# PRODUCT DEVELOPMENT TRAINING IMPACT ON ARTISAN CAPABILITIES AND SUSTAINABLE BUSINESS SUCCESS

by

Elizabeth Davelaar

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Science in Fashion and Apparel Studies

Spring, 2017

© 2017 Elizabeth Davelaar All Rights Reserved

# PRODUCT DEVELOPMENT TRAINING IMPACT ON ARTISAN CAPABILITIES AND SUSTAINABLE BUSINESS SUCCESS

by

# Elizabeth Davelaar

Approved:	
-FF	Marsha Dickson, Ph.D. Professor in charge of thesis on behalf of the Advisory Committee
Approved:	
	Hye-Shin Kim, Ph.D. Chair of the Department of Fashion and Apparel Studies
Approved:	
	George Watson, Ph.D. Dean of the College of Arts and Sciences
Approved:	
	Ann L. Ardis, Ph.D. Senior Vice Provost for Graduate and Professional Education

#### **ACKNOWLEDGMENTS**

I am truly honored to be able to thank all the people who have taken me under their wings and made this thesis possible. First, to Dr. Marsha Dickson, I extend my most sincere thanks. From the very beginning, she encouraged me to follow my passions and helped me through all of the challenges that came with planning international research and travel. It was truly a joy to be able to learn from someone who has a great understanding and a passion for the same things I do. I cannot express how grateful I am for her mentorship and guidance through the process of writing my thesis. Secondly, I would like to thank Dr. Lu and Prof. Cobb for being on my thesis committee. Both have taught me so much about their perspective areas of focus and have always pushed me to be my best and to challenge myself. Next, I would like to thank the entire fashion department at the University of Delaware and to the professors of which I have had the opportunity to work for. They have all pushed me and have been very understanding through the whole writing process. A special thank you to Deborah Chandler for being our guide for the 10 days we explored Guatemala. Her expertise and knowledge of the industry are invaluable to this research.

I would like to thank my family for their continuous support and for always believing that I can conquer the world. Their support has been irreplaceable through all of this and it would not be complete without them. Lastly, I would like to thank God for giving me a clear passion and dream that has led me to many crazy places. While the dream of helping people started 10 years ago, this is the first real output I have of it. For that I am extremely thankful.

# TABLE OF CONTENTS

LIST	OF TA	ABLES		.vii
LIST	OF FI	GURES	S	ix
ABST	TRAC'	Γ		X
Chapt	ter			
1	INT	RODUCTION		
	1.1	Introd	uction	1
	1.2		ture Review Overview	
	1.3		sed Theoretical Model	
	1.4		se and Research Questions	
	1.5		y of Guatemala and Guatemalan Craft	
	1.6		od	
	1.7		cation	
	1.8		tional Definitions	
	1.9	-	nptions and Limitations	
2	REVIEW OF LITERATURE			
	2.1	Histor	y of Artisans and Crafts	10
	2.1		n Business and Cultural Significance	
	2.3		as a Development Tool and Chamber's Web of Responsible	1.
	2.5		eing	20
	2.4		m and Littrell's Model for Performance of Peace Corps	
		Handicraft Enterprises		28
	2.5		raints within the Artisan/Informal Sector	
		2.5.1	Technology and Facilities	
		2.5.2	Hyper-competition and Market Access	
		2.5.3	Financial Access	
		2.5.4	Formalization of the Sector	
		2.5.5	Education	
		2.5.6	Findings to Combat Constraints	40
	2.6	Produ	ct Development Training	41
		2.6.1	Informal Sector Training Methods/Interventions	41
		2.6.2	Need for Training in Small/Medium Size Apparel Production	
			Enterprises	49
		2.6.3	Innovations, Interventions, and Examples of Product	
			Development	50

		2.6.4	Understanding Tastes and Preferences for Artisans and Consumers	57
	2.7	Theor	etical Model	60
3	ME	ΓHOD.		64
	3.1	Dagaa	roh Overtions	6/
	3.1		rch Questionsrch Approach	
	3.2		iew Schedules	
	3.4		Research	
		3.4.1	Recruitment of Participants	67
		3.4.2	Data Collection	
	3.5	Data A	Analysis	72
4	RES	RESULTS		
	4.1	Introd	uction	75
	4.2		Study #1: Building Baskets, Building Opportunity	
		4.2.1	Products Created	78
		4.2.2	Product Development Training	
		4.2.3	Capabilities	
		4.2.4	Internal Constraints	83
		4.2.5	Business Success	84
		4.2.6	Sustainability Awareness	
		4.2.7	External Constraints	86
	4.3	Case	Study #2: 'Compassion' Training	8
		4.3.1	Product Development Training	
		4.3.2	Capabilities	
		4.3.3	Internal Constraints	
		4.3.4	Business Success	
		4.3.5	Sustainability Awareness	
		4.3.6	External Constraints	99
	4.4	4.4 Case Study #3: Weaving Opportunity		
		4.4.1	Products Created	
		4.4.2	Product Development Training	
		4.4.3	Capabilities	105

	4.4.4	Internal	Constraints	108		
	4.4.5	Busines	s Success	109		
	4.4.6	Sustaina	ability Awareness	110		
	4.4.7		l Constraints			
4.5	Case S	Study #4:	Weaving in the Mountains	112		
	4.5.1	Product	Development Training	117		
	4.5.2		ities			
	4.5.3		Constraints			
	4.5.4		s Success			
	4.5.5		ability Awareness			
	4.5.6		l Constraints			
4.6	Case S	Study #5:	Friends for Life	122		
	4.6.1	Product	Development Training	124		
	4.6.2		ities			
	4.6.3	-	Constraints			
	4.6.4		s Success			
	4.6.5		ability Awareness			
	4.6.6		l Constraints			
4.7	Additi	Additional Interviews, Market Observations and Detours				
	4.7.1	Interview with Trainer				
		4.7.1.1	Western Ideals and Expectations Versus Tradition Practices			
		4.7.1.2	Benefits of Training and Important Training	130		
			Elements	131		
		4.7.1.3	Elements That Are Needed to Create a Better Arti			
			Sector			
	4.7.2	Guatem	ala City NGO			
	4.7.3	Rug NGO				
	4.7.4	Business in Antigua				
	4.7.5	Intervie	w with Apparel Executive	139		
	4.7.6					
		4.7.6.1	Mercado de Artesania in Guatemala City	140		
		4.7.6.2	Panajachel Market.			
		4.7.6.3	Chichicastenango Market.			
		4.7.6.4	Antigua shopping and market			

		4.7.7	Unavoidable Detours	145	
	4.8	Person	nal Reflection	146	
5	DIS	CUSSI	ON AND CONCLUSIONS	148	
	5.1	Summ	nary of Research	148	
		5.1.1	Case Study #1: Building Baskets, Building Opportunity	149	
		5.1.2	Case Study #2: 'Compassion' Training		
		5.1.3	Case Study #3: Weaving Opportunity		
		5.1.4	Case Study #4: Weaving in the Mountains		
		5.1.5	Case Study #5: Friends for Life		
	5.2	Cross	Case Analysis and Discussion	152	
			•		
		5.2.1	Needs Assessment		
		5.2.2	Similarities and Differences of Training		
		5.2.3	Capabilities		
		5.2.4	Internal Constraints		
		5.2.5	Business Success		
		5.2.6	Social and Environmental Sustainability Awareness		
		5.2.7	External Constraints	161	
	5.3	Concl	usions	167	
	5.4	Limita	ations and Future Research	170	
REFE	EREN	CES		172	
Appe	ndix				
A	INT	ERVIE'	W SCHEDULE – ARTISAN GROUP MEETINGS	178	
В	OBS	SERVA	TION SCHEDULE	182	
C	INT	ERVIE	W SCHEDULE - TRAINERS	183	
D	INT	INTERVIEW SCHEDULE – EXPORT AGENCY EMPLOYEE 185			
E	SCR	AIPT FO	OR MODIFIED INFORMED CONSENT TO PARTICIPAT	E IN	
	RES	EARC	H – ARTISAN INTERVIEW	188	
F	SCR	SCRIPT FOR MODIFIED INFORMED CONSENT TO PARTICIPATE IN			
			H - TRAINER		
G	SCR	RIPT FO	OR MODIFIED INFORMED CONSENT TO PARTICIPAT	E IN	
	RES	EARC	H – EXPORT AGENCY INTERVIEW	192	
Н	HUN	MAN S	UBJECTS PROTOCOL	194	
I	IRB	<b>APPRO</b>	OVAL FORM	202	

# LIST OF TABLES

Table 2.1 Models of Educational Pathways in the Informal Sector	38
Table 3.1 Case Study Overview	71
Table 3.2 Additional interviews with NGOs and a Business.	72

# LIST OF FIGURES

Figure 2.1 Model of Product Development Training Impact on Artisan Capabilitie and Sustainable Business Success	
Figure 3.1 Map of Guatemalan Highland Region	69
Figure 4.1 Placemats in two sizes created by Artisan Group #1	78
Figure 4.2 Basket designed by Artisan Group #1	82
Figure 4.3 Order check-in procedure	83
Figure 4.4 View from the road to Patanatic looking down over Panajachel	90
Figure 4.6 Making a basket	91
Figure 4.5 Example of baskets created for NGO B	91
Figure 4.7 Randas Example	93
Figure 4.8 Example of completed randa from NGO B	93
Figure 4.9 Examples of products created for NGO C	102
Figure 4.10 Example of bag made for Novica	113
Figure 4.11 Examples of the yamikas created by NGO D	113
Figure 4.12 Example of pray shawls created for NGO E	114
Figure 4.13 View of road on the trip to Agua Caliente to build the trust that was lost	115
Figure 4.14 Example of wall-hanging created by group	116
Figure 4.15 Example of products designed by artisans	116
Figure 4.17 Example of the mirrors created through training	117
Figure 4.16 Example of crowns created by group	117
Figure 4.18 Street in Comolapa.	122
Figure 4.19 Entrance to a home in Comolapa	122

Figure 4.21 Example of bags created by group	123
Figure 4.20 Example of products created by group	123
Figure 4.22 Example of products created out of naturally colored cotton	133
Figure 4.23 Example of Rug created for NGO in Panajachel	134
Figure 4.24 Example of napkin rings made out of pine needles	136
Figure 4.25 Throw blanket made out of cotton	138
Figure 4.26 Example of other products	138
Figure 4.28 Local vegetable market within the Chichicastenango Market	142
Figure 4.27 Chichicastenango Market	142
Figure 4.29 Church located in the middle of the Chichicastenango Market	143
Figure 4.30 Inside of Antigua market	144
Figure 4.31 Stack of huipiles at one of the stores in Antigua	144
Figure 5.1 Revised Model of Product Development Training Impact on Artisan Capabilities and Sustainable Business Success	169

#### **ABSTRACT**

The purpose of the study was to determine how product development training affected the capabilities of artisans and impacted their groups overall internal constraints and business success. In addition to this, external constraints and artisan awareness of social and environmental responsibility were taken into consideration to understand the context influencing artisan work and potential for long term business sustainability.

This study utilized a multiple case study design with embedded units of analysis. Five case studies were conducted with artisan groups and their NGO partners during a 10-day field study in Guatemala. Interviews lasted between one and three hours and an additional three interviews were conducted with three other NGOs, a trainer, and a board member of the main export organization in Guatemala.

The study found that product development training did have an impact on artisan capabilities. But having a strong NGO partner that trained for a market opportunity or a needed production capacity increase had as much of an impact, if not more, on artisan capabilities and also on artisan businesses. NGOs that "compassion train," or trained without a market opportunity or production need, did not have a positive impact on the businesses. Additionally, the study found that some of the NGOs used imported raw materials to an extent that had not been found in past literature. The NGOs used the imported materials to differentiate their products from what was found in the local markets and to increase the quality of their products. Lastly, it was found that some of the artisans did have an awareness of social and environmental sustainability, understanding that they could not sell products that they had not personally created to the NGOs and wondering what would happen when the

grasses they used for the baskets ran out. Some others did not have an understanding, having their children weave on occasion.

#### Chapter 1

#### **INTRODUCTION**

#### 1.1 Introduction

Crafts around the world serve as a development tool (Bhatt, 2006; Haan, 2001; Liebl & Roy, 2004) because of the ease of entry into the market (Harris, 2014). However, the current market has become oversaturated with the same products (Harris, 2014), making new skill sets vital. This study focused on how product development training has impacted the lives of artisans and their businesses, specifically in Guatemala.

#### 1.2 Literature Review Overview

Artisan crafts, while traditionally marketed and sold within communities (Liebl & Roy, 2004), have grown into an international business (Littrell & Dickson, 1999; Grimes, 2000; Wherry, 2008). Crafts are useful tools for development because most are based in the informal sector and are methods for families and communities to make an income from things that they already know how to do (Bhatt, 2006; Haan, 2001; Liebl & Roy, 2004). Usually, the crafts that are produced involve traditions that are passed down from generation to generation that are part of daily life (Bhatt, 2006).

Crafts are useful for development because they allow artisans to have a livelihood and improve wellbeing. These elements are drawn from Chamber's Web of Responsible Wellbeing and the web is used in this study because it puts the needs of artisans in the study first. The five elements in the web are wellbeing, livelihood, capabilities, equity, and sustainability. Wellbeing addresses the quality of life,

livelihood is the inflow and outflow of cash to support basic needs, capabilities are the abilities or skills of the individual, equity is putting the last (or poorest) first, and sustainability focuses on the overall long term viability of the solution (Chambers. 1997). This model was used because it gives measurable elements for how training affects the individual. Remaining focused on the needs of the artisans was an important aspect of this study.

From Chamber's model, this study specifically focused on the capabilities of the artisans and the long-term viability and sustainability of their businesses. Capabilities were important because they can be directly impacted by education, training, or practice (Chambers, 1997). Product development training falls into the training category. Sustainability of the business was based on 10 criteria for small business success; profitability, growth, innovation, firm survival/continuity, contributing back to society, personal satisfaction, satisfied stakeholders, work/life balance, public recognition, and utility/usefulness or the organization (Gorgiexski, Ascalon, & Stephan, 2011).

When analyzing what is happening in the artisan sector around the world, internal and external constraints have been found in many previous studies (Bhatt, 2006; Haan, 2006; Harris, 2014; Rogerson, 2000). Internal constraints on artisan businesses are inadequate technology, production levels, market position, business management, and education. External constraints are economic policies, legal framework/sector formation, poor market structure, and lack of access to finances. Internal constraints are constraints that can be addressed by artisan actions but external constraints are mostly out of the control of the artisans because they are dictated by governments and cultural norms.

Hyper-competition has been found to be prevalent in the artisan sector because there are low barriers of entry and this has created over saturated markets (Harris, 2014). Even with help accessing international markets through non-governmental organizations (NGOs), it is difficult to remain competitive in the sector (Bhatt, 2006; Harris, 2014; ILO, 2006; Liebl & Roy, 2004). It is also difficult for artisan to gain access to finances to buy raw materials because of the current informal structure of the sector (Liebl & Roy, 2004). The lack of formal education in the sector is also prevalent and determines how training is most effectively delivered (Haan, 2006).

Current education and training greatly varies within the sector. Education around the world does not follow a specific path but can include various levels of primary education. Training for artisans also can vary, some only learning from apprenticeships, while others are trained by governments or NGOs (Haan, 2006). Apprenticeships are very common in the informal sector, where younger artisans are trained by master artisans in a craft (Haan, 2006; McGrath et al., 1995). Training from governments tends to be very uniform and teaches the same skills to all participants, regardless of their needs (Haan, 2006). NGO training can be split into three types; social welfare, traditional training, and professional training/multi-service (PTMS). Social welfare training tends to have outdated training methods and equipment and traditional training tend to provide longer training programs spread over one to three years (Haan, 2006). PTMS is beneficial because the instructors are hired based on specialization. This tends to create a more sustainable practice because the training is done by people who have been trained in the skill (Haan, 2006). The need for training was addressed on the international level in 1989 at the International Labor Association (ILO) Training Center Workshop (Fluitman, 1989) and is still a need (Haan, 2006).

Many of the trainers in the informal sector do not have backgrounds in what they are teaching (Haan, 2006).

A needs assessment was performed of the apparel production sector in Swaziland to find the state of the industry, the equipment they had available to them, and the future needs. Results showed that the smaller the group was, the poorer the equipment was. The study also showed that there was a need for training within the industry, with 60% of the participants wanting pattern making training (Zane, Richards, & Edmond, 2002). It is possible that textile artisan organizations may have similar needs.

Both artisan innovation and NGO interventions in product development are important to analyze to see what is currently being done in the sector. It is important to remember that artisans are business people and want to create products that will sell. This means that they innovate to sell products (Antrosio & Colloredo-Mansfeld, 2015). NGO interventions range in degree of their involvement from the organization in the development and sale of products made by artisan groups. Some alternative trade organizations (ATO) do not intervene with product development, only buying what they find, while others are deeply involved with the product development process of the artisan groups. MarketPlace India, for example, had designers from the United States involved in much of the process (Littrell & Dickson, 2010).

Lastly, it is important to understand that there are different taste preferences and different markets, which is relevant to artisan group success. Artisans in Ecuador did not agree with college students in the Midwest as to what was fashionable and this shows that there is a need for outside resources for targeting the correct markets (Antrosio & Colloredo-Mansfeld, 2015).

#### 1.3 Proposed Theoretical Model

Based on the literature review, a proposed theoretical model explaining the impact of product development training was developed. The model provided a framework for designing and carrying out this study.

#### 1.4 Purpose and Research Questions

The purpose of the study was to determine how product development trainings affected the capabilities of the artisans and impacted their groups' overall internal constraints and business success. In addition to this, external constraints, as well as artisan awareness of social and environmental responsibility, were taken into consideration to understand the context influencing artisan work and potential for long term business sustainability. Research questions for the study were as follows:

- 1) How has needs assessment been incorporated into product development training for artisan groups?
- 2) What are the similarities and differences in the trainings artisan groups have received?
- 3) How has product development training expanded the capabilities of the artisans?
- 4) How has product development training aided artisans in addressing the internal constraints they face?
- 5) What is the relationship between product development training and artisan group business success?
- 6) How aware are the artisan groups about social responsibility and environmental responsibility?

7) What external constraints are influential to artisans and their business success?

#### 1.5 History of Guatemala and Guatemalan Craft

Guatemala is a developing country where craft development can be found and where the field research for this study was done. Guatemala has a population of 14.9 million (2015 estimate) which is the largest population in Central America. The population is very young, with 57% of the population being 24 or younger (The World Factbook, 2016-2017).

Poverty is prevalent in Guatemala, with over half of the population living in poverty, with 23 % in extreme poverty. Forty percent of the population is considered indigenous and of that group, 79% live in poverty, with 39% in extreme poverty. Overall, 81.5% of the population is literate (The World Factbook, 2016-2017).

Guatemala has strong ties to the Maya Indians, who occupied the country and much of the surrounding area starting as early as 2600 B.C. The Mayans were most prominent between 200 A.D. and 900 A.D., with some of the cities thriving until 1200 A.D. The culture was well known for its architecture, advanced astronomy, farming, and weaving. The Spanish Conquests overtook the area in the 1500s (Canadian Museum of History, n.d.). Guatemala gained independence from Spain in 1821 (The World Factbook, 2016-2017).

A civil war officially started in the country in 1960, but tensions started in 1944 when the standing dictator, Jorge Ubico, was overthrown by civilians. The president that followed, President Juan Arevalo, began reforms to the education system, as well as labor and economic systems. Part of this included expropriating lands that were not in use, which was met with apprehension from the U.S.

government because they were worried about the spread of Communism. This led President Eisenhower to allow the CIA to support the groups that opposed President Arbenz in 1953 and a U.S. backed coup occurred on July 2, 1954, when Colonel Carlos Castillo Armas declared himself President. During his presidency, President Castillo Armas reversed the expropriated land laws and set up a law that said any person thought to be Communist could be arrested, which resulted in thousands of arrests and imprisonments. (Calderón, 2002-2011).

Between 1954 and the official start of the civil war in 1960, CIA involvement also came to light, which was not popular with many Guatemalans. Government backed militias terrorized the general population through disappearances of people who opposed the government. Many of the native Mayan people fought for social justice and equality (Caldon, 2002-2011).

The 36-year civil war included military control and violence, as well as guerilla militias and two more coups. The military was responsible for the 'disappearances' of thousands of people and during the war over 200,000 people died and there were 23,671 arbitrary executions. Over 80% of the victims were of Mayan decent. 1994 marked the beginning of peace talks between the opposing sides of the civil war, which officially ended in 1996 (Caldon, 2002-2011). The violence of the civil war reached into the artisan community. In 1981, 23 who were working with Pueblo to People (PTP), an ATO, were murdered. PTP also had one staff member killed in the violence (Littrell & Dickson, 1999).

The government has continued on a rocky road to democratic recovery but still fights corruption. In 2015, the La Linea corruption scandal was responsible for the resignation of both President Molina and Vice President Roxana Baldetti. Both were

later arrested on corruption charges, because of their involvement in bribes for lower tariffs (Alwani & Bulmer, 2016).

The large portion of the population that is living in poverty, as well as the traditional crafts produced, make Guatemala a good location for artisan development, which is why it was chosen as the field location for this study.

Clothing and cloth plays a large role in the traditions of the Maya population of Guatemala. Traje is the traditional clothing that is worn by the Maya population, specifically those who live in the highlands region. It is hand woven on backstrap looms (Shaughnessy, 2013). Traditionally, each town and region would have patterns specific to them (Miralbes de Polanco, 2013) and weaving was a daily part of life for most women (Hecht, 2001). The huipil is the blouse that women wear and is typically made from two or three panels of materials that are woven, brocade, or embroidered. Traditionally huipiles were made from cotton and wool, but more recently synthetic fibers have been introduced because of the low prices associated with synthetics (Hecht, 2001).

While traje is a source of pride (Shaughnessy, 2013), the indigenous population of Guatemala also experiences discrimination, especially the women when wearing their traditional clothing, or traje (Macleod, 2004). During the civil war, people abandoned traje for fear of getting targeted and potentially killed (Gordon, 1993).

Today, with the introduction of brighter colors because of synthetic dyes and fibers, as well as exposure to European sources, women are adapting the traditional patterns and techniques to create new designs and aesthetics (Pollard Row, 2013). The once town specific designs are now less specific, conveying Mayan unity but the

traditional messages that huipiles and traje were once famous for are now lost (Miralbes de Polance, 2013).

#### 1.6 Method

The research method used for this study was multiple case study design with embedded units of analysis, with the units being the artisan group and the NGO. Case study research was useful for this study because it answered the 'how' and 'why' of the effect of product development training when there was no researcher intervention. Case study research was also useful because the sample cannot be recreated in a controlled environment or removed from the context of the surrounding environments (Yin, 2014).

