partnerships may not positively influence program development.
Advocate(s) (Advocacy)	An individual or a group of individuals who have the ability to influence a program's development through either their positions or leadership qualities, and are committed to program's development.
Funding	Sustained dedication of financial resources to program development and maintenance.
Program Marketing	Effective advertisement or strategies that will ensure that potential students, including their sponsors and stakeholder institutions, have knowledge of program's existence and benefits.
Cultural Factors	Activities, norms, or behavior of a country that could positively or negatively impact program's development and sustenance.
Faculty Issues	Availability of, access to, and ability to recruit faculty with necessary professional and academic background who are committed to the growth of the discipline.
Students Issues	Ability to attract and enroll significant number of high quality and determined students, through comprehensive admission criteria. The factor includes measures to resolve student funding issues, if any.
Supporting Learning Materials	Identifying and availability of learning materials, such as text books and journal articles, and Information Communication Technologies that will enable hassle free access by students and faculty.
Professional Legitimacy	Recognition and approval of intended degree program by the country's practitioner community.
Academic Legitimacy	The extent to which the program is viewed by other academic disciplines and by higher education institutions as credible and worthy of inclusion in the scientific academy.
Autonomy and Administrative Location	Autonomy issues refer to challenges in establishment of EM programs as stand-alone or independent departments, while administrative location issues are related to challenges of the opposite scenario where programs are placed under other more established programs or departments of academic institutions.
Accreditation	The process of achieving and maintaining recognition and approval for a degree program and its curriculum from a formal accrediting body.

FACTOR	DEFINITION
Curriculum Standardization	Whether a standardized curriculum for the degree is available to inform the development of a degree program and, if so, whether the developing degree program adopts the available curriculum.
Institutional Criteria	A set of institutionally-based steps that must be completed and criteria that must be met by those seeking to initiate a degree program within a higher education institution before the degree program will be approved by the institution.