For each case study, NGOs and artisan groups were both interviewed to understand how training was approached and the outcomes of the trainings. Each interview lasted between one hour and three hours, and were conducted over a ten-day period of field research in Guatemala. Five additional interviews were conducted with NGOs, a trainer, and a board member of a privately run non-profit Guatemalan export association, AGEXPORT. These interviews provided a greater contextual understanding of artisan work in Guatemala.

#### 1.7 Justification

While education and training paths have been analyzed in previous research, no study has been found on the impact of different types of product development training on artisan groups. With the continuation of globalization, it is more important than ever to find training methods that benefit groups that are otherwise overlooked. It is possible that without further training, traditions could be lost and opportunity for

development of craft trades will fall further into the background. This has the potential to negatively affect development because it could cause other informal jobs to become even more saturated, which is a constant battle for the informal sector, especially handicrafts (Harris, 2014).

By improving the capabilities of artisans with a unique skill set, it was anticipated that there would be a ripple effect in the community and have a positive influence on overall development of the community.

#### 1.8 Operational Definitions

- Sustainable Business Success: Overall success of business, measured by the ten criteria found by Gorgiexski, Ascalon, and Stephan, (2011), and how viable it will be over time.
- Internal Constraints: Factors that dictate business success, but that can be changed directly by artisan actions.
- External Constraints: Factors that impact business success but that cannot be impacted by artisan actions themselves. These factors are government policies and sector wide.
- Artisan Groups: Group of people, most likely living in poverty, that produce hand-crafted goods, using traditional or traditional/modern mix of skills.
- Needs Assessment: A deeper look into what an artisan group is lacking and where there is potential for growth.
- Product Development Training: Any training given to artisans related to the development of new products or enhancing skills for production.

#### 1.9 Assumptions and Limitations

One assumption in this study is that artisan groups within the same general community for the comparison have the same constraints. This assumption comes from a study done by Harris (2014) of the handicraft market in Nairobi, Kenya. He found that because there were low barriers of entry into the sector that there was hyper-competition and over saturation of markets. Competitive advantages are hard to sustain because the structure of the sector is very open and ideas are not protected (Harris, 2014). This points to a general uniformity within the handicraft sector of a community.

A limitation of this study is that there is not a control group present in the study that has not had any type of training. There are many different NGOs in Guatemala working with artisan groups, which makes finding a group without any help difficult. Because of this, having five cases assisted in finding common strategies that are the most beneficial and other things that do not work as well.

#### Chapter 2

#### REVIEW OF LITERATURE

#### 2.1 History of Artisans and Crafts

Artisan groups have a foundation in history, making cultural products based on ethnic traditions, with practices being passed down through generations (Durham & Littrell, 2000). The crafts produced are linked to the people that create them. Some crafts, such as embroidery for the women in the Gujarat province in India, are closely tied to daily life. The women have been embroidering clothes and houseware products for generations and each community and caste in the Indian culture holds their own embroidery style. Women embroider for their daughter's future dowry, and for their future nieces and nephews. It is an integrated part of the culture (Bhatt, 2006). Similar stories can be heard from around the world, from back-strap weavers in Guatemala (Gianturco & Tuttle, 2000) to woven textiles for clothing in India (Liebl & Roy, 2004).

Many artisan crafts originally had strong domestic markets because of how integrated crafts were in the traditions of the community. But traditional markets for artisan products have shifted because of globalization (Leibl & Roy, 2004).

Innovations of western goods, such as synthetic fabrics, can be made cheaply and quickly. Innovation and industrialization of manufacturing has created less of a market for artisan goods, which in turn creates less opportunity for work for artisans (Bhatt, 2006; Liebl & Roy, 2004; Richards, 2007). This has forced many artisans into financial crisis because the craft that is rooted in tradition and used to be valued in the community is no longer a viable option for making a living as it was traditionally (Liebl & Roy, 2004).

To combat the effect of globalization, the alternative trade movement started in the 1940s. The alternative trade movement focused on "trade not aid" (Fridell, 2004, p. 412) and consisted of three stages starting with the first stage in 1940, with the third stage starting in the late 1990s (Littrell & Dickson, 1999). The first stage in the United States was started by the North American Mennonite missionaries and the Church of the Brethren missionaries. The missionaries were stationed in developing countries in the 1940s and 1950s and would bring ethnic products back to the United States and sell them in the church communities with the intent to send the profits back to the artisans in the developing countries (Grimes, 2000; Littrell & Dickson, 1999).

The second stage of ATO development took place in the 1960s-1970s (Littrell & Dickson, 1999). During this time, more organizations entered the movement, many driven by social activists with connections to universities and peace movements. Most of the ATOs were not-for profit and retail stores became popular avenues for revenue, in addition to catalog sales, which were also used as a tool to promote and sell products (Grimes, 2000; Littrell & Dickson, 1999). Some for-profit sellers originated in this time period but were not intensively competitive (Littrell & Dickson, 1999). The 1970s also saw a rise in the informal micro-enterprise sector in developing countries, which was the start of international craft businesses not connected with ATOs (Haan, 2006).

The third stage started in the 1990s and brought about intense competition because of the addition of more for-profit retailers, such as Pier 1. This caused ATOs to reanalyze their businesses because the market was saturated. The businesses could no longer just think about helping the artisans but also had to think about the business aspects of their organizations (Littrell & Dickson, 1999).

Stage 3 was responsible for the distinction of ATOs and mainstream retailers, stemming from the intent behind the sales. The ATO movement still held to the intent of creating opportunities for artisans and in order to connect the different individual ATOs, the Fair Trade Federation (FTF) was formed in 1992 (Grimes, 2000). The mission of the FTF was comprised of seven main principles. "Payment of fair wages to artisans and farmers, the guarantee of employment advancement, environmentally sustainable production practices, public accountability, the creation of long-term trade relationships, the assurance of safe and healthy working conditions, and the advancement of technical and financial assistance from the North American marketer to the producer groups whenever possible" (Grimes, 2000, p. 13). These principles set the FTF organizations apart from mainstream retailers (Grimes, 2000), like Pier 1 and World Market, which had risen as two of the top players in international handicraft trade in the early 2000s (Wherry, 2008)

Research has shown that competition of handicraft markets in developing countries has intensified since the early 2000s. Harris found the market in urban Nairobi, Kenya to be hypercompetitive because of low barriers of entrance and the production of crafts that take little skill (2014). When analyzing regions, most of the artisans tend to be concentrated on similar products that do not require much (if any) technology and have low production levels (Gobagoba & Littrell, 2003) which was the case in Kenya (Harris, 2014). Many artisans rely on both tourism in their country as well as international exports through NGOs and other middlemen in order to remain in business and make a profit (ILO, 2006).

#### 2.2 Artisan Business and Cultural Significance

While artisan business is present all around the world, the majority of the research and attention has been given to the marginalized groups in Central and Latin America, Africa, and Asia (Scrase, 2003). The artisan sector is part of a broader sector which is also known as the informal micro-enterprise sector (IME). The term 'informal sector' was developed in the 1970s as a name for informal income opportunities (Hart, 1973). IME can be defined as businesses where people are self-employed, the businesses are non-agricultural in nature, and rely on traditional practices and ways of manufacturing (Haan, 2001). The larger informal sector can also be characterized by the size of the operation, which is normally small, the use of labor-intensive methods, having limited formalization of businesses, and low barriers of entry (Haan, 2006). Many different types of activities fall under the informal sector, such as secretary/office work, appliance repair, and automobile repair, as well as artisan activities (Haan, 2006).

The artisan sector itself is a \$34 billion global industry and is the second largest employer in developing countries, right behind agriculture (Alliance for Artisan Enterprises, 2014). A statistic from 2004 said that India's handicraft market brought in \$3 Billion (USD) per year alone and had employed approximately 10 million people (Finger, 2004).

Artisan groups can vary in size, with micro-scale enterprises being the smallest. The definition of micro-scale in literature varies with number of people ranging from under six (Gobagoba & Littrell, 2003) to 10 and under (Wherry, 2008). Gobagoba and Littrell (2003) also added that micro-scale enterprises earn less than \$11,000 per year. Small enterprises are described by Haan to be enterprises with 10-50 workers and be on the cusp of formal work (Haan, 2001). Medium enterprises were

described by Wherry (2008) as very similar sized groups to small enterprises, being classified as 10-50 people working in what can be classified as a small factory, many of which are vertically organized, with one person at the top (Wherry, 2008). The largest artisan enterprises can involve several thousand artists (Arnopoulous, 2010).

The labor portion of the sector tends to be informal (Richard, 2007) and casual (Harris, 2014). In a study of artisans in Nairobi, Kenya, it was found that most employment was done on an apprenticeship basis with little emphasis on full-time employment within the sector. Workers/apprentices in Nairobi were paid per piece and employment was on a casual basis with workers being employed by many different firms. The employment structure was accepted as a cultural norm by both workers and employers because most orders were inconsistent, all requiring a different amount of worker capacity (Harris, 2014).

Most artisan groups belong under the income-generating activities (IGA) type of enterprises because the artisans focus on practices that generate income for their families (Haan, 2001) and qualify as subsistence self-employment meaning that all income generated is used for survival (King, 1980). IGA enterprises are entry type enterprises that succeed because of the low barriers of entry into the artisan market (Haan, 2001) and the markets tend to be hyper-competitive (Harris, 2014). IGAs are defined as the precursor to entrepreneurship ventures because the challenges that accompany low barriers of entry tend to make sustaining a business difficult (Haan, 2001).

Four common characteristics were found in a study of 123 artisans in Thailand, creating painted wooden bowls and wall hangings, and in Costa Rica, creating ceramics. Wherry (2008) found that most of the artisan were over 40, almost all were

married, most did not have more than a primary level of education, if that, and most of the workshop managers were women. Wherry (2008) also found that while men were the head of the household, they were responsible for carving while the women were responsible for painting and finishing, as well as for managing the workshops. Previous research has also shown that many artisans are women because the crafts were originally viewed as a domestic process, with most women working with soft goods versus hard goods like wood (Schoeffel, 1995).

Work for artisans is most of the time located in the home because many women have children to look after and still have household chores to do (Bhatt, 2006). The craft sector also tends to be seasonal because women work in between the agricultural seasons when they are not helping in the fields (Bhatt, 2006; Liebl & Roy, 2004). While crafts are considered a rural development tool, they also are very important in urban development (Harris, 2014). Traditionally, the artisan and informal sector has been separated into rural (Bhatt, 2006) and urban (Harris, 2014) research, each facing vastly different challenges than the other. But for both rural and urban sectors, difficulties faced are hyper competition in markets (Harris, 2014), limited access to markets (Rogerson, 2000), and inadequate education (Haan, 2006; McGrath et al., 1995). One distinguishing factor for rural areas, especially when looking at product development trainings, is the difficulty of access to additional training in the most rural areas in the world (McGrath et al. 1994). These elements are important to the study because they are factors that dictate how training should be approached and planned.

Many crafts around the world take skill and training to create. These skills signify an important source of knowledge that is worth protecting not only because of

the traditional significance but also because of the intrinsic value of the product. Liebl and Roy (2004) argue that traditional knowledge is worth preserving for the "intrinsic beauty, cultural meaning, or value as a knowledge base" (p. 55).

Each country or region that has a traditional craft can use that cultural aspect as a comparative advantage over other countries. Every country has its own set of images that corresponds with it in the minds of western consumers. A country's nationality, history, and current political state all influence the image and can be seen as an advantage when comparing different countries (Wherry, 2008). "Made in Thailand" will be perceived differently than "Made in Costa Rica" because of the history and stories that go with that culture. The feel of the items, color, and stories will all invoke different feelings and can sway buying behavior. The advantage the item has also is strengthened when the product is connected with the artisan selling it because the authenticity of the item is most valuable when it is connected to the artisan. Consumers can connect their purchase with the artisan (Wherry, 2008).

National pride also can be a motivation for artisans to start selling internationally. Women interviewed in Botswana said a motivation for them to begin producing was to show the world the capabilities of Botswana, both in workmanship and workforce (Gobagoba & Littrell, 2003).

One factor of culture that needs to be addressed is cultural appropriation and the issues that have been raised. Many artisans keep to the traditional methods of production, much of which is by hand, and these culturally significant products have been knocked off by western designers and other craft makers in the area (Liebl & Roy, 2004). Intellectual property for cultural crafts is difficult to define because these crafts are based in the traditions of the region and have been shared over generations

(Finger, 2004). Crafts are also normally created in open environments given the living conditions of crafts people and the open environments make it easy for people to steal designs. Research has also shown that crafts work tends to be on a casual employment basis, which makes keeping innovative creations a secret difficult (Harris, 2014).

Cultural independence also needs to be kept. Many NGOs and ATOs are against creating neocolonial relationships between artisans and western buyers because neocolonial relationships can ruin the cultural heritage and separate the people and the craft from the historical importance (Arvelo-Jimenez, 2004). Creating a balance of authentic creation but for a western market will be a vital element in this study when looking at product development training.

Another element that supports artisan development is support for 'intangible cultural heritage.' Intangible cultural heritage is defined by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) as

... practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity (UNESCO, 2003, p. 2).

In 2003, UNESCO instituted a convention regarding the safeguarding of intangible cultural heritages, as well as respect for communities that had strong

intangible heritages (UNESCO, 2003). Safeguarding of the heritage does not mean freezing time for the community, but instead giving them support in order for them to be able to continue their traditions and grow in their traditions (UNESCO, n.d.).

Artisan craft is built on the history and traditions of a community and many artisans have skills sets that are traditionally based (Durham & Littrell, 2000; Liebl & Roy, 2003). Because these skills are traditional and linked to the culture, they fall under intangible cultural heritage and have support from the UNESCO to be preserved.

# 2.3 Crafts as a Development Tool and Chamber's Web of Responsible Wellbeing

Artisan capabilities and traditional crafts has been cited by UNESCO as a method of poverty alleviation because handicrafts are homebased, there are few barriers of entry, and inputs for crafts are readily available. These elements make artisan crafts a suitable method for poverty alleviation because the sector is easy to enter (Richards, 2007). Poverty itself is defined by the UNESCO as "a condition of severe deprivation, not only of one's basic human needs (food, water, shelter) but also of limited or non-existent access to education, information and other basic services" (Richards, 2007, p. 7).

The possibility of economic growth, mainly through international export companies and tourist sales (Richard, 2007), is what makes handicrafts an ideal sector for poor communities and this possibility has many developing nations interested in supporting micro, small and medium scale enterprises (Creevey, 1996). Traditionally, support had been in the form of finances but a shift started in the early 2000s towards assisting artisan enterprises through technical and business training, in addition to

providing financial assistance (Gobagoba & Littrell, 2003). But research has also found that governments are not always supportive of development of the informal/artisan sector because of the low degree of modernization needed to support the sector (Haan, 2006).

The differing views of the handicraft sector from NGOs, governments, and artisans themselves, suggest different values for the intended outcomes of success. Different groups put value and measures of success on different aspects of artisan business. For this study, outcomes were analyzed based on Chamber's Web of Responsible Wellbeing. Artisan work has a history of being used in economic and social development because many artisans live in moderate to extreme poverty (Richard, 2007). When looking at any form of development tool, it is vital to look at the people involved and put the people (artisans) involved first in the hierarchy of research. Chamber's Web of Responsible Wellbeing was developed as a method of describing how to put people first. The model contains five aspects that work together to describe development and they are wellbeing, livelihood, capabilities, equity, and sustainability. Each element is not independent of the others and Chambers uses a statement for each to describe how they interact (Chambers, 1997).

"The object of development is wellbeing" (Chambers, 197, p. 9). Wellbeing is described as a good quality of life, with a balance of human experiences, social, mental, spiritual, and material elements. Personal wellbeing is individual and is defined on a personal level, not at a community level or by professional development specialists. A person's wellbeing must be described by themselves, not others for them. Chambers explains that extreme poverty and ill-being, which is the opposite of wellbeing, are relational, as poverty decreases so does ill-being. On the other end of

the spectrum, wealth and wellbeing are not linked, and wealth can sometimes have a negative effect on the wellbeing of a person (Chambers, 1997). When looking at how artisan crafts have impacted wellbeing, research has found that artisans form microenterprises in order to improve personal and family wellbeing (Dickson & Littrell, 1998a) and to have greater control over their future (Gobagoba & Littrell, 2003).

"Livelihood security is basic to well-being" (Chambers, 1997, p 10). Livelihood is described as the inflow and outflow of cash and resources in order to meet basic needs. This supports wellbeing by providing for the basic needs, which are essential for wellbeing. Research has shown that artisan businesses have the potential to give people, especially women, the opportunity to have an income and provide for their families (Gobagoba & Littrell, 2003; Littrell & Dickson, 2010).

"Capabilities are means to livelihood and wellbeing" (Chambers, 1997, p 10). Capabilities are what people can do or be and can be enhanced through training, practice, and education (Chambers, 1997). Capabilities are the foundation for development because they are the basis of what livelihoods people can have and link directly back to wellbeing (Chambers, 1997; Littrell & Dickson, 2006)

Capabilities are the basis of artisan trade. The capabilities (skills) artisans already possess (Gobagoba & Littrell, 2003) in creating crafts is the foundation on which their livelihoods can expand and create sustainability and equity for future generations, which are the next two elements of Chambers model. Education, training, professional development and practice are also elements that Chambers includes (1997) and it is under capabilities that product development training falls.

"The poor, weak, vulnerable and exploited should come first" (Chambers, 1997, p.11). Equity means that all individuals should have a level playing field, no

matter their social standing. Human rights tie directly into equity (Chambers, 1997) and crafts have been used for poverty alleviation, focusing on the poorest of the poor who are normally at the bottom rung of society (Liebl & Roy, 2004)

"To be good, conditions and change must be sustainable – economically, socially, institutionally, and environmentally" (Chambers, 1997, p. 11). Sustainability means that all the policies, motivations, and intended outcomes should first be critiqued for long term viability, with or without outsiders help, and if the project or measure will assist in making the wellbeing of the individual better (Chambers, 1997).

When looking at the sustainability of the artisan sector, there has been debate over its viability as a sustainable method of poverty alleviation mainly because the population of artisans tend to be the poor and the emphasis on quantity over quality and lack of innovation creates weaknesses in the craft section (Liebl & Roy, 2004). Additionally, because artisans can be desperate for income, the products they create tend to sell for under the price that is fair (Wherry, 2008). This has been cited as a reason that artisans leave the craft and move to other employment options that are more consistent (Liebl & Roy, 2004). Scrase (2003) argues that "relentless commodification of craft production, inherent gender segregation and discrimination against women and girls, and a generational divide" (p. 450) are popular arguments against artisan development.

Even with these arguments against artisan development, IGAs still show promise as a method of development (Richards, 2007). Not pursuing better methods of sales and assistance in innovation for artisans could ultimately lead to the knowledge base they possess to be lost (Liebl & Roy, 2004), which could be even more devastating to countries who use crafts as a national symbol (Gobagoba & Littrell,

2003). Pushing for better methods has the possibility to enhance the overall long term viability of the artisan sector.

In addition to looking at the sustainability of the sector as a whole, each artisan enterprise can be analyzed for its long-term viability and impact. Because artisan enterprises are businesses, understanding what success means in both a conventional sense as well as what it means for the artisans themselves is vitally important for measuring impact of trainings and the long-term viability of the business. While business success looks a little different for the artisan sector than for mainstream Western small businesses, the same principles can be applied in creating a holistic picture of business success and how viable the business is in the long run.

Criteria for a successful small business was addressed in a study done by Gorgiexski, Ascalon, and Stephan (2011), of 150 Dutch business owners. In order to create a list to describe what was considered 'entrepreneurial success criteria,' the researchers found a total of 346 journal articles and sources that described successful small businesses. From these articles, they compiled a list of ten criteria for measuring success of small businesses. The ten criteria are profitability, growth, innovation, firm survival/continuity, contributing back to society, personal satisfaction, satisfied stakeholders, work/life balance, public recognition, and utility/usefulness of the business (does the business meet the goals it has for itself).

Profitability and growth, or how much the company has grown in production, employees, and overall sales, are two very traditional measures and were found to be the most popular criteria for measuring business success in the studies analyzed by Gorgievski, Ascalon, and Stephan (2011). Because artisan businesses can be qualified as IGA, with all money going back to the families (Haan, 2001), income for artisans

for this study will be more important than the overall profitability of the business. Innovation was also related to entrepreneurial business success because it is defined as "introduction of new products or production methods" (Gorgievski et al., 2011, p. 209).

Firm survival/continuality can either mean that the firm is financially successful enough that it can be passed on from one generation to another or sold (Gorgievski et al., 2011). Artisan businesses are traditionally passed down from one generation to another (Durham & Littrell, 2000) but selling the business could be difficult given the informality of the sector and the low barriers of entry into the business (Harris, 2014). For artisan businesses and this study, firm survival will be addressed as being able to pass the business onto future generations or the other artisans that are working with the organization.

Contributing back to society means that the business is "socially conscious [and uses] sustainable production methods" (Gorgievski et al., 2011, p. 209). Many artisan businesses who work for ATOs, are concerned with fair labor practices, creating better lives for the community, and having environmentally conscious products (Grimes, 2000). When working with textile and apparel artisans, socially conscious labor practices are a key element for companies that are fair trade or ATOs. Guidelines for ATO/fairtrade businesses, as set by Littrell and Dickson (1999), include ensuring fair wages, honoring culture, building relationships with the artisans, and ensuring worker safety in production. Guidelines in mainstream apparel manufacturing, as determined by the ILO also can be applied. Guidelines set in 2008 by the ILO state that workers have the right to organize, that there should be no forced labor, no child labor, and there should not be discrimination in hiring/firing practices

or in working conditions (ILO, 2008). Environmental practices also have been addressed at more of large corporate level by the Higg Index, but these principals can also be applied to small scale producers (Sustainable Apparel Coalition, 2016). Environmental sustainability is also an important element in ATO and fair trade organizations (Littrell & Dickson, 1999).

Personal satisfaction is defined as "attaining [the] important things in life, such as autonomy, challenge, security, power, creativity, etc.," (Gorgievski et al., 2011, p. 209). Personal satisfaction for artisans can be analyzed using Chamber's Web of Responsibility and the wellbeing concept. This concept is individual, not based on the community, and incorporates materials, psychological, social, spiritual, and human experiences (Chambers, 1997). The concept of wellbeing in artisans' lives, specifically in India, was analyzed by Littrell & Dickson (2010), focusing on the material, social, and psychological wellbeing. The artisans who worked for MarketPlace India said that self-respect, confidence, better healthcare, respect, changes in housing, and increased social interaction were some of the biggest changes in wellbeing that resulted from working with MarketPlace (2010).

Satisfied stakeholders are "satisfied and engaged employees [and] satisfied customers" (Gorgievski et al. 2011, p. 209). Satisfied stakeholders of artisan businesses include the organization buying and selling artisan products, the customers around the world that purchase the products (Littrell & Dickson, 1999), and the artisans themselves (Littrell & Dickson, 2010).

Good work/life balance is allowing time for all responsibilities that the artisans have (Gorgievski et al., 2011). While this may be different than the typical work/life balance as known in the developed world, understanding that artisans have many

different commitments is important when looking at the success of their business. Day to day life chores include watching children, cooking, cleaning, and collecting water (Littrell & Dickson, 2010). In a study done of Indian artisans, it was found that cooking alone took up an average of 4.7 hours a day (Littrell & Dickson, 2010). Daily chores are a necessary part of life and demand that there be a balance between work and these activities.

Public recognition means that the organization/business has a good reputation and is well known (Gorgievski et al., 2011). For artisan groups, this may come from being number one in the community in sales (Antrosio & Colloredo-Mansfeld, 2015) or it could come from international sales and the recognition that the country could get from the sales (Gobagoba & Littrell, 2003).

The last measure for business success is utility or usefulness of the organization in the context of the society where it is present and that it fills a need for a product and a service (Gorgievski et al., 2011). Artisan groups fill the need for work for the artisans that work within them. Whether the artisans are creating products for domestic markets or international markets, the sales are ultimately creating income for the artisan.

When looking at Chamber's model as a whole, all of the elements connect and do not draw away from others. Chambers describes equity and sustainability as items that combine to ensure that future generations benefit from the current outcomes while keeping the playing field level. He goes on to explain that capabilities and livelihood work together for more immediate results to wellbeing. Responsible wellbeing, or what individuals and organizations do with increased opportunities, can affect not only individual success but also the success of future generations (Chambers, 1997).

When applying Chamber's Web of Responsible Wellbeing to artisan groups, capabilities and sustainability of the businesses are the two most logical aspects to focus on for this study because these are the two that have opportunity to be directly impacted by product development trainings. Wellbeing and livelihood are impacted through capabilities.

# 2.4 Durham and Littrell's Model for Performance of Peace Corps Handicraft Enterprises

In addition to Chambers Model of Responsible Wellbeing, a model of key performance factors for handicraft enterprises supported by the Peace Corp around the world illustrated key elements needed to create and continue an artisan business (Durham & Littrell, 2000). This model is important to the current study because it gives direction to what is important for artisan businesses.

Durham and Littrell (2000) surveyed 58 former Peace Corp volunteers and did in-depth interviews with 14 of those volunteers. Volunteers had backgrounds in business, education, health, and other development careers and 44 of the volunteers had worked with a total of 17 handicraft enterprises in 11 countries. Through the survey and interviews, the model which included six key factors that were "fundamental to the operations of an income generating craft enterprise" (p. 264). These factors were local raw material availability, facilitator (local or international), funding, sales outlet, producer skills (including education, business skills, product development skills, and leadership), and simple technology that were needed for IGAs. The factors were vital inputs into craft enterprises and would affect income generation.

Raw material availability was found to be mostly locally sourced materials, whether that be environmentally sourced or sourced from local shops. The researchers also found that "the majority of artisans were dependent on very few imported materials" (Durham & Littrell, 2000, p. 262). Facilitators were the leaders of the organizations, groups, and cooperatives around the world that directed the business. This person (or people) had strong drives for the groups and moved the group forward. They ranged from missionaries to local women (Durham & Littrell, 2000). Funding came in the form of capital, equipment, or transportation but was normally a one-time gift and was "not intended to long-time economic or human resource support" (p. 266).

Sales outlets were mostly local based because of the difficulty artisans had meeting strict international deadlines and the complexities that came along with international shipping, which Durham and Littrell (2000) labeled 'transportation.' Durham and Littrell (2000) also said that "finding sales outlets... was an essential task" (p. 267).

Producer skills related to education, business, product development, and leadership. A key finding in the study around product development was the division between the indigenous knowledge for traditional goods created by the handicraft group, such as traditional Kalahari baskets, and the goods that were developed for the market, such as leather handbags and rag dolls. Traditional crafts were learned by observing, so changing and innovating these crafts was easier for the artisans than creating new products. Many of the new products were made from ideas that the Peace Corp volunteers had and this sometimes resulted in the artisans feeling as though they did not have ownership of the final product (Durham & Littrell, 2000).

Education was an important element when starting a business and finding a person who was literate was essential for day to day operations (Durham & Littrell, 2000). Business skills were also important to have in a group, given that the intent was to make money, but this was a challenge to the Peace Corp volunteers because of the level of education of the artisans. Lastly under producer skills, leadership skills were important for craft businesses and this sometimes presented a challenge given traditional gender roles in communities. Peace-Corp volunteers were responsible for implementing methods to grow leadership skills in the artisans. The last input that was important was indigenous technology, which referred to the skills of the workers and the equipment needed for production.

All the inputs together created income and then cultural considerations had to be considered. Cultural considerations, as defined by Durham and Littrell (2000), were a constraint on the sustainability of the business primarily because cultural norms, such as traditional leadership roles, kinship relationships or gender roles, could undermine the success of the business. The businesses that found the greatest sustainability, while only observed for two to four years, were able to work through these differences and the businesses were then able to continue growing. This then affected the respect and empowerment of the artisans and the artisans were then able to give back to their community because of increased sales (Durham & Littrell, 2000).

This model analyzed the important elements of running an artisan enterprise and the inputs and cultural constraints that influence artisan business success. The study also addressed that artisans wanted ownership of the crafts they create. What it does not address is how different actions (e.g. furthered education) would influence

the income levels of the artisan enterprises, just that they are important. This is the largest way the proposed method differs from Durham and Littrell's model.

#### 2.5 Constraints within the Artisan/Informal Sector

Just as Littrell and Durham (2000) found that culture was a constraint to businesses, many different studies (Bhatt, 2006; Haan, 2006; Harris, 2014; Rogerson, 2000) have found that the artisan sector has constraints that dictate success and long term viability within the sector. While not all of these studies have broken the constraints into internal and external, which describe inside forces and outside forces limiting artisan success, the constraints for this study will be split based on the impact to artisan businesses.

Internal constraints are constraints that affect artisan businesses because of the artisan's skills, attitudes, and other areas that are directly related to the business and are in the control of the artisans. Internal constraints are inadequate technology and facilities used, low production levels, poor market positions, education, and poor businesses management. External constraints are constraints that affect the business but are not in the control of the artisans. These constraints are economic policies, poor access to finances, poor legal frameworks/sector formation, and poor market structures including hyper competition, compassion exports, adverse selection, and selling practices. Changes in external constraints require action from people in government, sellers, and other organizations and are not directly in the hands of artisans (Bhatt, 2006; Haan, 2006; Harris, 2014; Rogerson, 2000). The constraints that will be discussed more in-depth are inadequate technology and facilities, market access and hyper-competition, financial access, lack of a formal infrastructure, and lack of education.

### 2.5.1 Technology and Facilities

Artisans face constraints in their business through inadequate technology and facilities. Workshops are normally small and outdoor (Harris, 2014) and artisans lack access to advanced technologies that could further their businesses (Rogerson, 2000), such as internet connection (Haan, 2006). Other problems arise because of the inconsistency of electricity in developing countries. Electricity can also be expensive and difficult for families to afford (Bhatt, 2006; Liebl & Roy, 2004).

Globalization is also a reason for the inadequate technologies and facilities. Globalization has influenced consumer tastes, making many of the trends merge and leave little room for off trend items. International companies have the flexibility to change easily, while traditional artisans do not (Haan, 2006). Haan (2006) cites globalization as a leading driver for the need for improved technical skills in the informal sector. Because the markets are getting saturated with manufactured goods, local producers need to continually grow their skills in order to keep up. Consumers increasingly want to know where the items they purchase are created and who made each product (Scrase, 2003).

## 2.5.2 Hyper-competition and Market Access

The markets around the world for artisan crafts has become very competitive because of globalization (Scrase, 2003). Natural raw material shortages affect the amount artisans can produce (Rogerson, 2000). Prices for the raw materials needed have risen because of the increase in demand due to mass productions (Scrase, 2003).

Harris (2014) found that there is hyper-competition in the handicraft sector in Nairobi because there are low barriers of entry and production takes very little skill,

which can cause fierce competition. With the overly saturated market, products may have to be sold under production value in order to make a sale and sales may not turn a profit. Because of the oversaturation of the market and the high competition, there are very limited ways for firms to gain any market advantage (Harris, 2014).

The drive for income has created a mass quantity one-size-fits-all product mentality within the artisan sector, only fueling the hyper-competition (Liebl & Roy, 2004). The one-size-fits-all production has set up the sector so that adverse selection is prevalent. Adverse selection in the artisan sector means that a seller may be selling a poor-quality item but telling buyers it is a higher quality item. Asymmetrical balance of information between buyer and seller occurs, where the seller has more information than the buyer does (Kreps, 2004). Harris found adverse selection to be a problem for the Nairobi craft sector because many firms sold the same product at varying quality levels, causing some producers to lose orders because their products were of better quality and more expensive than lower quality products (Harris, 2014). This trend has limited creativity and ultimately has hurt the traditional artisan skills (Liebl & Roy, 2004) Artisans that do not work with cooperatives, nonprofit organizations, or fair-trade entities run the risk of being paid very poorly for their products because of middlemen that source for larger companies around the world (Bhatt, 2006).

External access to markets also is a difficulty for artisans. Artisans have little access to larger markets, unless working with a larger NGO (Harris, 2014), while fighting with severe competition within the region (Rogerson, 2000). The knowledge gap can contribute to out of date products that do not meet the needs of their ultimate consumer, which is people in the western world (Liebl & Roy, 2004). The knowledge gap may cause artisans to sell their wares at significantly lower prices than they could

because they do not travel often and have limited access to buyers and need to sell when they have the opportunity (Bhatt, 2006).

Practices by NGOs can also influence the market with compassion exports. In a report done by the ILO of the Cambodian handicraft market, it was found that compassion exports, or exports purchased by individuals who were more concerned with helping the Cambodians in the study versus buying high quality crafts, could actually be decreasing the value of the crafts and hurting the sector. The ILO also stated that a move back to quality over quantity could be a method of creating a more sustainable sector, along with lowering costs for exports (ILO, 2006).

One positive effect of hyper-competition was found in past literature. Antrosio and Colloredo-Mansfeld (2015) reported that hyper-competition in the acrylic sweater sector in Ecuador pushed some artisans to advance their technology faster in order to stay up to date with the advances pushed by competition.

In contrast, Antrosio and Colloredo-Mansfeld (2015) also argued against the trend of hyper-competition, stating that "first... competing successfully is predicated less and less on objective economic factors of capital and innovations and more on expressiveness, communication, and cultural affiliation. Second, the competitive dynamic is frequently not one of the go-it-along individualism, but positioning; of reading neighbors' successes and aligning with them, even while seeking to come out ahead" (p. 64). This statement is important because it shows that there are contrasting views to hyper-competition as a whole.

#### 2.5.3 Financial Access

Liebl and Roy (2004) found that one of the challenges Indian artisans faced was the access to formal financial institutions and also the educational backgrounds to

understand business finances. The way that artisan businesses tend to run is fairly typical of any fashion business, the artisan/manufacturer is responsible for buying the raw materials and creating the product before they are paid by the buyer. This practice made it difficult for Indian artisans to take large orders because they would not have the funds to buy the raw materials. Without access to formal institutions, which can be very limited in artisan communities, they had no way of accepting orders and furthering their business. The lack of education in finances also was found to be a constraint because artisans struggled to understand government programs that would have allowed them to gain capital to buy products (Liebl & Roy, 2004).

Microfinance is one method that has been implemented to address the gap between large institutions and rural artisans (Arnopoulos, 2010; Brooks, 2013)

Microfinance is a branch of banking aimed at helping people who are living in poverty through small loans. The funds from these loans are used to purchase equipment and supplies to either further a business or a means for people to support themselves and their families. Normally, these loans are not over several hundred dollars; however, the interest on the loans can be very high (Brooks, 2013). A problem that has arisen with microfinance, especially when looking at small businesses, is that without the proper training and education, artisans can still be exploited, even when they have financial security through micro-finance (Arnopoulos, 2010)

## 2.5.4 Formalization of the Sector

A UN study of the Cambodian artisan sector found that the lack of formalization in the sector caused challenges for artisans. If a microenterprise earns less than \$1,500 per year, they were not required to register with the government, which was beneficial because business registration was also very expensive (ILO,

2006). If micro enterprises did not have a formal registration, they could not easily export products (ILO, 2006). Yet, if unregistered artisans work with an NGO, exporting became easier because NGOs did not have to have the same formalization for exporting.

Because of both the difficulty of formalization and lack of formalization infrastructure, the UN study found that enterprises that partnered with NGOs had less difficulty exporting and an advantage over formally-registered private businesses and over businesses that were not registered at all. The extra costs of exporting made it difficult for the private businesses to stay competitive. The UN study also found the lack of formalization also made it difficult to calculate exports and extent of employment in the sector (ILO, 2006).

All of this is important for product development studies because if a business cannot export its product, it may have difficulty staying afloat, especially given the hyper-competition. Any advantage an artisan can have to make their business stronger is something that needs to be addressed.

## 2.5.5 Education

Education around the world varies in formality (Haan, 2006; McGrath et al., 1995), as does the amount of time that artisans attend education institutions (Wherry, 2008). In the study done by Wherry (2008) of artisans in Thailand and Costa Rica, it was found that most of the artisans did not have even a primary level of education. Not having a base in education can lead to illiteracy and limited math skills, which are both constraints on artisan businesses because the skills are needed for business operations (Durham & Littrell, 2000).

Several researchers have made models to help explain the differences in education (Grierson, 1993;1997; Haan, 2006; McGrath et al., 1995) and most of the education includes some but not necessarily all of the following: primary school, apprenticeship, working for a wage under a master craftsperson, and vocational training. Four different educational pathways were developed for self-employment education (Grierson 1993;1997; Haan, 2006; McGrath et al., 1994), one model was developed for NGO trainings (McGrath et al. 1994) and two separate pathways were developed by Birks et al (1994), to distinguish education paths leading to high or low income potential (See Table 2.1).

The models show how much variation there is in education within the informal sector. Some people may have had a full education and had to opportunity to go to vocational school. Others may have not completed their general education and had no additional training. The variance is important to remember when approaching training because education levels may vary within each group and differ with each training and it stresses the importance of creating material for different levels of education because there is not a set education regiment as there is in more developed countries.

It is also important to look at apprenticeships when looking at training and education within the informal sector, specifically because it is cited as a popular

Model by:	Name or additional concept	Steps of Education
McGrath et al. (1994)	World Bank Model	<ol> <li>General education</li> <li>Enterprise-based training</li> <li>Self-employment</li> </ol>
Grierson (1993;1997), cited by Haan, (2006) and McGrath et al. (1994).		<ol> <li>General education</li> <li>Enterprise-based training</li> <li>Wage-based employment</li> <li>Self-employment</li> </ol>
McGrath et al. (1994)		Limited general education     Self-employment
McGrath et al. (1994)		<ol> <li>General education</li> <li>Enterprise-based training</li> <li>Vocational training</li> <li>Wage-based employment</li> <li>Self-employment</li> </ol>
McGrath et al. (1994)	NGO involvement	<ol> <li>Limited general education</li> <li>NGO training</li> <li>Self-employment</li> </ol>
Birks et al. (1994)	High income potential	1. Seven years of school 2. Vocational training 3. Four and half years of apprenticeship 4. Three years of wage earning employment 5. Self-employment
Birks et al. (1994)	Low income potential	1. 3.4 years of school 2. 3.2 years of apprenticeship 3. Self-employment

Table 2.1 Models of Educational Pathways in the Informal Sector

teaching method (McGrath et al., 1995). Around the world, apprenticeship can mean different things but it tends to involve a young adult learning a trade from a master.

The amount of time varies but is dependent on the apprentice's work (McGrath et al.,

1994). In the 1950s, a study done by Foster in Ghana found that students rejected vocational training because it was viewed as an inferior method of education, while primary and secondary school was the premium (Foster, 1968). While primary education is important for teaching math, science, and languages, vocational skills are important because they help in being able to understand and manipulate materials for specific purposes. It is important to acknowledge the importance that formal education can play in career and business development (McGrath et al., 1994), but for many artisans and the poor, extended formal education is not always a luxury they have (Bhatt, 2006).

When looking at product development training in relationship to educational paths, the generally varied education attendance of workers in the informal sector can be a difficulty in delivering training because the training would need to encompass many different learning levels (Haan, 2006). In addition to this, further training is sometimes difficult for artisans to find time for given the production nature of artisan groups. Setting time away for professional training has been seen as a trade off or opportunity cost (McGrath, 1994).

But this also shows the importance of meeting artisans where they are at in their education when looking at training design for product development. The educational paths are necessary to analyze when looking at product development training because it cannot be assumed that all the artisans have the same educational background. Education may very between the different artisans in a group or from group to group and can limit the success of a business.

## 2.5.6 Findings to Combat Constraints

Harris, from the study of Nairobi handicraft sector, suggested that to combat internal and external constraints, the decentralization of production was necessary when production was located in urban areas (Harris, 2014) or areas with concentrated product development (Gobagoba & Littrell, 2003). The finding suggested that improving productivity of selected firms instead of training more individuals to start firms and spatially based interventions, or the addition of individual workshops in a committed environment, would be avenues that would limit the effects of hypercompetition and provide room for growth. By providing resources to select firms to increase production instead of teaching more people, NGOs will assist in raising barriers of entry and making the sector more competitive and sustainable. Giving artisans space to produce products with adequate infrastructure and leasing space was given as a solution because it provides firms the opportunity to grow and keep their innovations more private (Harris, 2014).

This contrasts with a study of sweater makers in Otavalo, where it was found that hiding business could make the business more vulnerable because this would possibly limit their customer base to a few select clients. The study also found that sticking with a few designs would end up hurting the creativity of the business, especially if the artisan withdrew from the public market (Antrosio & Colloredo-Mansfeld, 2015). While the handicraft sector has always been a method pushed for development (Richards, 2007), the overtraining of basic skills has forced the sector into constraints that can do more harm than good (Harris, 2014).

### 2.6 Product Development Training

This study focused on the impact of product development training (PDT), and while PDT has not been discussed in depth in past literature, the two fields of product development and training within the informal sector have been discussed in detail in two separate fields. The following section will present past research that has been done on training in the informal sector in a broad sense, research that shows the need for product development training within the apparel industries in third world countries, the research on the different types of product development interventions that can be found within the artisan sector, and finally, how consumer preferences fit into product design.

# 2.6.1 Informal Sector Training Methods/Interventions.

In case study research done by Haan (2006), it was found that many of the people employed in the informal sector did not complete their education through secondary school, and some not through primary. The study of sub-Saharan countries, also found that only 5-30% of those employed in the informal sector had gone through any form of formal skills training and even fewer workers had gone through business training; instead most training was done on the job. When the study was published in 2006, there were very few training programs available for the informal sector (Haan, 2006), but the need for training and how training should be executed had been discussed in length before the study. Training is the next step for artisan for education and skills advancement, after general education and the importance of skills training for the informal sector was first reported in a workshop for the ILO Training Centre in 1987 and reported by Fluitman (1989). The workshop reported that training needed to be different from the formal sector because the informal sector had a focus on

production, a group approach, and training needed to have unconventional delivery for direct outcomes because of the structure of the informal sector (Fluitman, 1989).

The workshop first addressed macro and micro level interventions. Micro-level training interventions focus on an induvial or small group for the intervention activities. Because of the variation of group makeups and products created, there was no one right method for interventions that made the biggest difference for people involved; however, key elements for successful trainings were identified when researchers worked within what the artisans already had present, such as tools and facilities, which was recommended by the workshop. A training needs assessment should be done in order to understand the need of the participants and to match instructors to those needs. Secondly, training methods needed to be formed based on what skills and technology that already exists. Next, trainers and other actors needed to understand the community and have managers that connect with the community. Lastly, financial issues needed to be remembered and training should maintain a low cost for training. (Haan, 2006; Fluitman, 1989).

Training needs assessment is described as understanding what people are currently doing and what they need in order to be more successful. Assessment is split into two different sections, a broad group assessment and then a smaller group assessment. The broad group assessment is done by looking at the needs of a community or discipline (Fluitman, 1989). The second part of needs assessment is doing more in-depth research within a smaller group. An example of this would be a singular workshop or group. This step of needs assessment would examine what exactly the group was doing and looking for room to grow.

The first part of the needs assessment would consist of looking at the larger artisan community and finding collectively what is missing in training. The second part of the needs assessment would be looking at one individual or small group, for example a textile weaver in India, and analyzing where there is room for growth in their business, market, and within their own capabilities (Fluitman, 1989).

Training methods also need to be addressed when working with different groups around the world because of the varying level of education (Fluitman, 1989) and differentiated from the standard training done by most public training centers (Haan, 2006). Training needs to be focused on the individuals receiving it and meet them where they are at. This also means that it is in their own language and Fluitman (1989) also recommends that training be hands on because this method leaves little room for misinterpretation and confusion.

The training of the instructors has been a topic of debate. Fluitman, in 1989, wrote "qualified trainers, or resources to pay for them, are usually in short supply" (p. 219). This has also been found in the artisan community, where many of the NGOs' or ATOs' training programs are run by people who are not trained themselves in what they are teaching (Haan, 2006).

When reporting on the ILO Training Center Workshop, Haan said this about successful training. "Other important ingredients of successful training interventions were found to include: clear purpose, favourable environment, participation of beneficiaries at all stages, paying attention to complementary inputs and follow-up services, sound management and delivery by committed staff, flexible design allowing permanent adaptation of training content and delivery method, early results, long-term perspective of development, and replicability and scope for economies of scale"

(Haan, 2006, p 6). Understanding what elements create a successful training is important to the current study because it gives guidance as how to analyze the different trainings aimed specifically at product development.

Macro-level interventions address the systematic problems in training at a very high level. This means working with governments to create other methods of training and be a change-agent for future micro-interventions. When discussing micro-interventions, Fluitman made it clear that there needed to be an economic focus for training programs because the training itself is not a job but could lead to a job. The macro-level interventions need to be addressed in order to understand the different micro-level difficulties (Fluitman, 1989; Haan, 2006).

Haan also analyzed different structures for training methods/interventions for the informal sector through case study research and focused on public training, private training, and NGO training. For this study, findings on public training and NGO training will be addressed because these best fit the artisan community needs. Haan also drew from McGrath et al. (1994) for background information and this was incorporated, as well as other important points from McGrath, here because the information pertained to this study.

Research on training done by government organizations is prevalent, especially in Africa. Typical training done by public or government agencies include masonry, carpentry, and mechanical maintenance for men and secretarial, tailoring or textiles, and food processing for women. These training programs tend to lack working equipment for training because of cost and many of the programs do not involve business skills training. Training from public services also tends to be very expensive and the majority of the services teach the exact same courses (Haan, 2006).

Overall, it has been found that publicly funded training programs are not the best method of training because of the lack of adequate training facilities and equipment, outdated training materials, poorly qualified training staff, and poor management of the facilities. The courses also are not linked to follow-up services which are important for businesses when learning new techniques (Haan, 2006).

The second kind of intervention is by NGO or other private institutions. Historically, Salesians of Don Bosco in Africa has been cited as one of the first NGOs to focus on training (Lohmar-Huhnle, 1992). The Salesians of Don Bosco were started by Friar John Bosco in Italy during the mid to late nineteenth century because he saw a need for homes for homeless young men (Salesians of Don Bonsco, 1994-2017). When they established in Africa, they also focused on total person well-being, not just professional development of an informal sector skill. The training provided for men/boys was mostly focused on welding, mechanics, and electronics, while training for women was focused on typewriting (Lohmar-Huhnle, 1992). Training programs by NGOs originally arose to fill the gaps of education for communities (McGrath et al. 1994).

Today, NGO training can be split into three types: social welfare, traditional training, and professional training/multi-service (PTMS). Social welfare training is conducted by NGOs with a focus on specific target groups and fostering trades that artisans already have. The NGO and the trainings tend to focus on social and cultural aspects of development rather than economic and are normally focused on traditional crafts. Many of this type of NGO have outdated training materials and equipment. The NGOs conducting these trainings also tend to have limited to no experience or training in what they are teaching (Haan, 2006).

Traditional training NGOs are larger NGOs whose training resembles the public sector training and the programs are normally longer (1-3 years). They tend to have high costs associated with them because of the materials needed and the instructors are normally people that have graduated from the program (Haan, 2006).

PTMS NGOs are a generally new concept. These groups focus on sustainable development of communities and employment. The NGOs also focus more on the individuals being 'clients' in a business environment versus a poor person who is being helped. Professional training NGOs also recruit staff that has background in the different aspects of the training, such as business and engineering. The overall goal of these groups is to create a more modern approach to development and on furthering the abilities of the people through sustainable options. Many of these groups are also involved in microfinance as a method of giving ownership of the training because the view is that if training is paid for it is valued more (Haan, 2006).

A strength of NGOs that train compared to public and private training has been found to be that they have more of a presence in the informal sector, which assists in the viability of training programs (McGrath et al., 1995). Having access to the market is important because the demand tends to be hidden for training. Since many of the current training programs are outdated, the demand for training is not necessarily easy to find (Haan, 2006). NGOs are on the ground and understand the needs of the people better than those who are not on the ground (McGrath et al., 1995)

Yet, literature points out many more weaknesses of NGOs than strengths. The sheer number of NGOs and lack of coordination of efforts between these organizations has been seen as a weakness for skills training. This may have to do with the fact that there is no one right answer for development because of governmental regulations and

unrest but this is still a weakness of NGOs (McGrath et al., 1994). They also struggle to collaborate with governments and donors because of the conflicting interests of the groups (McGrath et al., 1994).

Harris, in the study of the Nairobi handicraft sector, found that what NGOs are currently doing for training can do more harm than good. NGOs in Kenya provide basic handicraft training, contributing more craftsman to an already saturated sector. The business strategies for export of goods also tends to draw away from the positive impact NGOs are trying to make. In Kenya, one of the NGOs would only source so many specific products from one producer before it moved onto the next producer. The NGO "places a value on spreading employment opportunities as far and wide as possible over other concerns such as variation of price and quality" (Harris, 2014 p 113). This strategy is contributing to market saturation and can be seen as a cause of hyper-competition within the sector.

In addition to the findings on how to execute trainings, Haan (2006) also found that the following skills training are needed in the informal sector:

- upgrading of technical skills in their area of operation
- knowledge on recent technological developments in their trade
- general theoretical aspects of the trade
- management practices
- product promotion and marketing
- basic literacy and numeracy (including basic knowledge of an international language)
- simple computer skills (e.g. for internet use) (Haan, 2006, p. 232).

Advanced training allows workers to produce more efficiently and use materials in a more sustainable and cost effective way. Haan (2006) said that advances needed to be made in the training for the informal sector in order to keep the over saturation of products as low as possible. Training needed to be able to address a wide variety of situations because of the wide spread of each profession, such as mechanics and secretarial work, in the informal sector.

A main group that Haan suggests targeting is the 'master' craftsmen(women) that facilitate apprenticeships. By improving the skills of these people, the training will then potentially be extended to more individuals. He also found that this group is the most willing to learn new skills and update their current skills.

Haan also stresses the need for a formation of more training within governments and NGOs. Even though it has been found that there is little perceived demand for more skills training, Haan argues that people in the informal sector may not understand the advantages of advanced skills because many have not finished overall education. The current training materials and methods are not in demand but updated training by meeting the market needs and expectations, has been shown to have a 'hidden' demand. But this training is lacking, which is why Haan has stressed the need for a more cohesive approach to training, partnering many different organizations together to provide both the initial training as well as post training support (Haan, 2006).

All of the insights from Fluitman and Haan are important to remember when analyzing the impacts of product development trainings because, while the research was done on the broader informal sector, it points to the variable state of education in developing countries and illustrates where there may be holes in artisan training and

where improvements may be made. It is also very important for western communities to think about all of the aspects of the 'help' they are giving to a community because ultimately it could do more harm than good. This is an important point to remember because the introduction of a new training could create competition if not executed correctly.

# 2.6.2 Need for Training in Small/Medium Size Apparel Production Enterprises

The need for training in the artisan sector is apparent when looking at studies done not only in the artisan sector, but also in the apparel production sector of third world countries. A study was done of 60 apparel businesses and cooperatives in Swaziland in order to determine the state of the apparel industry, problem areas for owners, and the need for training among apparel producers (Zane, Richards, & Edmond, 2002). A sample was drawn of apparel businesses, with the final sample having 25 very small businesses, employing one to three people, 14 small businesses with 4-10 people, 17 medium-sized businesses with 11-50 employees, and only four businesses with over 50 employees. These businesses were sent a questionnaire about demographics, business practices, facilities, and occupational skills needs (Zane et al., 2002).

Results showed all of the facilities had the needed equipment for apparel production but the condition of the sewing machines, cutting tables, irons, and scissors varied depending on the size of the business. Cooperatives, which made up much of the medium sized businesses, were found to have the poorest quality equipment and had limited access to electricity. All of the businesses sampled had at least one hand operated sewing machine, 88% had at least one domestic sewing machine, and 75% had at least one industrial sewing machine. As the size of the businesses increased, so

did the quality of the tools and the level of production, especially when the business was found in metropolitan areas. None of the businesses, no matter the size, had access to computer aided design software or computer operated equipment.

Research also found that 51 of the 60 businesses produced only one to ten garments per day and only one produced over 500 garments a day. Most of the cooperatives specialized in sewing school uniforms and the rest of the businesses varied greatly on clothing products (Zane et al., 2002).

Results also showed that over half of the business owners had a need for pattern making training, pattern grading and sizing training, and record keeping and banking. Other trainings that at least 25% wanted were product pricing, fabric layout and cutting, overhead costing, operation breakdown, and government business incentives. The business owners also said that because training slowed or stopped production, that short term training was more conducive to their businesses than long term training (Zane et al., 2002).

This study is very beneficial because it brings attention to the type of product development training that the business owners want in the small-scale production of apparel. While this study was not specifically on artisan trade, it did focus on capabilities and production capacity in a developing country, making the information in this study pertinent to artisans that may have a need for more specialized skills.

#### 2.6.3 Innovations, Interventions, and Examples of Product Development

Product development within the artisan sector has been discussed by different researchers, specifically when looking at artisan innovations (Antrosio & Colloredo-Mansfield, 2015; Dickson & Littrell, 1998b), NGO interventions (Dickson & Littrell,

1998b; Littrell & Dickson, 1999; Littrell & Dickson, 2006; Strawn & Littrell, 2006), and design oriented schooling (Education, n.d.).

Prior to discussing product development innovations and interventions, it is important to understand the structure of the informal sector, especially within IGAs, because there is a separation between top tier and lower tier products. Lower tier products are the products that are created by businesses that focus on IGAs and are products that have low barriers of entry for new ventures (Haan, 2006). These products can also be classified as quotidian crafts, which are crafts used for everyday (Scarse, 2003). Producers in the lower tier are more likely to be affected by hypercompetition and over saturated markets (Adams, Middleton, & Ziderman, 1992; Harris, 2014).

The top tier of the artisan sector and the informal sector is categorized mainly by the ability of firms to expand and develop (Haan, 2006). Crafts produced in these activities are called 'elite crafts' and tend to be produced in the most traditional method (Scarse, 2003). The different levels of craft will be important to remember when analyzing craft enterprises because product development training would probably need to be different for each group.

After understanding the different tiers of the sector, design innovation for artisans can be looked at. Design innovations within the sector are not limited just to outside interventions, as artisans design products for sale. A study done of belt makers in Ecuador and Mexico showed both the positives and negatives of design innovation within the artisan community. One of the artisans, through development had created a diamond pattern that was, at the time, the most intricate design available and produced on a nine-pedal loom. The design became very popular and the artisan taught his two

brothers how to create it. But one of the negatives that came along with the design innovation was that because of the structure of the sector, the competition of the artisan tended to be family who were also in the business, which is typical in Ecuador and Mexico, so the design was shared with other competitors and quickly saturated the market. One of the only reasons that the original artisan was so successful is because he had the worker capacity to keep eight looms going at once. The retention of workers was a vital part of the success of the business (Antrosio & Colloredo-Mansfeld, 2015).

Antrosio and Colloredo-Mansfeld (2015) also discuss how design copying affects entrepreneurs and artisans who design different products. A knitter in Otavalo was inventive and designed new products but ultimately had to shut down his production facility because his designs were being copied by other artisans who saw the design at the open-air market nearby. Any innovation he made was copied and sold all over the city.

In addition to Antrosio and Colloredo-Mansfield (2015), Dickson and Littrell (1998b) did a study of textile and apparel businesses in Guatemala and found that the degree of product development and innovation within groups varied based on location. Rural makers produced items that were more in line with traditional garments, while urban makers created simple garments and focused on quality over innovation (Dickson & Littrell, 1998b). Both of the studies pertain to product development training because they show that people who are creating craft products around the world are innovative but struggle to gain an advantage without advancing skills. The artisans understand that innovation is beneficial and strive toward making products that are different.

Next, research has been done on ATOs and Fair Trade interventions within product development, although this has focused on the types of interventions and problems within the interventions rather than the training elements. Littrell and Dickson (1999) explained the diverse approach taken by ATOs in regards to assisting artisans in product development. The first type of intervention is no-intervention. This means that a buyer enters the market and buys what is available to them without giving any direction to the artisan. The reasoning behind this approach was that the ATO did not want to create a neocolonial relationship with the artisan community. Littrell and Dickson found that many ATOs have moved away from this method of no-intervention (1999).

The second type of intervention is ATO-directed intervention market-oriented. These interventions are performed by 'culture brokers,' or individuals who work directly with the artisans to develop products that match the needs of the ultimate consumers. These culture brokers may be hired by the ATO in developed countries or they can be an advanced member of the artisan group. Design decision would either be made in the country where the ATO was based or the culture-broker would help the artisans develop while with them. Other methods that have been utilized to train artisans is bringing groups to the United States for training or to do workshops to facilitate learning and new design techniques (Littrell & Dickson, 1999). The third type of intervention was relatively new in 1999. It is artisan-directed intervention market-oriented and involves the artisans creating and developing products that are market oriented (Littrell & Dickson, 1999).

Problems were found by Littrell and Dickson (1999) that related to apparel product development. Fit of clothing was an issue because sizing is different around

the world and creating a standard sizing for the artisans is difficult and takes extensive inputs. Environmental issues were also a problem to take into consideration because some of the chemicals and dyes used around the world, even those that have been used traditionally, are no longer allowed in developed countries (Littrell & Dickson, 1999). Another product development issue that needed to be addressed was related to quality. The ATO Pueblo to People had problems with fabric shrinkage and color bleeding of traditional Guatemalan garments. They worked with the artisans to create fabric of high quality to be able to sell in the United States (Dickson & Littrell, 1998b).

A more in-depth look at product development intervention has been done extensively in partnership with MarketPlace: Handwork of India (MarketPlace). MarketPlace is a ATO that sells tailored clothing and embroidered goods created in India to the United States through catalogs (Littrell & Dickson, 2006; Strawn & Littrell, 2006). Design development for MarketPlace India was done in multiple steps. First, the color scheme for the season was picked, then color was tested by the print maker. Prints were developed by an artist in the United States and then the final products were produced. Designs for the garments were developed in Chicago and the designs were then sent to India for patterning and sampling at the textile designer. The samples were created and then the owner of MarketPlace, along with a US designer, traveled to see the samples. A design workshop was then held to develop the embroidery for the season. The workshop involved up to fifteen artisans and the women planned the embroidery for the entire season's collection. Designs were then finalized and set to the states for customer rating while tech packs were developed and patterns were finalized. Production of the clothing then started and work was divided by the artisan groups who were the best fit for the product (Littrell & Dickson, 2010).

Littrell and Dickson (2006) found that artisans that worked and expanded their working capabilities with MarketPlace had increased quality of life. MarketPlace offered not only employment for the artisans but also worked with the artisans on community health and education (2006). A study done by Strawn and Littrell (2006) showed how the capabilities that artisans learned under MarketPlace: Handwork of India (MarketPlace) transferred into entrepreneurial businesses. The artisans were asked to develop products for markets other than the ones that Marketplace sold to and three new businesses were formed. The businesses used techniques learned from working with MarketPlace, and the business that were created made products out of rejected or flawed fabric from MarketPlace, a dye and surface design shop, and a textile weaving shop. Ultimately the study showed that worker capabilities could be transferred from an ATO to entrepreneurial businesses.

These types of interventions were all with ATOs that worked directly with and sourced from the artisans. It is important to see what organizations around the world are doing for product development and how integrated their organizations are into the communities of the artisans.

Lastly, when looking at types of product development intervention, a training school for artisans in India is called Kala Raksha Vidhyalay design school. This school focuses on teaching artisans design through a year-long program that consists of six, two week courses in Color, Basic Design, Market Orientation, Concept and Communication, Finishing and Collection Development, and Presentation (Education, n.d.).

Since its creation in 2005, the school has been training and developing artisan capabilities. In a survey done in 2012 of the male graduates, the following was reported:

- -100% of artisan graduates have benefitted from the course. All have gained a new perspective for their craft, and learned to be open minded and observe design in everything they see.
- -100% of KRV graduates have gained confidence in terms of understanding the requirements of clients, creating new designs based on themes, and experimenting with colours and materials.
- -56% of KRV graduates have grown in their designing capabilities (Alumni, n.d.).

This example shows the impact of design training on artisans capabilities in a course work/school environment and is beneficial for the artisans that took the courses. But the school requires travel for the artisans and is not located by their home base, so while it shows that artisan training in schools is beneficial, it does not analyze training that takes place in community of the artisans that is probably more feasible for most to participate in.

All of these studies show the large variation in what is currently being done within the artisan sector, but also serves as a guide because it narrows the scope of informal sector training down into artisan level interventions. This is important to remember because the study looks specifically at the artisan level product development trainings, and understanding what has been done will serve as a guideline for observing product development training.

### 2.6.4 Understanding Tastes and Preferences for Artisans and Consumers

When analyzing the needs of artisans for product development, it is important to also understand artisan taste levels and customer preference to find the most adequate level of intervention.

When looking at artisan taste levels, a study was done of artisans within a community in Mexico. The study was with 17 Otavaleno acrylic sweater producers and 42 shirt producers and the purpose was to find if there was a connection between heritage/culture and income earned from designs and if there was a difference in perception of fashion and heritage/cultures because so many artisan products are connected to the culture of the community. The researchers showed participants 20 designs that pertained to their chosen profession and had them rate the images on a scale of 1-5 for the fashionability of the items, their personal preference, and the cultural significance of each one (Antrosio & Colloredo-Mansfeld, 2015).

Of the 20 items shown to the sweater makers, there was a 3-1 ratio of producers who ranked all of the products lower than 3.0 on the 5-point scale. This showed that the producers 'generally did not like their [own] products, saw little cultural value in them, and were even less convinced they were fashionable" (Antrosio & Colloredo-Mansfeld, 2015, p.112). The sweater images that were seen as the most culturally significant were also seen as the least fashionable. Scores for shirt makers were higher than the sweater producers, with 24 of the 42 producers believing their products were fashionable. They were also found to be interested in the fashion of their product.

The survey was then given to undergraduates at the University of Iowa to gain a different perspective on preference because the college students were the demographic of the artisans target market. What was found was that while preferences

aligned with what the students thought was fashionable, what they thought was fashionable did not match up with what the artisans thought was fashionable.

The biggest question raised by Antrosio and Colloredo-Mansfeld (2015) in response to this study was "if the producers do not like these sweaters, and if buyers no longer seem interested in them, and if they have a history that is in fact only a few years old, why do producers continue to make them?" (p. 115). The researchers go on to explain that what can be identified as native is something that connoted with artisan crafts and is therefore normally included in designs for sale even if it is not fashionable. When the artisans/producers sold products in the Plaza de Ponchos, which is a market that is typically known for its culturally connected goods, they felt that they had to sell the typical goods. This connection may be a reason the typical cultural items do not sell as well as other items are included in the product mix of the artisans.

Antrosio and Colloredo-Mansfeld (2015) also point out that the artisans themselves are creative and that the artisan and cultural handicraft sector, especially in Otavalo, is shifting. They also pointed out that the artisans are business people who understand that they should produce what sells and not produce what does not.

After understanding artisan preferences, artisan craft consumption can be analyzed. Artisan craft consumption can come from at least three separate areas, specifically being the artisan's community, tourists, and international trade. A large amount of research has been done on this topic and the different type of consumers for each group, but this paper will only give an overview because of the large amount of research.

The community where the artisans live is the first source of consumption, even though many markets have shifted from local production (Leibl & Roy, 2004), but

local production still is an option for selling (Hecht, 2001). In Guatemala, the traditional clothing is created for individual consumption and for sale in community, while other products are created for tourists (Hecht, 2001).

Tourism consumers can fit into five different groups, or clusters. These sections are shopping oriented, or those who found value from the experiences of shopping and talking with the vendors; authenticity seeking, those who purchased items that were more traditional and not created for the tourist sector; special trip, those who buy products that connect to the experience more than the culture or country itself; textiles for enjoyment, those who bought products based on the workmanship and quality of the item; and finally, apparel oriented consumers, those who bought products specific to their style and clothing preferences (Littrell, 1990; Popelka & Littrell, 1991).

Non-tourist international consumers are ones that buy from international handicraft retailers and can typically be split into two categories; mainstream retail consumers and Fairtrade/ATO consumers. Mainstream retail customers, such as those purchasing from Pier 1 Imports, value price (Triplett, 1994) but are also looking for unique products that are colorful and inspiring (Pier 1 Imports, 2016). Fairtrade/ATO consumers tend to be more ethically oriented. A 'typical' fair trade or ATO consumer is described by Brown when talking about a Ten Thousand Villages consumer. The persona that Ten Thousand Villages has selected as their ultimate consumer is 'Gwen.'

Gwen is a thirty-six-year-old mother with a child in preschool who works as an associate professor at a local university. She and her husband have a combined income of more than \$90,000 a year. She likes to travel, read, and practice yoga. Gwen and her husband each work hectic schedules but find time

to volunteer in the community and support environmental initiatives (2013, p.73).

While this consumer is very much a 'perfect' consumer in many ways, this is the idealized client of Ten Thousand Villages. Brown goes on to say that this client is not real, instead fair trade consumers have contradicting philosophies and purchasing behaviors, realizing that their choices and purchases may damage the earth and still needing to be conscious of price (2013).

Lastly, these ATO consumers could be split into two groups, 'creative ethnic' and 'plain and simple, specifically when looking at consumers of ATO clothing. Creative ethnic consumers were more willing to wear cultural/ethnically styled garments while plain and simple consumers were less likely to purchase and wear garments that were strongly cultural/ethnic. From these finding, guidance was given to Pueblo to People (PTP) to consider which consumer segment to target and how to develop products for each section in respect to the current skills of the artisans they worked with (Dickson & Littrell, 1998a).

It is important to understand the different facets of artisan craft consumers, both locally and internationally, because it shows the variety of different outlets possible for artisan crafts. Aiming product development trainings at these different markets could have different outcomes for artisan business success.

## 2.7 Theoretical Model

Based on the previous literature, a theoretical model of Product Development
Training Impact on Artisan Capabilities and Sustainable Business Success was
proposed (see Figure 2.1). The model anticipates that product development training
will affect the capabilities of the artisans and through the increased capabilities, artisan

businesses will be better able to address internal constraints and, as a result, increase their overall business success.

Providing a needs assessment for the artisan group is the first step in the process that literature has shown to be an important step in training (Fluitman, 1989). Needs assessment allows the training to be specialized to the individual or group of artisans, versus giving a one-size-fits-all training, which has a history of happening with government training programs (Haan, 2006).

The product development training is the next step in the process. It is anticipated that training from professional training facilities will have the greatest impact on internal constraints and capabilities (Haan, 2006), which are the next elements in the model. Because training teaches a new skill, the capabilities of the artisans will increase. Both the training and the capabilities will help address internal constraints because both have the potential to open new markets, increase financial success as well as financial literacy, and increase production levels.

Internal constraints, as well as awareness of environmental sustainability and social sustainability, all impact the long-term success of the business. Including environmental sustainability and social sustainability, is important because these three factors are indicators of how conscious the business is of the impact they have and how they will do in a global economy that is continually moving toward more sustainable products and practices. Sustainable products and practices include, but are not limited to, considering the social and environmental impacts found through the lifecycle of the product, as well as the impact the business has on the employees and communities it works with. These elements have grown in importance, stemming from the fair-trade elements from the alternative trade movements (Littrell & Dickson,

2010). Understanding if the artisans realize this is key to furthering sustainable research and sustainable business.

The feedback loop incorporated into the model indicates how business success will input into advancing technology, as well as continue to further capabilities and impact internal constraints.

Lastly, the model addresses the importance of external constraints on artisan businesses. While only on the outside of the model, external constraints are factors that can control some aspects of artisan business. These factors need to observed and

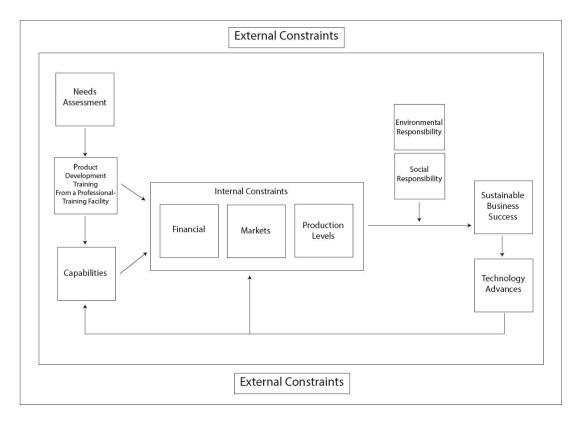


Figure 2.1 Model of Product Development Training Impact on Artisan Capabilities and Sustainable Business Success

documented in order to gain more perspective on the overall context of artisan craft business in a region.

# Chapter 3

#### **METHOD**

# 3.1 Research Questions

The purpose of the study was to determine how product development trainings affected the capabilities of the artisans and impacted their groups overall internal constraints and business success. In addition to this, external constraints, as well as artisan awareness of social and environmental responsibility, were taken into consideration to understand the context influencing artisan work and potential for long term business sustainability. Research questions for the study were as follows:

- 1) How has needs assessment been incorporated into product development training for artisan groups?
- 2) What are the similarities and differences in the trainings artisan groups have received?
- 3) How has product development training expanded the capabilities of the artisans?
- 4) How has product development training aided artisans in addressing the internal constraints they face?
- 5) What is the relationship between product development training and artisan group business success?
- 6) How aware are the artisan groups about social responsibility and environmental responsibility?
- 7) What external constraints are influential to artisans and their business success?

## 3.2 Research Approach

The research method used for this study was a multiple case study design with embedded units of analysis, with each artisan group being a unit of analysis and the NGO being the other. Initially, when the study was being formulated, the people that trained the artisan groups were intended to be the second unit of analysis instead of the NGO because it was anticipated that the trainers were employees of the NGOs. Questions for the trainers involved NGO characteristics and job duties. Upon arrival in Guatemala, it was realized that the trainers were not members of the NGO as anticipated; instead, the people who did the trainings were contracted from external organizations and that were not available for interviews. This caused a shift in the choice of the embedded unit of analysis, with the NGO becoming an important source of information about the trainings artisan groups had experienced.

Each case focused on one of five artisan groups and the NGO that was working with the group. The multiple case study design was used because the methodology offers the ability to analyze conditions that are typical in an everyday situation for the sample (Yin, 2014). A multiple case study design also allows for replication. This strengthens the study because each of the artisan groups studied were selected based on their experience with training and were chosen because they had different experiences. It was anticipated that there would be contrasting results of overall success of the businesses given the different methods of training and this contrast can be linked to a theoretical replication (Yin, 2014).

For each individual case study, triangulation was used in data collection by using group interviews, observations, and desktop research.

### 3.3 Interview Schedules

Questions for the artisan interview schedule (See Appendix A), the trainer interview schedule (See Appendix C), and the export agency employee schedule (See Appendix D) were developed first by finding instruments used in previous literature that pertained to the research questions. These sources were the World Bank Manufactures Survey (2013), which was also used in the study done in Nairobi, Kenya, by Harris in 2014, and questions taken from Antrosio and Colloredo-Mansfeld's study of cultural significance to artisans and college age consumers (2015). If a topic could not be covered from another source, questions were developed. From this preliminary set of questions, topics and questions were condensed and combined to ensure that all topics represented in the research questions were covered. An observation schedule was also developed to assist in collection of observed data during the interviews (See Appendix B).

The interview questions were open-ended and the interviews were semi-structured. Having the interviews be semi-structured allowed for continued adaptiveness in research if topics arose that were not predicted (Yin, 2014). To ensure ethical treatment of human subjects, the final interview schedules were submitted to the IRB board (See Appendixes H)) and received exempt status (See Appendix I). Modified informed consent was used for the interviews. The interviewer stated the purpose of the research, the reason that the artisans and trainers had been picked, the time the interview would take, that the artisans would be compensated for their time, and that the study was completely voluntary (See Appendix E and F). The modified informed consent for the export agency employee also stated the reason they were selected (See Appendix G). Verbal responses were required to indicate consent and permission was asked to digitally record the interview.

### 3.4 Field Research

Field research was conducted in August of 2016 at various locations in the Guatemala highlands region. The main sources of data were group interviews with artisans, an interview with a trainer or representative of the NGOs, observations during the interviews, and in markets and stores where artisan crafts were sold. Desktop research was conducted upon returning to the United States to supplement material learned through interviews.

## 3.4.1 Recruitment of Participants

Because field work was conducted in Guatemala, Deborah Chandler, a retired NGO director, was recruited to assist in local logistics and setting up interviews with different organizations and groups. Deborah was originally from the United States but has lived and worked in Guatemala for 16 years, and is an expert in weaving and artisan craft. She also acted as the Spanish to English translator and travel guide during the field research. Having her involved in the study was essential because of her experience working with artisan groups and her knowledge of the NGOs in the highlands region of Guatemala.

Recruitment initially began with a proposed sample document that was sent to Deborah, who then recommended several NGOs that fit the description for review. Publicly available information about the NGOs available on the internet was reviewed and several were selected as possibly good choices for the study. Next, Deborah reached out to the NGOs to discuss that partnership. Four NGOs agreed to participate and help facilitate the interviews with artisans they worked with. One NGO offered to facilitate two separate interviews with groups they worked with. In addition, three other NGOs agreed to be interviewed but were not able to facilitate artisan interviews

because of time constraints. Deborah then continued to work with the NGOs to create a schedule for the ten days.

# 3.4.2 Data Collection

All the NGOs involved in the case studies were viewed as ATOs, being non-profits and focusing on health and education, and all the organizations had some type of fair trade membership or certification. The location of the offices for these organizations were as follows: two in Panajachel, one in Santiago Atitlan, and one in Chimaltengo (See Figure 3.1). At the beginning data collection for of each separate case, the employees of the NGO gave a tour of the facilities and explained their method of working with artisans. This took between two to three hours and three discussions were conducted in a mix of Spanish and English, with Deborah or the employees of the NGO translating and one was conducted all in Spanish.

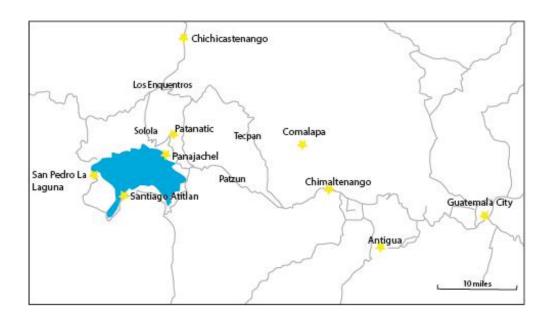


Figure 3.1 Map of Guatemalan Highland Region

After the tour, the interview with the artisans were conducted. One artisan group interview was conducted in one of the Panajachel NGO offices and another artisan group interview was conducted in the Santiago Atitlan NGO office. The other three groups were interviewed at an artisan members home, one in Patanitic, one in Agua Caliente and one in Comalapa. The interviews with the artisans lasted one to three hours. One interview was conducted totally in Spanish, three were conducted mostly in Spanish but with some Kachiquel translation where needed, and one was conducted using entirely double translation from Kachiquel to Spanish to English. Initially it was proposed that the groups being interviewed would be of 8-15 people but the actual number of participants in each interview varied from three to six

women. This change was made because of the time needed for the interviews and the ability of the artisans to travel to the interviews.

One interview was performed with a trainer, who was introduced during a site tour at one of the Panajachel NGO offices. The interview took place at a foundation in San Pedro La Laguna. This interview lasted one and a half hours and was conducted in Spanish. All the artisan group interviews and the interview with the trainer were recorded to ensure accuracy of the data collection and were transcribed upon returning to the United States. Photos were also taken of the products created by the artisans to ensure accuracy of observations. Table 3.1 illustrates the different partnerships that make up each case study. Each case has been titled to reflect an overarching theme from the case.

In addition to the case studies, two other NGOs and one business that design and sold artisan crafts were visited to understand how they trained artisans. These three were not able to facilitate interviews with artisan groups given time constraints of the artisans. The interviews lasted approximately one hour. Photos of the products that were created for these NGOs were taken. Table 3.2 gives more detail about each of these organizations and what products they created.

Lastly, one interview was also conducted with a board member of AgExport and also an apparel executive, who was Guatemalan and was a friend of one of the interviewers. This interview took place in Guatemala City and the questions asked were based on the export agency expert interview schedule because of his experience with exporting as his position as a director of the association focused on exports. The interview lasted approximately 20 minutes.

Case Study 1: Building Baskets, Building Opportunity		
	NGO A Location: Guatemala City and Panajachel	
	Artisan Group: 12 women total, 3 interviewed	
	Location of Artisans: Small village west of Sololá	
	Products Created: Baskets	
	Organization Responsible for Training: IXOQI'	
Case Study #2: 'Compassion' Training		
	NGO B Location: Panajachel	
	Artisan Group: 10 women, 6 interviewed	
	Location of Artisans: Patanatic	
	Products created: Baskets, randas, neckties, clay necklace beads, tassels	
	Organization responsible for the training: Randas training from NGO B	
	Also sold to two other NGOs in the area	
Case Study #3: Weaving Opportunity		
	NGO C Location: Santiago Atitlan	
	Artisan Group: 30 women, 10 men, 6 women interviewed	
	Location of Artisans: based in and around Santiago Atitlan	
	Product created: Woven goods	
	Organization responsible for training: Fundap	
Case Study #4: Weaving in the Mountains		
	NGO D Location: Chimaltenango	
	Artisan Group: 5 women, all of which were interviewed	
	Location of Artisans: Agua Caliente	
	Products created: Woven products (backstrap/footloom) mirrors, and crowns	
	Organization responsible for training: NGO D	
Case Study #5: Friends for Life		
	NGO D Location: Chimaltenango	
	Artisan Group: 5 women, all of which were interviewed	
	Location of Artisans: Comolapa	
	Products created: Woven products (back-strap/footloom)	
	Organization responsible for training: NGO D and AgExport partnership	

Table 3.1 Case Study Overview

Five different markets were visited to be able to analyze the competition and images were taken of the markets from a distance. The markets were in Guatemala City, Panajachel, Santiago Atitlan, Chichicastenango, and Antigua. Stores were also visited in Panajachel, Guatemala City, and Antigua because of specialty products they offered. Stores were selected from information gathered from Deborah and other members of the artisan community in Guatemala.

At the end of each day, field notes recorded the experiences and observations from the day. These notes were then discussed with Deborah as a way of ensuring that the data were accurate, especially concerning the NGOs because of her familiarity with their operations. The data from the day were also formed into preliminary themes.

Guatemala City NGO	
	Location: Guatemala City
	Products: Naturally colored cotton products, mostly household goods
Rug NGO	
	Location: Panajachel
	Products: Hooked rugs created from recycled t-shirts
Antigua Business	
	Location: Antigua
	Products: Clothing, household goods, bags, accessories

Table 3.2 Additional interviews with NGOs and a Business.

# 3.5 Data Analysis

Upon returning to the United States, recordings of the interviews with the artisans and with the one trainers were transcribed and then were analyzed using the theoretical framework and research questions that were developed before the study

was conducted (see Yin, 2014). Notes taken about the NGOs were analyzed using an inductive approach, reading and rereading the data and making connections through this process to form themes. Each case is presented separately in the following chapter.

Inductive analysis was then conducted on notes from the observations of the markets and the three other interviews done with NGOs that did not include artisan groups. The information is reported in a separate section at the end of the next chapter. One theme from the initial question list, technology, was omitted from the results because there was not enough data given the traditional method of weaving the artisans used. It had been hypothesized that technology would advance as a result of increased capital, but because advanced technology was not used for the majority of the production, it was omitted.

The case studies and other information were then compared and contrasted to each other and to previous literature under the structure of the framework that was developed before the study. This cross-case analysis focused on answering the research questions and testing the theoretical model.

Because all the interviews were translated by Deborah and were not word for word Spanish to English, the information presented in the results chapter do contain some of her personal narrative and her voice. This is important to note because of the potential of certain biases Deborah may have had to be involved in the translation, whether from English to Spanish in explaining things that were confusing to the artisans or from Spanish to English, not always having the ability to translate certain words. While Deborah was prepared for the interviews, there was still potential for this during the actual interview because the interviews were semi-structured and other

questions were asked where necessary. Also, the names of the organizations and the names of the artisans have been kept confidential because of IRB protocol and possible safety concerns given that Guatemala has a recent history of violence.

## Chapter 4

### **RESULTS**

### 4.1 Introduction

This chapter contains the results from the study. There are five separate case studies, which include data from the NGO interviews and the artisan interviews. In a final section (4.7), the results of the additional interviews and observations from the markets are presented.

## 4.2 Case Study #1: Building Baskets, Building Opportunity

The first case study is of the partnership between a fair-trade organization (A) with offices in Guatemala City and Panajachel and one of the artisan groups (#1) that created basket for the organization.

NGO A was founded in 1989 and exported products such as hats, table clothes, baskets, bags, placemats, felt animals, and a variety of other products. All the products were exported through the Guatemala City office, which was in a residential section in north-eastern Guatemala City. The NGO also had a distribution center in New York, in addition to their offices in Guatemala.

The products created for the NGO were either delivered to the office directly by artisans or via the field office in Panajachel, which accepted products that artisans delivered there because of the distance from the villages to Guatemala City. NGO A had six people on staff in Guatemala, split between the field office and Guatemala City. A Guatemalan man runs the headquarters in Guatemala City. The field office in Panajachel was in a residential area that was situated by a cliff and had two people on staff. In addition to supplying work opportunities to the artisans, NGO A also assisted the artisans through support for their children to attend schools, medical support, and

through other trainings. The organization sold locally in Guatemala through different stores and exported to the United States where the products were sold in different stores. NGO A did not have any shops of their own. They also sold products online through their website.

NGO A designs all the products that it sells and while their current designer has a degree in physiology, she is very fashion oriented. The organization is very proud of the quality of products they export and have high standards for the products they will accept from artisans. Products were for sale in the Guatemala City office that were not acceptable for export, but to the untrained eye, the defects were difficult to see.

Because the organization emphasized quality, they imported raw materials to improve the overall quality of the products they exported. Specially, they imported wool for making felt animals and raffia to create baskets. The wool was important to import because the quality of the locally sourced wool was not good. They did utilize locally produced wool for the inside structure of the felted figures, but used the imported wool to cover the figures. The raffia was imported to the Unites States from Madagascar and then sent to Guatemala for production. The raffia was distributed to the artisans and then either used in its raw form or dyed colors to create more aesthetically diverse designs. The yarn for weaving was provided to the artisans by the organization, as was the wool. It was sent from the Guatemala City office to the Panajachel field office and distributed from there.

One way that the organization was dealing with product that would not sell, specifically baskets, was to soak the older baskets to rehydrate the materials so that the baskets could be taken apart and remade into other baskets. This also illustrated how

the culture of high quality has expanded to their artisans because the women who had been tasked with reusing supplies were embarrassed that they had turned in the baskets to begin with because the quality was not up to what they expected of themselves at the time they were remaking baskets.

The organization worked with multiple different artisan's groups that made baskets and had production schedules for each group posted on the wall in the field office. Each group varied on the number of baskets produced per month, based on size and experience, and production was split up by month but was flexible, with the total production goal being yearly.

The artisan group for this case study was interviewed in the field office in Panajachel. The group had to travel via bus and tuk-tuk to get to the field office from a village approximately 30 kilometers from Panajachel. Of the 12 women in the group, three could participate in the interview on the day that they were scheduled to deliver finished baskets to the field office. Their ages were 17 to 32 and the entire group was female and ranged in ages from 17 to 42. The women interviewed ranged in education levels from having never attended school, having gone through third grade, and having gone through three years of junior high.

The interview took place outside of the field office in NGO A's courtyard. The women were very welcoming and were happy to talk with us about their experiences. Two of the women spoke Spanish and the other spoke some Spanish but also required some translation into Kaqchikel, which is one of the local Mayan languages spoken.

The group originated specifically from one woman who had attended IXOQI', a local training institution, with two other women. The group was formalized February of 2015 after the group had located NGO A. The woman who started the group had

heard about the NGO from a woman at IXOQI' but it took the group three days in Panajachel to locate the NGO.

# 4.2.1 Products Created



The products that the women had brought to the field office to deliver were pine needle and grass placemats/baskets in three different sizes (see Figure 4.1). The three women were delivering an order of 100 baskets of each size for their group and it was their fourth delivery to the organization. The baskets were made of a wild grass grown locally around Lake Atitlan, pine needles, that were harvested from a specific region of Guatemala and can only be harvested from January to April, and raffia, that was sourced by the U.S. headquarters of the NGO, from Madagascar and then exported to Guatemala from the United States. The raffia was an innovation that set the baskets apart from baskets traditionally made in the area.

Figure 4.1 Placemats in two sizes created by Artisan Group #1

# 4.2.2 Product Development Training

There were two different training methods that had been experienced by members this group: the formal training of three women at IXOQI' and the informal training of the additional women who joined the group.

Before the trainings, there was not a formal needs assessment done for this group by the NGO A. Instead, the women took the initiative to investigate further income potential and to pursue the training. Three women started the group and it all began on a trip through Tecpan when they saw a sign for IXOQI', which is a training institution. The three women, one of whom was interviewed, stopped and discussed the classes with the institution and signed up for basket making.

When the artisan group was formed, it was because NGO A required that the group have 10 members to ensure that the business was both financially and physically able to meet certain levels of production. The president of the group, who was in the interview, her sister, and her sister-in-law gathered a group of ten and taught the women how to make baskets.

The formal training experienced by the group took place at IXOQI'. Desktop research found that IXOQI' is part of the Foundation for Integral Development (FUDI), which is a nonprofit institution. It was originally started in 1976 and FUDI offers programs in agricultural development, health, and in women's economic development, at IXOQI' (IXOQI, 2013c). IXOQI' targets mostly native women and the courses include basket making, baking, jewelry, candles, canning and candy making (typical sweets) (IXOQI, 2013e). IXOQI' had the following goals for 2013-2014: to reinforce the productivity of women, provide technical and business support and training, and improve the lives of the women who live in extreme poverty in the cities and villages around them (IXOQI, 2013b).

The textiles products that are featured on IXOQI's website include wallets, bags/purses, cosmetic bags, key chains, book marks, and woven belts (IXOQI, 2013d). Other products featured on the website for crafts include five different styles of baskets (one was fairly shallow, two had lids, one had a handle) and three wooden boxes with textile details (IXOQI, 2013a).

The three women from the group took a basket making course at IXOQI', where they were taught how to make baskets using grass, pine needles and omega, a nylon-like thread that is a fairly common material for basket making in Guatemala and they learned different stitches. The products they learned to make during training were not functional baskets, rather stars and other decorative items.

The women had to pay for the training, which cost 35 Quetzals initially and an additional 20 Quetzals for each class. This comes out to an approximate total of 355 quetzals for the training, which is equivalent to approximately \$50 USD (exchange rate of 7.44Q/\$1USD). The training was once a week for four months and the students received a diploma at the end of the course.

When the woman who had attended the course was asked about what she had liked about the training, she said she liked the class itself and that she was able to learn. One of the negatives about the class/institution was about orders from IXOQI'. As part of the training, IXOQI' would give students orders for baskets to sell in their shop but not pay the women when they dropped off orders, even though they were told each week they would be paid the next week. The women did receive payment in full at the time they got their diplomas.

The woman wished she had learned about baking and making cakes. Because IXOQI' has many different trainings, she would have liked to take more trainings, but

was unable to because of finances. One other thing that the women did not learn at IXOQI' was how to dye raffia, but this was something that they would be able to learn from NGO A.

The next step for the group was to train the additional people to have a total of 10 members to work with the organization. The three women gathered friends and family and asked the women who gathered if they wanted to join. Nine others did and they started training in the president's house. The training for the group was very irregular, normally from 8-11 in the morning when the women had time, and the training lasted one year.

One woman who had taken the course was responsible for teaching and she had the women start making whatever shape basket they wanted and they used omega for the training. One of the other women in the interview said that training was difficult for her to begin with because she did not know anything about baskets and she picked a shape and it did not turn out very well. The woman teaching told her that she just needed more practice and she created more samples until the baskets turned out. After the women had a grasp of basket making with omega, NGO A gave them raffia to train with. The women figured out how to use the raffia on their own and when each woman was ready they switched over to raffia. The baskets they currently make for the organization use raffia and one stitch, versus the many stitches that were taught at IXOQI'. The group meets together if there is a new design to learn, working on it for one day together, otherwise they all work in their homes.

# 4.2.3 Capabilities

Before the group was trained in baskets, they had worked in the fields, wove huipiles for themselves and for sale, and had done bead work. None of the women had experience making baskets.

While the baskets that were being delivered the day of the interview were designed by the organization ordering them, the women also showed a design that they had created on their own (Figure 4.2). Because of the trainings at IXOQI', the women were trained on other shapes and designs and were not limited to only one shape of basket. NGO A ordered a small amount of the new design, which the field expert explained was shipped to the United States to see if it would sell.

The president of the group oversaw quality control, along with one other woman. The president cited the high-quality control requirement of NGO A as one of the reasons she enjoyed working with them because of the attention to detail. The high quality control standards were observed during the order check-in before the interview (See Figure 4.3). The three women who were part of the artisan group sat on one side of the table and trimmed loose raffia from the baskets and then placed them in a pile



for the two field workers to examine for quality control. One of the field workers measured every basket and both field workers analyzed every stitch against a sample to assure that they were identical.

Figure 4.2 Basket designed by Artisan Group #1



Figure 4.3 Order check-in procedure

Other capacities that the artisan group had developed was in relation to building a business and overall production. The group has a president, vice president, secretary, and treasurer and these four members all work together handling money. The group, and especially the president, learned how to handle money from the president's sister who is studying finance.

Production is split up

evenly when an order comes in, each member getting an equal number of baskets to make. If individuals cannot complete their part of the order, they ask other members of the group for assistance. It took the women approximately one day to finish a large placemat, and a half a day to finish one of the medium size baskets. The women had a yearly goal set by the organization to produce 400 baskets total. Delivery is done once every four to six weeks, and the president of the group always goes along with one other women. The group has a rotation schedule that they follow so that everyone is given an opportunity to deliver the order.

# **4.2.4** Internal Constraints

Internal constraints that the participants talked about were impacted because of product development training were access to local markets and production levels.

Interestingly, new financial constraints were added because of the training. In access to local markets, the group actively had pursued a buyer to create a demand for the products they could learned to create through the training.

Production levels were impacted through the training and through practice. The training of the larger group provided the women with time to develop their skills. The woman who started the group could make more money than most of the women because of her experience and her ability to work faster.

Financial considerations arose because the group was given the raffia from NGO A but was required to source the pine needles and grass from local sources. The grass was harvested by the artisans locally, but they had to purchase the pine needles from a woman in Chimaltenango because the pine needles are only found in the northern region of the highlands. They pay 10 quetzals per pound for the pine needles and were able to make four baskets per pound of pine needles. The baskets are purchased by the organization for 20 quetzals each, meaning that the women spend 10 quetzals for every 80 quetzals they make.

## 4.2.5 Business Success

The addition of capabilities allowed for an increase in income for the group. Each woman in the group earned about 260 Q per month, which was approximately 3,120 quetzals total for the whole group. Before being trained in baskets, one of the women who was single and living with her grandmother, would weave two small sections of cloth and sell them to her neighbors for 40 quetzals. The increase in income from making baskets made her very happy. Another woman did beadwork before learning to make baskets, and would sell her work to a woman for 75-100

quetzals a month. She did not know what the woman did with the work but she is now making more per month making baskets.

The women also found personal satisfaction from their work. When asked what made their group successful, one said that they were hard workers who respected each other and the women respected her. The women also thought that how the group cooperated and worked together was something that they were proud of. One of the women enjoyed being in a group because she never had been before. It has also opened one of the woman's world. That woman used to work alone in her grandmother's home and had never been to school. She felt that being able to be part of a group had given her many more opportunities.

The training from IXOQI' and the partnership with NGO A fostered growth for the artisan group, the partnership being the key reason for the forming of the group and for the additional members being trained. In addition to this, the group also had satisfied stakeholders, being able to meet the high quality control standards set by NGO A and were able to innovate new products because of the many stitches they had learned.

During the interview, the women expressed multiple times how thankful they were for the work that basket making had provided and that it was steady work and how making baskets has opened opportunities up for the women that they have not had before. This illustrates that the group was meeting its intended purpose, to create an income for the artisans. They also said that they wanted to continue making baskets, with one of the women saying that she wanted to make baskets until she could not see anymore.

### 4.2.6 Sustainability Awareness

Sustainability questions were asked to understand how much the women were aware of socially responsible and environmental sustainability issues. Specifically the artisans were asked about the amount of time worked, work life balance, if they had help from any of the members of their household, especially their children, and if they recognized any environmental impacts from their work. The women work 8-11 and 1-5 every weekday until the order is done and if an individual is not able to complete her section of the order, then others who can work faster take on more of the order, and are paid accordingly. The women were also responsible for watching either their children or their siblings. Only one of the women interviewed had children, a two-month old son, but another was one of 12 kids ranging in ages from 8-32 so she was responsible for watching her younger siblings. The women enjoyed the work that they were doing and this was expressed many different times throughout the interview from all three of the women. The women did say that they wanted their future daughters to learn and continue the work. The women who had her son with her said that she would let him learn, but basket making was considered a woman's job.

When asked if the group considered the environmental impacts to the products they created, the women discussed sourcing the grass and the pine needles. The grass need to be pulled up from the root to ensure that they are long enough and needed to be picked when it rained. They also wondered whether eventually there would be no grass left to harvest.

### 4.2.7 External Constraints

Access to raw materials and transportation for delivery were the biggest two external challenges faced by the artisans. For raw materials, the pine needles can only

April. The grass can only be found under trees in the shade because the sun turns the grass yellow instead of the green color that is desirable and can only be found when it has rained. The women pick the green grass and wrap it in a blanket to keep it wet to and stay the right color. All of these factors contribute to the external constraint because if there are weather events, the grass could be the incorrect color. There is also the possibility that the demand for pine needles could rise, increasing prices. The raffia for the baskets also had to be imported because it is not available in Guatemala.

The biggest challenge that the women faced was delivering the products to the Panajachel field office. They normally pay a man, who they consider a friend, 150 quetzals to drive them to the field office. On the day that the interview was conducted, the man had been unable to drive them, and other drivers in their village would charge them 250 quetzals. Instead, the women took the bus, with all of their baskets. They had to change buses twice and were stopped in one of the towns because the town fair had blocked traffic and closed down the town. When they reached Panajachel, they then had to take a tuk-tuk to the field office. Total for all of their bus fees and tuk-tuks, it cost them 27 quetzals for one way but took considerably more time.

Market access was also an external constraint for this group. The NGO requested that the artisan group only sell baskets created using the NGOs designs to the NGO. Baskets designed by NGO A differed from traditional baskets because of the incorporation of imported raffia and modern designs (flat coasters, placemats, and chargers). Traditional baskets are created with omega or string collected/recycled from plastic bags and differ in shape from the baskets designed by the organization. The organization asks that the artisans they source from not sell any baskets to anyone

other than them, including baskets that do not make it through quality control and are not accepted, to maintain a competitive advantage. This put a production limitation onto the group, being very susceptible to the success of the NGO.

In regards to cultural relevance, the products created by the group were traditional in the sense that basket making is prevalent in the area, but it was a new skill for the group, making it not traditional for them. The artisans had grown up weaving, which was their traditional craft. The design and the addition of raffia changed the product into something that was not traditionally found in the area.

# 4.3 Case Study #2: 'Compassion' Training

Case Study #2 is of the partnership between a fair-trade organization (NGO B) located in Panajachel and an artisan group (#2) located in Patanatic. NGO B was founded in 1996 and had two locations in Panajachel, a headquarters located in a residential section of town and an educational facility that was used for literacy trainings, as well as other trainings. The educational facility was near NGO A's headquarters but was situated closer to the cliff with a medicinal garden planted on the cliff.

The director of NGO B was an American woman who had a background in geography and non-profit management, and they had two consultants that were hired on a temporary basis for quality control, product development, and measurements. They also heavily utilized international volunteers, with volunteers/employees working there at the time of the interview being from the United States, Germany, and France. NGO B focused on textile production (mostly created from backstrap woven materials), herbs for medical purposes, and emphasized supporting the artisans they worked with in sending their children to school through scholarships. The NGO only

had one of its own stores, which was in their headquarters in Guatemala, otherwise they were solely a wholesaler, with products being sold in two locations in Guatemala, and around the world in Denmark, India, The Netherlands, the United Kingdom, and the United States. They did not sell any products directly online.

The textile products exported by NGO B were bags, table runners, scarves, and other like products. The organization had two separate methods for designing. Foreign based designers would work with the organization to produce products, or designs produced in house. Many of the patterns that were created were based off traditional motifs, but had been westernized in color preference and number of colors used overall. Other motif designs were created by the designers. The other method of designing was by the NGO B for the its seasonal wholesale catalog.

The organization worked with nine different artisan groups, six of which wove. They provided the groups with the yarn for the weaving, and bought the yarn from two Guatemalan yarn producers. The only time that the artisans dyed the yarn was when they were producing jaspe. They also used local producers for the leatherwork which was used in many of their bags and sourced the leather from Guatemala. The leather they used was not fair trade but was something that the NGO was looking into. The NGO also used to create baskets, but stopped because the baskets were not selling. This contradicted what was experienced during the group interview because the



Figure 4.4 View from the road to Patanatic looking down over Panajachel.

women in the interview reported that they were creating baskets for the NGO. NGO B was in the process of setting up trainings for macramé bracelets because they had a large order for a buyer in the United States.

Problems in production that
the organization was facing was the
disconnect between traditional Mayan
techniques/quality expectations of
weavers and the expectations of
Western designers and consumers. An
example of this was while western
designers expected consistency, the
weavers would randomly change
colors in the designs. They also had

struggles with consistency because there were times where yarn would be lost in transport from headquarters to the production location thus creating a difficulty because the amount of thread would be off and as a result the weavers would simply make a shorter piece.



Figure 4.5 Example of baskets created for NGO B



Figure 4.6 Making a basket

The artisan group for the case study was located in Patanatic, and to get to the location from Panajachel, which is on the lake, took about 15 minutes and was mainly uphill with many switchbacks (See Figure 4.4). The interview took place in the home of one of the women in the group. Two employees from NGO B traveled to the interview to give directions and then left before the interview began. One employee was from France and one of the consultants was from San Pedro.

The group was made up of six women and the women were working around a table on baskets when the team arrived.

The interview took place in the courtyard area of their home.

The group originated in 2007 and in the beginning had 12 members. The six that remained in the group still needed money to send their kids

through school, so they continued with the group. The ages of the women ranged from 28-70 and the education levels ranged from first grade to third year in junior high. The interview was conducted entirely in Spanish. While all six of the women sold to NGO B, four of the six also worked for other NGOs. There was not much cohesion in the group throughout the interview as demonstrated by the various organizations they sold too and observed body language. Because members of the group had different working relationships with at least three different organizations, they made a variety of products. During the interview, products seen were randas, baskets (See Figure 4.5), and tassels, all of which were created for NGO B. The group also had members who made hook rugs, neckties, and clay pieces for necklaces.

The baskets that were shown were made from pine needles and raffia (See Figure 4.6), but they also used nylon string and cotton thread. The group had received the raffia from NGO B. They showed two different baskets, one that looked like a vase and another that was flat and called a 'chocolate basket.'

Creating randas means embroidering two pieces of cloth together to form one large piece. This is necessary because foot looms are made for certain widths and randas create wider pieces with a flat seam that has a decorative look. The women did not have a large piece to show us, but did have a sampler of the stitches they had learned (See Figure 4.7).



Figure 4.7 Randas Example

Of the products that the women made, there was not one that sold best. They prioritized orders from NGO B and did consignment sales for another NGO when they had time. The product that sold the worst of their product assortment was the neckties. The woman who sewed said that she had made 12 neckties five months prior and that only two of them had sold.

# **4.3.1 Product Development Training**

The group had initially started because of the opportunity to make baskets for NGO B. The women had been given a training on baskets in 2007 but because it was



Figure 4.8 Example of completed randa from NGO B

nine years prior to the interview, the details of this initial training the women did not recall.

The women had recently been trained in how to embroider randas and this was because the baskets they were making were not selling. While there had not been a formal needs assessment done, the women had gone to NGO B

and asked if they could be taught another skill in order that they would be able to get more work.

None of the women knew how to weave. All the skills the women had that were required to make the products they sold were learned through trainings. Before 2007, they had embroidered for themselves and embroidered t-shirts to sell. They had taken a basket making course in 2007, which was the first interaction they had had with NGO B and was the first of a couple trainings they had been a part of in partnership with the NGO.

The randas training was provided by NGO B and had been taught by the woman who was the cleaner at NGO B. The reason she was chosen to give the training was because she was from two villages away, and this town used randas on their traje, and thus, she was experienced with the skill. The training consisted of four three hour sessions over two weeks, the same days each week and was done at the same location in Patanatic as the interview. The first week the women learned four stitches and the second week they learned four more. Each woman made a sampler of the eight stitches over the two weeks. The stitches from the first week were checked by the teacher when she arrived the second week and the second week's stitches were sent to Panajachel to be checked before the women could take orders from the organization.

NGO B paid for the training and the women said that they liked the teacher and had no complaints about the training itself. They did find the training difficult because each woman had different stitches that were difficult to learn. Each woman had one stitch that they were good at and focus on fulfilling orders that required only that stitch.

## 4.3.2 Capabilities

Before the training, two of the women had done agricultural work, one had washed clothing, and one of the women also baked and sold bread in her bee-hive oven. She had to stop because of the competition in the area. The others had embroidered t-shirts to be sold. They would receive five quetzals a piece for the t-shirts.

After the basket training in 2007, they made baskets, mostly sphere shaped to sell for NGO B. They had since designed baskets in other shapes on their own because the sphere-shaped baskets would not sell. The group also created totally different designs for NGO B and another NGO. The baskets created by the artisans in this case study were more similar to the baskets created by the artisan group from case study one than the more traditional baskets that were seen in the market mainly because of pine needles and raffia. The traditional baskets seen in the market tended to be flat, and were sewn together with omega, regular thread, or recycled thread from grocery bags.

After the randas training, each woman had a stitch that she was good at doing but the stitches were spread out among the women, there was not one stitch that everyone could not do. This dictated who would get the orders, given that many of the products that required randas would only use one stitch versus many different ones. While they had not had many orders for randas, the artisans were hopeful that eventually everyone would get an order based on the stitches they could do and they were practicing to become better at the different stitches.

Two of the women present were responsible for quality control, but said that work was never not good enough because baskets could not be taken apart and fixed. The women knew this and made baskets that they knew would meet the standard

required by the NGO. Surprisingly, the quality of the baskets the women had on hand was not very high, with stitches being of varying lengths and sizes, but NGO B would accept them and pay for them.

The group does not have a set delivery schedule, which was in part because they did not have consistent orders, but instead would go down to Panajachel to deliver product when someone called them. They would take turns making deliveries. Whoever made the deliveries had the check written in her name and she went to the bank to cash it. Upon return, the cash was divided by the amount of work done for the order by each artisan.

#### **4.3.3** Internal Constraints

Even with the training, the group faced the internal constraints of limited finances, had issues with quality control, and access to local markets. In addition, production levels were a constraint that was now faced because of the training. First for access to local markets, the women in the group were selling many different products to at least three different NGOs. Four of the women sold to a NGO that had a store in Panajachel that sold products created by 12 cooperatives. The women sold different basket designs to this organization than they sell to the NGO B. Two of the women make hooked rugs out of old t-shirts and sell them to both the store in Panajachel and online. While they had many different outlets for sales, this also served as an internal constraint because they did not have a consistent place that would order from the group. Even orders for randas were lacking, as they did not have a strong demand. The baskets they made were more modern than the traditional baskets seen in the market, but the quality was not very good, which meant that the baskets would most likely be sold in NGO B's local store for visitors coming for tours versus shipped

to international wholesale customers. The women also had many different skill sets and had the ability to create many different products, but no consistent demand for any of them.

Production levels were also an internal challenge. They only had received two orders for the randas, one women fulfilling one and another making two because of the stitches required. If there had been a very large order for just one stitch, this would have taken substantially more time than if they all knew how to do all the stitches. Through practice they were improving their skills and had hopes that more orders would come in the future.

In regards to finances, the women are responsible for harvesting the pine needles used for making the baskets and pay taxes. For harvesting pine needles, the person who they were sourcing the pine needles from charged them 5 quetzals a person a day to harvest the pine needles no matter how much they collect. This was a constraint because without having a good estimate of basket orders they would have to estimate how much they would use, and it would be a gamble if they would run out or have too much.

The group is a legally formed business but all the taxes are taken care of by the foundations they work with. NGO B gives them receipts and tells them how much they need to pay for taxes. Likewise, one of the other NGOs has the group pay them the taxes because they have a member who works for the government and pays the taxes for all their groups. This was an internal constraint because the artisans were not doing the taxes themselves, but trusting others to do them. This constraint could have been lifted by additional education.

Lastly, quality control was another internal constraint because the group did not have high standards for their work and NGO B would accept most products and sell them. This served as an internal constraint because they were not able to meet the quality control standards of other NGOs, meaning that they were missing out on another opportunity to have consistent orders.

#### 4.3.4 Business Success

The artisans said that the work that they had gave them an income. Five of the six women were married and the sixth was widowed and the work they had gave them the means to be more independent. That being said, the group overall was not successful, in terms of business success.

The whole group had earned a total of 2000 quetzals working for NGO B and did not have monthly orders from the group. The training itself had not provided them with a regular income. The artisans said that they liked the work and would continue it until something better came along. While they did enjoy the work, which is a positive, the fact that they would continue with it until something better came points to the artisans as being unsatisfied stakeholders in the partnerships they had. The group did have fewer members than it did when it started and the membership was fragmented with women working for other organizations as well. There did not seem to be cohesion to the group and every woman was working to make money for herself.

When asked about what made their group successful and what gave them pride, there was a very long pause in the conversation as the women thought about what this meant to them. Once they had had enough time to formulate answers one woman said that she now is conscious of her capabilities and her value and another said that she was proud that NGO B would call her when they needed someone to

learn new things. One woman found pride and identity from being part of a group because it was something that she could claim and share this with other artisan groups. The women were proud that their products were sold internationally and that their products go around the world. Lastly, they also had opportunities to meet the international visitors and this had opened them up to new experiences. All of these responses point to personal satisfaction of the group, which was a positive found for business success.

# 4.3.5 Sustainability Awareness

For environmental sustainability, the group did not see any harm done in their production methods because the pine needles that they use would either decompose or would be used for the baskets. The artisans believe there were no detrimental impacts on the earth from this.

In regard to social sustainability, the women in the group liked what they did and wanted to continue to make baskets and make randas until something better came along. When they are making baskets, they worked for two hours in the morning and two hours in the afternoon. They wanted their children to learn the skills they had to supplement their education from school.

# **4.3.6** External Constraints

External constraints for the group were raw materials and hypercompetition/market access. Raw materials were a constraint because as mentioned before, the women must travel to collect raw materials for the baskets and must pay to collect. Hyper-competition was a prevalent external constraint for this group. The women had vast skills, but no distinguishable products or markets to sell them in and skills they had learned also could be found in other parts of the country (baskets, randas, embroidery, tassels). The randas are a traditional embroidery method found in certain Guatemalan villages. While they are not traditional in Patanatic, the women were taught by someone who had learned as a child living two villages away. The baskets created were also similar to the baskets made in case study #1, but the quality seen here would not have met the standards for the NGO in case study #1. Two aspects that did set their baskets apart from what was seen in the market place was the use of raffia and the shapes, especially the vase.

# 4.4 Case Study #3: Weaving Opportunity

Case Study #3 is of NGO C located in Santiago Atitlan, which is across Lake Atitlan from Panajachel. NGO C was unique because the organization itself was also the artisan group. The setup of this group was different from all the other groups because the women were not their own independent group, but were essentially employees of the larger organization.

To reach Santiago Atitlan from Panajachel, the fastest way is by boat across the lake, which takes approximately 30 minutes and costs 15 quetzals a person. Santiago Atitlan is situated at the base of two volcanoes and because the lake rises and falls approximately 20 feet every two decades or so, there is evidence of some of the old town below the docs. Walking through the town is all uphill and NGO C was located about five minutes from the docks.

The organization started in 1983 with two founders, one who was Tz'utujil Maya and the other who was an American designer. The two founders also had the

assistance of a Guatemalan husband and wife team. The products created by the organization are upscale, and fashion oriented. The organization exports to the United States, Canada, and Hong Kong and sells wholesale to stores in Antigua, the Guatemala City airport, and in their own retail store in Santiago Atitlan. In total, the organization employed 40 artisans (30 women and 10 men), and had six administrative workers spread between communications, design, and production. Of these administrators, an American oversaw communications, a French woman was in charge of designs, and a Tz'utujil Maya woman was in charge of finances. The head weaving teacher was also a Tz'utujil Maya woman. NGO C was the only group that said that it was self-sustaining, not relying on grants to stay in business.

Five artisan women were interviewed and one of the administration workers served as a translator. The interview lasted two and half hours and the entire interview was double translated from the local dialect of Tz'utujil, then into Spanish, and then into English. The ages of the group ranged from three who were in their 30's and two who were 50. Two of the women had a second-grade schooling while the others had never had formal education. Of the women interviewed, two had been working with NGO C from the beginning in 1983.

Of the women interviewed, one had started working with the group at 17, another had worked with the group for 26 years, one had worked with the organization 19 years and another had been a member for 10-15 years.

### **4.4.1** Products Created

The products that the women make were created and designed by NGO C and were fashion accessories. The products that the women showed were created out of woven fabrics and used multiple different weaving methods. The methods were a type

of brocade back-strap weaving that was traditional and specific to the region, brocade



Figure 4.9 Examples of products created for NGO C

back-strap weaving that was typical in other areas of Guatemala, and jaspe, which is traditionally not from their region, but from San Lucas.

The organization staff
brought out six products for
observation, two scarves, one
woven with ribbon, two small coin
pouches, and two wallets that
incorporated leather. The team said

that the scarves stopped selling in 2006 and are now rarely sold, which the expert translator said was a trend for many organizations. The small pouches sold fairly well, and the wallets currently sold best. The wallets had been in production since the year before the interview, and incorporated an upcycled leather that was imported from the United States. The products were originally designed by one of the founders, who had recently retired. A French designer had taken her place and had worked with the group for one and a half years before she left. They had recently added another French designer who is responsible for designing the products for the organization.

## **4.4.2** Product Development Training

The organization has offered both technical and non-technical workshops and believe that the artisans had benefited from the trainings offered. Examples of trainings that the women have done were how to reduce weaving time, how to create brocade without extra heddles, and learning how to create jaspe. One of the trainings the organization has offered is on brocade techniques and how to create designs that look the same but take fewer heddles. Limiting the number of heddles used makes the weaving faster. None of the women interviewed had taken this training, so details are limited.

The women in the group had never asked for training, but instead the organization offers trainings when they see a production need or opportunity that is not being met. For the trainings discussed below, which are jaspe training and a type of brocade weaving training, both techniques could be found in other areas of Guatemala. A group from San Lucas, where jaspe is traditional, originally worked with the organization to make cloth for NGO C's products. These products sold very well but the group was a long distance from the headquarters in Santiago Atitlan, which meant the women could not be part of the group. NGO C made the decision to teach women from in and around Santiago Atitlan to create jaspe. Since then, the organization has continued to sell a lot of jaspe products so they had a need for more weavers, which is why they offered the jaspe training that is described below.

Trainings are typically outsourced to a group called Fundap, which is a non-profit organization that focuses on "Development with Dignity" (Fundap, 2016). It is an international organization, but the Guatemalan branch focuses on development through improving living conditions and market access for artisans, along with education and health (Fundap, 2016). When NGO C wants a new training, Fundap will send someone to teach and Fundap was regarded well by the staff. NGO C offers the training to everyone in the organization, not only those who are skilled in the area.

They do limit the number of people who can attend each to a total of 10, but initially everyone is invited. NGO C also pays for the training.

The five women interviewed had each taken one of two trainings that are discussed more in detail. Two, one of which was the weaving teacher for the organization, had taken a brocade class that taught what is more typically thought of as "Guatemalan brocade" and the other three had just completed a beginners jaspe course. The two women who took the brocade training knew how to weave but had never done the particular type of brocade and the three women who learned jaspe had never done it before and it was not related to the skills they had previously used for the organization. For example, they may have woven for NGO C, but jaspe requires different skills.

The brocade training was a totally new skill learned for one product. The teacher was from San Lucas and the training lasted three days. The warps were already on the looms for the women, so they were able to quickly get into the actual weaving, which is done by pulling up the warp threads with fingers instead of added heddles. The women said that the first day of training was very difficult and they did not enjoy it because they did not understand how to do it. By the end of the training though, they understood why the training itself was important and how to do the technique. The brocade technique of weaving was used to make fabric that could then be made into bags. The weaving is very difficult so the women who make those products switch between this technique and other products, in order to maintain both motivation and stress levels

The jaspe training was initially offered because of the need for production closer to the headquarters. It has since been offered more times because the jaspe

products sell well and it is a very difficult skill to learn, so not everyone who had taken the training would end up being able to do it. The training was six sessions long, going from 9AM to 1PM on Wednesdays and Saturdays. Participants were taught the whole process of jaspe, which has multiple steps from preparation and dyeing of warp yarns to weaving the actual fabric. It is a totally different set of skills from the traditional weaving done in Santiago Atitlan, and different from what is done around Lake Atitlan. The man who taught the class was from Fundap. He spoke the local dialect, which was beneficial for the women in the class. Five women were in the class, which was done on the instructor's land because of the need for special dedicated spaces for jaspe. The women said that at the beginning of the training, it was very difficult but they liked it by the end. They had just finished the introductory jaspe class and were waiting for the advanced class.

The women said that the trainings they were having were good because they wanted to focus on weaving. While they could learn beading and other crafts, they want to focus on what they are good at and they believe weaving is a strength of theirs.

## 4.4.3 Capabilities

Weaving is an integral part of the culture of the community, so the women learned to weave from their mothers as children. Some of the women grew up supporting themselves because their mothers had died, so they had been working to support themselves since they were teenagers. Even now, at older ages, weaving was the first priority for the women. Yet, NGO C staff has also supported the women in gaining new skills because they recognize that the women will not be able to backstrap weave forever given physical constraints of age. Having multiple skills is a benefit for

the women because they have more opportunity for work; production was divided into separate operations that were distributed to different individuals, making the separation and addition of skills viable for older women.

NGO C had a much different internal division of labor than the rest of the groups interviewed. Each artisan had their own specialty, with only two or three being skilled in each area, and orders were given based on what the women could do. One specific example of different skills the women have was that one of the women interviewed is able to weave very wide items, which is a skill that not many weavers have. She can weave 20 inches or wider. Skills ranged from weaving delicately for scarves to dyeing jaspe and weaving jaspe. The men in the group do the sewing for the group, as well as jaspe. Every product created for orders had two to three people working on it.

The group also has two to four women who prepare all the warps for the whole group in the headquarters because NGO C has found that this practice creates the most consistent fabric quality. The weavers weave and warpers warp, there is very little overlap. At the time of the interview, it did not matter what product was being made, all the warps were being wrapped at the headquarters. For the jaspe fabric this practice was in the middle of being changed because of the difficulty of the jaspe fabrics and warp. Traditionally jaspe has been completed from start to finish by the same person, which is what the organization was moving more towards., and it was another reason the organization offered the training.

The women who took the jaspe class said that the training was useful for them because they now have the skills to create tzutes, which was another traditional textile that women used in the area to carry things on their backs. Because of the

functionality of the item, it was useful to have the skill whether or not they used it in their work for to the organization. The group also does a brocade that is specific to their region of Guatemala, which involves backstrap weaving with multiple heddles. This is different from what it "typical" of Guatemalan backstrap, in which brocade is created by pulling up threads with the weaver's fingers and only has one heddle.

All the sewing is done by workers employed by NGO C, typically the men, and the sewers are responsible for cutting the fabrics. Production planning for the group is done by one of the founders of the organization. He is in charge of planning because he knows all of the artisans and knows who has what skill. Because all of the artisans specialize in different areas, orders are divided accordingly. The founder takes the order and assigns people to it depending on their skills and how much work they currently are doing for the organization. The warp yarn is prepared at the headquarters, then the women come to get it along with the weft yarn and weave it at their homes. Then they return the finished fabric and the sewers pick it up and cut and sew the product before delivering it back to the headquarters. Orders from existing clients normally take around a month in production, but new clients can take up to three months in order to find and make the material for the sample.

All the sourcing of materials and zippers is done by the production manager, who goes to Guatemala City to purchase products. The organization also takes care of money for the artisans and all business expenses. Quality control is handled by the weaving teacher, who was involved in the interview, the production manager and the designer if needed.

#### **4.4.4** Internal Constraints

Internal constraints that were impacted by trainings were access to local markets and productions levels.

Access to local markets was an internal constraint that was lessened by the training, and also through how the group worked. The women do not weave for other organizations, but one of them does own her own store where she sells items that are oriented towards local women and not tourists. She sells things like fabric for their huipiles that the women would later embroider and cloth for the traditional shoulder wraps. She said that she did not want to copy or duplicate anything that NGO C made but originally opened her shop because there is not guarantee that NGO C will always be running. The other women weave for personal contacts when orders are down from NGO C. The women sell mostly to neighbors and said that they did not sell through the other woman's store. If NGO C does not have external orders, the women weave for NGO C's store, which is located near the headquarters. The organization also sells by consignment to stores in Antigua if they do not have orders, which could create competition, but given the distance between Antigua and Santiago Atitlan, this competition does not significantly cannibalize sales. In addition to being able to sell products to friends and neighbors, the training gave the women another skill that they could use to sell in the local market, which lessened a constraint that already was not overly constraining for the group.

Production levels differ for every product and technique but the trainings that had been used had been actively trying to improve the groups production levels. The group has had training on how to reduce the time it takes to weave certain designs with fewer heddles in their traditional type of brocade. Another way that production levels have increased is that more women are involved in jaspe, making the work more

evenly distributed throughout the group. The trainings, overall, had positively impacted the internal constraints NGO C faced.

#### 4.4.5 Business Success

Sales for the whole group (40 people) were approximately 300,000 quetzals a year. It was difficult for the organization to give a specific average number for each individual because each person's pay was dependent on how fast they worked and what they do, but they said each person is paid approximately 450 quetzals a month. It was also said that the NGO itself was self-sustaining and not reliant on external funds, making the NGO at least a breakeven company.

Sales were the biggest challenge for the organization over all, but quality control was a key challenge for production and for satisfying stakeholders. The group realized this while working on an order for a client who was flying down to Guatemala to pick up the order, which is not typical. The women also had booked a plane ticket sooner than the organization had anticipated. The client was very particular in quality control and initially she pulled 30 bags from a 150-bag order that she felt did not meet her standards. The organization soon realized that all the individual steps involved in production had minor quality control issues, and because every step had a problem, quality control needed to be addressed on a company level. One example of an issue that arose was one of the weavers would only weave 76 inches instead of the 80 inches that the warps were measured for and that was needed to create five bags. With the shortened length, they could only make four bags and wasted material and the time the women took to weave it. The organization, which is very proud of its quality control, worked with the client to fix the mistakes and in the end the client took all the bags

except three. From this experience, the organization has realized that quality control needs to be thought about at every stage of production.

The women like working for the organization. It has given, especially the weaving teacher, different opportunities and she had met many different visitors. They liked the monthly meetings that they participated in. They liked the fact that they got to see everyone in the group and share what was going on. They also appreciated that the work they had was steady and they knew they were going to get paid.

Success for the women was on a personal level. The work that the women do for the organization makes them feel loved and respected. They feel that they are admired and that their work is wanted because they do not have to sit on the street to sell products. The typical buying/selling practices on the street devalues their products and what they are capable of. They were very happy working with someone who respects them and their work. Another reason that one of the women enjoyed working with the organization was because she had the ability to support her children through her work. She can put them through school and take care of them. All the women interviewed were happy working with the group.

## 4.4.6 Sustainability Awareness

In the early years of the organization, at least two of the women's mothers had been weavers for the group. The women interviewed would also weave with their mothers and their mothers would sell their products to the organization. At least one of the women had started working for the organization at 13 years of age. NGO C has since changed this practice that the artisans in the group cannot sell other people's work to the organization, but it has to be their own. All the work sold must also be from members of the organization. While one of the women still had her son help her

on occasion, keeping ribbons flat for weaving and winding bobbins, the majority of them do not have their children help them. The women work on weaving four to five hours a day, on average. The time of day varies from morning to afternoon, but weaving is incorporated into their day-to-day culture.

The women want to continue weaving as long as they can. The women said that there is a vast difference between today and when they grew up because then there was no chance to go to school. Everyone was dedicated to textiles and weaving and it was expected that children would work, especially by the time they were fourteen or fifteen. Their children now have more options for careers, but the women are old enough that they believe some of the new options are not open to them. They were focused on weaving and would not be switching to other things.

For environmental sustainability, the NGO has incorporated an upcycled leather that is imported from the United States. This leather is taken from previously worn items and coated with a thin layer of sealer. The women believed that most of the products they create did not have an environmental impact. However, one that has implication is the jaspe training because of the dyeing is a step they are involved in. The environmental issue with the jaspe dyeing is where the dye goes after it has been used, and the organization said that the people involved in jaspe have considered it. While unrelated to their production, one way that NGO C is actively working to cut down on pollution is by giving the people who work with them O'Neil stoves. These stoves are more efficient and use less firewood, which means less smoke. The expert translator said that respiratory issues are the second biggest killer of children in Guatemala, so the stoves are working to make less of an impact.

## 4.4.7 External Constraints

Language was a constraint for this group because most of the artisans only spoke the local dialect, not Spanish. This caused communications barriers between some of the organization staff. The administrator who translated for the interview spoke the local dialect, so she could communicate with the weavers easily.

When discussing if other people made the same products as the organization, the women said that weaving was the tradition of the pueblo. It was normal for the women that everyone weaves, so while there may be extreme competition, they were not fazed by it.

Distance and the conditions of roads was one constraint that was present for this group. They sourced many of their closures from Guatemala City, which, according to Google Maps GPS would take at least 3 hours and 15 minutes and is 163 kilometers away. This is without traffic and road conditions in Guatemala vary. This means that the trip would most likely taken an entire day and the would most likely have to hire someone to take them. The other method of transportation, is going across the lake to Panajachel and taking public transportation into Guatemala City. This method would most likely be faster, although it is not always a safer method. During the fieldwork, stories were told about artisans getting raped and having money stolen from them on public transportation. Women never went alone, normally in pairs of two, but this was consistently a worry for NGO C and artisans.

## 4.5 Case Study #4: Weaving in the Mountains

Case study #4 and case study #5 are of two separate relationships between artisan groups that both sold to NGO D. NGO D was located just off the Pan-



Figure 4.10 Example of bag made for Novica



Figure 4.11 Examples of the yamikas created by NGO D

American Highway in Chimaltenango, and the NGO was founded in 1990. Three employees worked in the headquarters and all were native Guatemalans, with two of them being of Mayan decent. Their titles were director, accountant, and production manager. The production manager was a daughter of a family that had worked with the NGO weaving on backstrap looms and foot looms. NGO D was headed by a woman who lived in the United States and made trips to Guatemala.

NGO D was going through a transition stage because they had been dramatically affected by the recession of 2008. The organization had had to lay off employees, both in the United States and Guatemala, and sales had plummeted. They were actively working towards finding new markets, looking at selling rugs in European markets, and partnering with Novica (See Figure 4.10). Novica is an online site

sponsored by National Geographic that specializes in selling artisan crafts from around the world. NGO D exports products to the United States, Vietnam, and Germany.



Figure 4.12 Example of pray shawls created for NGO E

The products that the organization sold varied. The most popular were yamikas (See Figure 4.11), of which they had sold 9,000 the year before. The item with the next largest sales was prayer shawls (See Figure 4.12). They also sold bags (without leather), bibs, booties, rugs and stoles. The products had been designed in various ways. They had a series of baby

products that were designed by AgExport, a Guatemalan non-profit export agency, and were working with a Vietnamese organization at the time of the interview to get more design assistance. To demonstrate to the artisans that NGO D was moving forward, each of the employees was attending workshops at AgExport related to their responsibilities. The production manager had attended a workshop on design and innovation. It was a two-day course where she learned about color, markets, and designing for certain markets.

The organization was also exploring new options for education, with dreams for partnering older weavers with the younger generation in Guatemala to keep the culture alive. Many of the ideas that they were developing were not focused on the groups they already worked with, but instead were looking at options where they could find funding, for example, in western Guatemala City. The main reason for this was because of the need to restructure and create long term opportunities.

In addition to selling products, the organization was very involved in violence prevention education and supporting the children of the weavers. Because of the recession, the weavers had lost faith in the organization and it was made worse



Figure 4.13 View of road on the trip to Agua Caliente to build the trust that was lost

because the organization could no longer provide educational support for all the children.

They had to cut their scholarship program from around 100 students to only 30.

The organization was actively trying to

reinstate the faith that was lost, but the three current employees had been hired only after the economy started to recover. This meant that they had had limited time to rebuild trust and they predicted it would take years.

The interview with artisan group took place in the home of one of women in a small town which was approximately 10 kilometers from Comolapa. The town was so small it was not labeled on Google Maps, and the 10 kilometers took approximately 45 minutes to drive. Most of the roads were dirt, only having paved sections on hills to stop erosion that was typical during the rainy season. The town was located in the mountains, which also meant that the roads were narrow, curvy, and had many switchbacks (See Figure 4.13), which made it more dangerous.

The interview lasted one hour and it was mostly in Spanish, but with some Kaqchikel translation done when the women did not understand. The three employees from the headquarters joined the trip because they had not been out to the group in quite some time and also, they gave direction to the village. The interview was done on a saint holiday, and there were festivities happening in the streets of the towns



Figure 4.14 Example of wall-hanging created by group



Figure 4.15 Example of products designed by artisans

along the way and fireworks going off in sporadic intervals.

One of the women was in her 40s. three were in their 50s, and one was 70. They ranged in education level from none to a fourth-grade education, but all the women had taken the literacy class offered by the NGO. The women had been working with NGO D for 14 to 20 years. Although the women could not come to a precise consensus during the interview, they had not had substantial orders from the NGO from at least one and a half to three years previously, with a small order from NGO D given the year before the interview for 12 scarves. Because of the lack of sales, the women were upset with the organization and some questions were omitted.



Figure 4.16 Example of crowns created by group

The artisans could produce products on backstrap looms (see Figure 4.14), foot looms, and they also could sew (see Figure 4.15). They also created crowns and mirrors, which were made out of cardboard and purchased cloth and figurines that the women bought from the market in Comolapa. The artisans also created products for a Jewish organization, but all of the products they showed they said were created for NGO D. However, the employees from NGO D said that they had never

seen one item, so they assumed it was for a different client. Of the products shown, the mirrors and the crowns (see Figure 4.16) were produced the most, but none of the products they showed sell. This was a major issue for the group, because they were not working at capacity and wanted more work. The products that they created ranged from traditional colors and motifs to more modern, westernized patterns and colors,



Figure 4.17 Example of the mirrors created through training

one specific example of a westernized pattern was a grey and yellow striped scarf. The women said that most of the products were designed by them.

# **4.5.1 Product Development Training**

NGO D offered many different trainings on social issue topics, ranging from literacy to personal growth. The product development training that most of the women had taken was a training done to make the mirrors. NGO D had sent a woman who worked for them to do the training and it had happened ten years prior to the interview. NGO D paid for the training.

Initially, NGO D had gone to the women with the idea to create the products. The women were not interested so the training did not happen at that time. Six months later, the women saw the mirrors for sale in Antigua and then asked the organization for the training.

Originally, eight women were part of the training but only two completed the training because the technique to create the products was very difficult. The training was done three times a week over three weeks. The first training was done in Chimaltenango but then the remaining classes happened at the women's home.

The women liked the fact that they now had a product that they could create and sell, but they disliked how difficult the product was to make. When asked what was the most difficult part of creating the mirrors, the women said that there was not one specific thing for everyone that was difficult, but instead the whole thing was difficult to make. Because there are many small pieces attached to the mirrors and the ribbon needed to be consistently tight, the women each had individual problems in training. The two women who had completed the training thought that the best part of it was to find out that they were able to make the products. The mirrors and the crowns sold for between 28-35 quetzals and the materials were all provided for them by NGO D, although this was a change from what was originally done. When the group originally started to work with NGO D, the organization would pay a 50% down payment for the order and the women would then buy the materials for the products. The new system had not been used very often because of the lack of orders placed by

NGO D. From the training, the thing that the women wished they would have learned is how to sew better.

# 4.5.2 Capabilities

The women were able to backstrap weave, weave on a foot loom and three of the five knew how to sew, which meant that they were responsible for sewing for the group. The women were taught by their mothers to backstrap weave. Weaving on a foot loom was traditionally considered a man's job, but 25 years prior to the interview, the women had learned to foot loom weave from a man in Comolapa who would pay them by the day to weave. The looms themselves would be set up, so at the time the women would just have to show up and weave. The more they continued to work for the man, the more they enjoyed weaving, so soon they had purchased their own looms. They were borrowing reeds for the looms from the man until they could afford their own because the reeds cost about as much as a loom did at the time. At the time of the interview, the group had eight looms total.

When there are orders, the women cut their own products, even though only three of the women sew. All of the products that would be ordered by NGO D would be completely assembled by the group before they were delivered to the headquarters. When there were orders for the mirrors, the two women who can produce them could make two a day.

Splitting up of orders for foot loom production is more difficult than for backstrap weaving because foot looms require longer warp yarns. The women gave the example of scarf production, where the order could not be under 150 to ensure that all of the women were able to work on the order. If the order was only 50 scarves, then only 3 of the women would be able to work on the order. They had also had some

orders that required special skills so not everyone was able to participate with those orders.

In addition to weaving for NGO D, the women also had some other sources of income. One woman had bought a cow through a microcredit loan and sells milk and cheese. Most of the women owned land and had chickens and corn fields. They also weave to sell in a local town and to other customers that order small quantities. Some of the women were unmarried and supporting themselves.

## **4.5.3** Internal Constraints

One main internal constraint that was faced was the lack of access to local markets. The group of women had a broad skill set, understanding how to foot loom weave, backstrap weave, and sew. While this would seem to create more opportunities for sales, the women had very few outside sales. Their partnership with NGO D was not reliable because NGO D was still in the restructuring phase since the recession in 2008. What sales the group used to have with the NGO D were no longer there so the women have had to find alternative methods for income and there was not a demand for the products they did create.

### 4.5.4 Business Success

The women tied much of their success to whether or not they had orders. The group was legally registered and could issue receipts, which gave the group recognition from the local government, but the group had very limited, if any income, making their business barely function. The fact that there had not been orders from NGO D in over a year was brought up many times during the interview and was a

cause of strife between the women and the three NGO employees that joined the interview, illustrating that there were unsatisfied stakeholders on both sides.

But the women did find success and take pride in the fact that they knew how to do many different things. One of the items that they had brought out was a bag that they had designed themselves, and they were very proud of the fact that they could do all of the steps to create the product. They were proud of their abilities and were disappointed if they did not know how to do things (e.g. the women who could not make mirrors). They were very happy that they knew how to use both types of looms.

# 4.5.5 Sustainability Awareness

The women wanted to continue the work they were doing because it was their life. They typically worked eight hours a day when there were orders, but would work late into the night if there were rush orders. When there are rush orders, the women work and then take breaks by put fancy fringes on the things while the others take turns weaving. One woman had her son helping cut the molds for the mirrors and crowns and others let their children help. The women did not think about the implications of their products on the earth.

### 4.5.6 External Constraints

Transportation and location were large external constraints for this group given that they are located in a remote village. Public transportation only ran three days a week and only picks up from a stop that was a ten-minute car ride from the village. This means that any time orders had to be delivered, it had to be the correct day and it would be very time consuming for the women. This situation constrained the women from traveling to and from markets.

## 4.6 Case Study #5: Friends for Life



Figure 4.18 Street in Comolapa

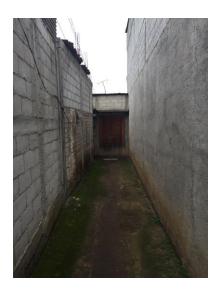


Figure 4.19 Entrance to a home in Comolapa

Case study #5 is of the relationship between NGO D and the artisans of Group #5, who lived in Comolapa. Because NGO D also partnered with the artisans in case study #4, the overview of the organization can be found in that section.

The interview for Group #5 took place in Comolapa, which was approximately 45 minutes away from Chimaltenango (See Figure 4.18). Comolapa was the site of an earthquake in 1976 that killed 14,000 people in the community. The

earthquake was an important element because the women interviewed had experienced the devastating effects of both this and the war. The interview took place in the home (See Figure 4.19) of one of the women, in their gathering room. The house has made of concrete blocks and had a dirt floor and the room had a shrine to their patron saint.



Figure 4.20 Example of products created by group



Figure 4.21 Example of bags created by group

The interview lasted one hour and was conducted in Spanish. The three NGO employees were also at the interview. One of the employees was the daughter of one of the women who was being interviewed. The five women in the interview were from 41 to 53 years old and they had been working since they were nine years-old to thirteen years-old. The women ranged in education level from none to third grade. The group had started 15 years previously and originally had 12 members but because of the recession in 2008, orders from NGO D had been very few. As a result, there were only five members at the time of the interview. The group was made up of three sewers and two weavers.

The group created bags, wallets, pouches, hats, booties, and wove huipiles (See Figures 4.20 and 4.21). The products were woven and sewn together by their group and delivered to NGO D completed when there were orders.

# 4.6.1 Product Development Training

The women said that they had only had a workshop to learn how to create the children's items that they made. They had figured out how to make everything else on their own. Needs assessments for the women was not done, but the organization did bring the training to them and paid for it. The only thing that the women needed to do was to feed the trainer.

The sewers of the group were the only ones that had received training, and that was in how to create the children's items for NGO D. They had been given two workshops for the baby products, each meeting three times over a week, and one was taught by an American woman and the other was taught by a Guatemalan woman. Six artisans attended the training and they learned to make two hats and baby booties. Some of the women did not enjoy making the hats because it was difficult, but once they learned they did not mind making them. The most valuable thing that they took away from the course was their ability to create more items, which gave them work. They had also gotten better at making bags because of the practice they had had with the hats.

Each woman had a different part of the hats and booties that was most difficult for her. One women struggled putting the last stitch around the brim of the hat, another struggled putting the string through that held the hat in place. The other thought that the booties were the hardest because they had to sew inside of the very small shoes.

## 4.6.2 Capabilities

All the women had learned to backstrap weave from their mothers at a young age. But the women also knew how to foot loom weave and sew. They had learned these skills by working with a woman named Lucia, a single mother, who had started a business when they were young. She had gotten too many international orders to handle by herself so she had hired children from the age of ten to work for her in her workshop. The women said that she would only hire children because they had open minds, unlike some of their older counterparts and the children were not in school at the time anyway. They worked on backstrap looms, foot looms, and sewing. All of the women in the group had been trained by Lucia's workshop in sewing and foot looms, and they had worked there until they started doing work for NGO D.

In addition to sewing the products, the women also weave the fabric. They have the talent that many weavers have in Guatemala; they can look at a design on paper and then weave the design into fabric. This is how they created the textile design for the hats and the booties.

For production, all of the women cut their own products and have a meeting to split up orders based on what they can do at certain points in time. There are times when the orders are not evenly disturbed because of the different skills of the women. If the women have too many orders, they will bring back the members of the group that had left for other work, and the process is reciprocal if the members that have left have too much work.

Three of the women were in charge of the finances and keeping records. When they deliver an order, they bring the check back and cash it before they split it up for the group. The same three were also in charge of quality control, in their respective area of sewing or weaving, and they return items that need to be fixed.

The last time that the group had received any orders from NGO D, they were still running on the down payment system. Because of this the artisans sourced their raw materials. The weavers could get their yarn from Comolapa, but the sewers had to go into Guatemala City to purchase their supplies, specifically zippers. They would go in pairs when they needed to get supplies and they went whenever they had orders.

The products they created were different than the products created in their community because of the yarn they used, which was the highest quality yarn available. Other than that, most of the products they made were very similar, with the exception being the baby products. Another thing the artisans reported that set them apart from the rest of their community was that they were producing things in a group. Others produced in families, but not in a group.

## **4.6.3** Internal Constraints

Access to markets wan an internal constraint faced by this group. In addition to selling to NGO D when there were orders, the women would also sell huipiles in town at the local market and create huipiles for their own personal use. One of the women showed a huipil that she had created. It had taken her three and a half months and she would sell it for 1500 quetzals or approximately \$200 USD. While they had a wide variety of skills and had the ability to produce products from weaving through to sewing, there was not a large demand for their products from NGO D and their products were not very different from others in the community, meaning they faced competition.

## 4.6.4 Business Success

The women linked their success with the fact that they did not have work and thus, when looking at overall business success this group was not successful. While they did not have sales, the field expert explained to the women that they were one of the best groups she had seen because they had known each other for so long and continued to work together and get along. In her view, that made them successful. The women followed this by saying that while the group was basically dead, when work picked up the group would be alive again. They also said that the women that had left would be welcomed back when they got work again.

The artisans were proud of the fact that they could do the work and that they were smart enough to do it. The women appreciated that they were able to take a customer's design and translate it into a product. They were also proud that their work does not get rejected and that NGO D accepts their work. Lastly, the women were very proud that they were able to support their families through the work they were doing.

## 4.6.5 Sustainability Awareness

This group was interesting because they had all started working at approximately the age of ten. But all the women, except one, had children and many had grandchildren. They children had professional jobs and worked but the women wanted their children to know how to weave to ensure that they had a backup plan for a time when they were unemployed, which was a common occurrence. Some of their daughters were creating handicraft items for sale.

The women wanted to continue the work they were doing because they felt that they were too old to switch jobs and this was something that they knew and could

support their families with. The women work on weaving and sewing between five and eight hours a day.

In addition to social sustainability, the women do not think about how their products effect the earth. They use basic commercial yarn for their products, so they did not consider environmental sustainability.

#### **4.6.6** External Constraints

One of the biggest external constraints for the group was reliability of raw materials. The group sourced yarn from the higher quality yarn producer in Guatemala, but while it was better quality yarn, the company was very unreliable. Randomly, colors would become unavailable and stay unavailable for months. The field expert said that there were times where the most popular color would be unavailable and the company did not release when they would be available again. This was an external constraint because it was a sector wide problem, effecting many NGOs.

## 4.7 Additional Interviews, Market Observations and Detours

While they are not considered their own case, studies given time constraints and artisan participation, interviews with a trainer, three other organizations, and an apparel executive and board member of AgExport, who is from Guatemala were interviewed for further insight into the context of the artisan work in Guatemala.

## **4.7.1** Interview with Trainer

By chance did the interview with the trainer come about. She was working in NGO B (Case Study #2) during the site visit to their organization headquarters, and while she was working for them as a production consultant, she also ran her own

organization and had been teaching and working with women for 39 years. She agreed to meet for the interview the next day. The interview was done at her organization headquarters in San Pedro, which is a boat ride away from Panajachel across Lake Atitlan.

The trainer was internationally recognized, she had gone to Europe to talk about her work and had provided trainings for many different organizations in Guatemala. She believed that her mission in life is to work as a promoter and teacher of weaving and hand skills, whether that be dyeing techniques or crochet. Although she started working and teaching in the agriculture section, teaching women and children about vegetables, as part of this she would teach the children how to weave as well. Learning from this experience, she then met a woman from France who was working on a thesis on traje, and the trainer guided this woman and the woman in turn helped her set up her organization and obtain raw materials. Her mission is to save the ancestral culture and teach the next generation about the traditional ways.

She has also worked with organizations teaching quality control, production control, time control and tech packs and has been able to teach all around Guatemala, both in the highlands region as well as the Atlantic region.

Each different training that the trainer offers tends to have a lesson plan that does not change, an example being her natural dyeing class. She originally learned how to natural dye products from a Spanish woman who taught a class in San Juan and then she went to France to learn more about it. Her classes last five days, meeting in the afternoons so that the women have time to do other chores in the morning and after the training sessions.

The training is five days because that is how long the process of natural dyeing takes. On day one the women prepare the mordents and wash the yarn to get it ready to dye. Days two and three are spent preparing the dye and dyeing the yarns. Day four is drying and the last thing they do is put together their notes to ensure that the women can do the dyeing themselves without assistance.

## 4.7.1.1 Western Ideals and Expectations Versus Traditional Practices

All the trainings the trainer offers have set course schedules and do not change, but she did say that the people she teaches react differently to her trainings. During her trainings she is very demanding, likes to be on time, and she tells the truth. Not everyone likes her style of teaching but she believes that it is appropriate and necessary. One of the challenges she sees is that it can be difficult to make people who have been doing things one way for years to see the benefits of changing their processes and actions. Whether that involves changing equipment or the amount of pattern on items for sale, being able to show the benefits can be difficult.

One problem that was mentioned by the trainer in training was that there is a disconnect between what the buyers expect and what the artisans are willing to produce. An example of this was a training she did for the NGO in Case Study #2. The NGO hired her to work on quality and production with a group because they had been given an order and were not returning work that was of good quality. The NGO hoped that she could remedy this. While it was not a structured course, she was with 16 women for 12 days and over the 12 days she worked with them on sizing and measurements but the women did not want to create high quality items. Her response to the group was to ask them to think about the time they were spending away from home and the time they were taking to weave, and how the organization would not

accept the work or pay the women less if it was not of good quality. The women did not seem to care and thoughts like that drive the trainer crazy. This group was also not the ones that had the issues. The women who worked with the trainer did not pay for the training but instead the funding came from IM, which is a Swedish group. Her stance on the training was that if that if the artisans do not learn the skills from her training, it is the artisans fault, because she taught them well.

When asked if she would change anything about the training if she could go back and redo the training, she said no because the women were working together and that overall, 85% of the issues got better.

# **4.7.1.2** Benefits of Training and Important Training Elements

The trainer said that the biggest benefit that artisans get from her trainings is that they understand a new skill that they can implement to produce products. She cites an example of a women in San Pablo who had learned to crochet from her. The woman was able to buy her house and plant coffee because she had learned to crochet from the trainer. She also said that through production trainings and quality trainings, as well as through having the women work together, products were cleaner and production levels went up. When women work alone, the items can turn out dirty because of the dirt floors where they work, as well as quality tends to be worse. She also said that when women work together, they tend to apply the concepts she teaches more than if they work alone.

The trainer believes that the biggest benefit to herself is that she is fulfilling her purpose in life and is making a salary because she is good at it. She also said that she is recognized because of her skills in teaching and her passion to help people, no matter the background. She has taught refugees and ex-guerillas and believes that she

is fulfilling her destiny, as related to her Mayan heritage. She believes her present role is to help others and guide them, and her future is wisdom.

When asked to talk about an example of a training that did not go well, the trainer gave an example of a training conducted for an organization that did not supply her with the yarn for the training. Because of miscommunication, the trainer had to purchase yarn for the training from her own money, which was not part of the contract, but the organization said that they would not provide the yarn. The class worked at creating four new products with the yarn bought by the trainer, but in the fifth month of the six-month class, a whole bunch of yarn arrived. At the end of the six months, she went to the director to give her final report and said that she was embarrassed at the outcome. The director was confused and did not know about the yarn. The group did pay her for the yarn, but she said that it was a bad experience and she would not work for them again. She went on to say that materials are vital to the trainings and without the right materials, the training would fail. The best example of training done was in Patanitic, where they had enough materials and equipment for all the women. If the materials and equipment are there, it is a recipe for success.

## 4.7.1.3 Elements That Are Needed to Create a Better Artisan Sector.

When asked what steps needed to be taken to make the artisan sector stronger in Guatemala, the trainer said first that materials need to be better. Because the materials are low quality and yarn bleeds, everything is made to be disposable. Secondly, there needed to be more representation and promotion of artisan organizations and the artisans themselves. Lastly, the artisans themselves need to strive to create better quality items so that things would sell better and not have as much cut throat competition. She believes that improved quality would give people the

opportunity to sell items at a fairer price. Artisans want to work, which is a benefit to the sector, but she believed that their work quality needs to improve.

## 4.7.2 Guatemala City NGO



Figure 4.22 Example of products created out of naturally colored cotton

Another interview was conducted with a non-profit group, located in Guatemala City, that works with artisans who produce product with naturally colored cotton (see Figure 4.22). They have a store in Mercado de Artesania in Guatemala City and sell products in different stores in Antigua. The group had originally started in the 1970s, creating woven and/or embroidered products out of naturally colored cotton. Most of the products observed during the field visit used traditional

motifs mixed with modern elements and in a significantly mellower color pallet, as naturally dyed cotton comes in rust, a light blue, a light green, and a cream color.

While they were still creating products with naturally colored cotton, they also were having to incorporate industrially dyed cotton because of a shortage/monopoly on naturally dyed cotton in Guatemala. There was one other group that grows and uses this cotton and because of the passing of the owner and reconfiguration, the company

was no longer selling any of the natural colored cotton to the NGO. The NGO also cannot import naturally colored cotton because it is more expensive.

While the NGO is shifting from its original mission that made them unique, they decided to continue because of the artisans that work for them. They work with 300 artisans, who typically work in groups of two to four, and the artisans make 1,000 to 3,000 quetzals a month, which is very high for artisan production. The director, who was one of the people being interviewed, said that while they would like to have higher prices for their products, their customers would not purchase products if the cost was any higher. They receive new products from the artisan groups every week, but the women only go to town once a month.

During time in Antigua, products made for the NGO were seen in stores along with products from the other company that was using naturally colored cotton. While the NGO had stayed fairly consistent with traditional motifs, the other company had shifted more towards western inspired designs. That company had many more types of products compared to the NGO, having an extensive line of home goods, and some



Figure 4.23 Example of Rug created for NGO in Panajachel

apparel. The NGO had mostly pillow covers, placemats, bags, napkins, and scarves available, but no clothing options.

## 4.7.3 **Rug NGO**

Another interview was conducted with a NGO that was located in Panajachel and was started

in 2010. The NGO focuses on hooked rugs created out of old t-shirts and the organization is unique because they encourage the artisans that work with them to create their own designs instead of making the same rugs repeatedly. The women are initially trained on design principles and then trained on rug hooking. The premise of this is that while teaching rug hooking only takes 'five' minutes, the design principles were important in order to develop designs for the products (see Figure 4.23). The artisans create products that are inspired by their daily lives. An example of how design is taught within the organization is how the artisans were taught color. The NGO brought in an outside trainer who taught the women color and how different colors worked together. The training also had the women name the colors themselves, based on things in their communities and what the color made them think of.

Quality control is done when the women arrive to drop off products, which works for this organization because it is fairly easy to fix mistakes in the rugs. The NGO's rugs are becoming internationally known, they are sold at the Santa Fe international craft festival.

One other important element that was mentioned during the interview was how everything used in producing of the rugs originally had to be imported. The base fabric, the hooks, and the embroidery hoops used to hold the base fabric steady all had to be imported, up until recently. Now, the NGO is able to locally source the base fabric, but still relies on imports for the rest. Having to import the products limits the amount of competition they have. The t-shirts used are sourced from second-hand stores that import second hand clothing, and women source their own t-shirts, focusing on the colors they want to use.

## 4.7.4 Business in Antigua



Figure 4.24 Example of napkin rings made out of pine needles

An interview was done with the women who oversaw quality control and exporting of a business located in Antigua. The business works with 60 different artisan groups and sells in its store in Antigua, as well as through retailers in the United States. They had six large and consistent clients from the United States at the time of the interview. The company sold products ranging from clothing, to home goods, to wooden products. All the products were designed by the company owner, who was an American, and two other designers that were fairly well-known in the

community for artisan design.

The business trains the artisans they work with on the products. An example of one of the trainings was teaching the women how to make jewelry out of pine needles. The jewelry is small and before the training the artisans were creating all different sized pieces. The business worked with the artisans on quality control to produce consistent sizes for the jewelry (see Figure 4.24). They do pay for lower quality items but will pay less and make the payment slightly delayed. The woman who was interviewed explained that because they work with so many different groups from various regions of the country, many of the products were delivered to the store in Antiqua. If anything needs to improve, they communicate with the artisans through notes and send the notes to the group about what needs to improve.

When talking about trainings and quality control, one insight the business gained was that whoever does the training requires the artisans in the training sessions to repeat back what they did in order to make sure that they understand it. An example of why this was important was an experience the company had with natural dyeing. During the process, somewhere someone had mixed up sodium carbonate (soda ash) and sodium bicarbonate (baking soda). The alkali soda ash required to fix dye to fiber without heat. The mix up in chemicals resulted in fiber that did not hold dye. Ultimately, it made the colors not turn out correctly. The company did not know where there had been a miscommunication, but the difference was not something that most of the artisans would have been able to catch, especially those who had had not had much schooling.

Another example came from the field expert during the interview. One of the groups she had worked with had woven fabric for bags that were four and a quarter inches when it was supposed to be four inches. But the artisans creating the products read the '4" as four and two lines, which they interpreted as four and a quarter inches. Confirming that the artisans understand what is being said and that what the trainers say is understandable is an important element to ensure quality.

Opportunities the company has found for artisan crafts was taking traditional techniques but replacing different materials for traditional ones. An example of this was a rug maker who wove rugs on a loom using coarse, almost plastic, materials. Customers would not buy the product, even at half price. What the company told him to try was to make the rugs out of cotton instead of the course materials. He now



Figure 4.25 Throw blanket made out of cotton



Figure 4.26 Example of other products

creates throw blankets and rugs that sell very well (see Figure 4.25). Changing out the materials he used changed the marketability of his product.

This example of producers being open to new ideas and the company's needs is not always the case. One of their suppliers, who created

textiles, used yarn that bled and this was a problem for the consumers and the company. Even after three discussions about the yarns, the man still did not change to different yarn and the company had to stop working with him and sell what inventory they had locally at a discounted price and with a label that said will bleed. Ultimately, even with the discussion, the man did not change and the relationship was terminated.

Overall, this store was unique because of the vast range of products sold. According to their

website, that all of their products were created under fair working conditions, but they were not certified by any other organizations because of the cost. The retail headquarters in Antigua is a destination because of the vast amount of high quality

products (see Figure 4.26). The company also sells products created by other fair trade groups in their store.

# 4.7.5 Interview with Apparel Executive

The interview with the apparel executive took place in a coffee shop in Guatemala City at the very end of the field research in Guatemala. He was Guatemalan and was also a board member of AgExport. After hearing the overall goals of the project, he said one of the biggest things about hyper-competition had to do with the culture in Guatemala. Not having an understanding of the value equation for new products or understanding how new products add value is a real problem for artisans. The artisans see that their neighbors are making placemats and being successful so then they make placemats because they see that there is value there. If the artisans cannot see the value physically in something, they will probably not understand it.

He also went on to say that a possible impediment to training or business success related to literacy. Women know how to write their names and how to answer basic questions but often do not know how to actually read and write. This translate into people saying they understand and demonstrating the basics, but then not actually understanding the basics, which can exasperate communication barriers further.

#### 4.7.6 Market Observations

Four different markets were visited and they were located in Guatemala City, Panajachel, Chichicastenango, and Antigua. All of the cities had their own personality and so did the markets. Guatemala City has many different districts, but is considered to be a more "urban" or western environment. Rarely were women dressed in traje

seen in Guatemala City. Guatemala City was also viewed to be more dangerous than the other cities visited for tourists. Panajachel, which has been historically known as the "hippy" town, has now shifted, and is more a tourist destination, with many tuktuks in the streets. Panajachel is also one of the main places to catch boats to go across Lake Atitlan. Panajachel also felt the most welcoming to outsiders.

Chichicastenango, while only visited for the market, seemed to be oriented around the market, with parking available for tourists, and a large hotel that is known for its lunch buffet. Antigua was very upscale tourist oriented. Antigua is an UNESCO World Heritage site, meaning that the Spanish colonial architecture is protected and can be seen throughout the town. Because of the architecture, a feeling of class and elegance that permeated through the entire town. The markets, as described below, seemed to follow the overall feelings of the cities they were located in.

# **4.7.6.1** *Mercado de Artesania in Guatemala City.*

The Mercado de Artesania in Guatemala City was located by the airport and in a permanent location. The market had four large pathways with two intersecting pathways, with one of the pathways having two kiosks that housed four stores each. The products in the markets were similar throughout, many of the booths selling bags, blankets, huipiles, wallets, and purses. Some of the locations also sold blankets. The clear majority of the products were in the traditional bright colors that Guatemalan textiles are known for, with neutrals only being seen in the booth of the NGO that used naturally colored cotton, which focused on naturally colored cotton products. Some locations on the far side of the kiosks also offered more western styled clothing that was not traditionally Mayan. Some of the western styled clothing did include some cultural aspects though, such as traditional Mayan patterns as accents or belts.

Clothing that was also found were large oversized shirts that might be considered "hippy" style. Fabric was also available at five to seven places, two of which had whole bolts of fabric for sale. The other five had large flat pieces available, but it was unclear whether they were intended for sale as table clothes or for future products. The naturally colored cotton clothing sold seemed to be the most internationally oriented, with neutral colors that would easily transfer into international color preferences.

#### 4.7.6.2 Panajachel Market.

The market in Panajachel consisted of store front and smaller booths created out of lumber and metal sheeting. The stores were located along the main streets in Panajachel and also along Lake Atitlan. The stores sold bags, baskets, wooden figurines, clothing (western t-shirts, huipiles, western inspired Guatemalan apparel such as woven pull-over blouses), hammocks, blankets, jewelry, animals created out of beads, and many others. Among the stores, there were also many street peddlers selling bracelets, pens, and small figurines.

What made the Panajachel market unique was that the stalls were in the city and, while they were taken down every night or closed, they were otherwise open consistently during the three days of field research. This may be because Panajachel is on Lake Atitlan and is a large tourist destination, making selling products there a good sales opportunity for artisans



Figure 4.27 Chichicastenango Market

# 4.7.6.3 Chichicastenango Market.

The Chichicastenango market is a large regional market that happens on Thursdays and Sundays. The market takes over the town, with the streets being filled with people from surrounding areas and tourists (see Figure 4.27). The sections are divided into clothing, jewelry, textiles,

wood, food, local items, as well as some others that were not visited. The streets of Chichicastenango were crowded and hard to navigate through, until traveling off the main streets into the more textiles based area. The most crowded section of the market



Figure 4.28 Local vegetable market within the Chichicastenango Market

was the local food market (see Figure 4.28).

Each individual section
of the market had its own
specialty (e.g., wood section,
textile section, jewelry section)
and within the different
sections the items varied by
color and patterns, but many of
the items remained very

similar. Many of the bags were similar, and, while quality varied, many tourists most



Figure 4.29 Church located in the middle of the Chichicastenango Market

likely do not look at stitching, but more at the aesthetic of the bag.

During the field visit, there was also a Cofradia celebration, which is a religious festival for the leaders of the Catholic church located in Chichicastenango (see Figure 4.29). The festival

also included a parade from the house of one of the Cofradia members to the church, and this was happening during the site visit, which may have increased the congestion.

One interesting thing that was observed was, when looking for a specific metal juicer, if a store front did not have them, the people working there could tell where to find them, or at least where the best bet would be.

# 4.7.6.4 Antigua shopping and market.

The shopping experience in Antigua was vastly different from the other three market visits. The city is Spanish colonial influenced and is catered towards tourists. Because of this, they have outlawed street peddlers and the only place where there were "pop-up" shops that were observed were in the market. The market itself was



Figure 4.30 Inside of Antigua market

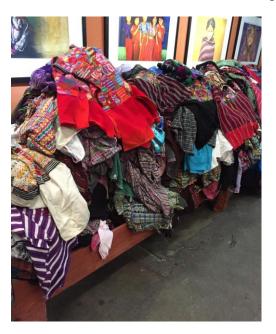


Figure 4.31 Stack of huipiles at one of the stores in Antigua

more western oriented, having more western clothing than the other markets had, as well as more plastics. There were not as many small knick-knacks items observed at the market and the market itself was mainly covered (see Figure 4.30).

The stores in Antigua were permanent stores that catered to a higher end demographic. There were more western style clothing stores located in Antigua and more upscale and high quality products being sold. There was also a

store located in Antigua that has been famous for its collection of huipiles for sale, organized in by region. The expert translator warned before going in that it had changed a lot over the years and made her upset. The store was like a warehouse with many tourist goods in varying qualities, and the huipiles that are for sale were mostly in piles (see Figure 4.31). This made the expert translator upset because the huipiles were being disrespected and that many of them were being sold to people who would upcycle them into bags or shoes.

#### 4.7.7 Unavoidable Detours

There were many things that were experienced during the field research that were typical for Guatemalans. Many of the external constraints that were country specific need to be experienced and considered to understand what it meant to be an artisan in Guatemala. Three of the biggest external constraints experienced during the field research was weather, transportation, and holiday celebrations sometime in combination. The field research was conducted in August, which was during the rainy season, and while the weather was generally nice, downpours did happen. One caused the town of Panajachel to shut down, with the normally busy streets only having a few tuk-tuks on them and no pedestrians. Having to shut down the streets in town means that the markets are not open, which means less sales for vendors. The trainer, in her interview, also mentioned how the weather is hard on the women weaving and on the cloth, itself. Another thing that can happen in regard to weather is that rain can cause mudslides, which can take out roads and homes. Many of the towns and villages only have one road into them and when the roads get taken out by mudslides, this can cut the town off from supplies for extended periods of time.

Lake Atitlan itself, rises and sinks every 20 years. In Santiago Atitlan, there are visible ruins under the water, and one of the organizations is named after an island that is formed when the water rises. This fluctuation causes unknowns for farmers in the lake area because they may lose farmland over extended periods of time.

Transportation is an issue because busses can be unsafe for women, even when traveling in groups. There were many stories that were told during field research about assault happening on busses. Transportation is also an issue on holidays, which coincide with the local Catholic/Maya religions. During the field research, Guatemala City was celebrating the day of Santa Maria, which is the city's Patron Saint. This

meant that the workers in the city had Monday off, and vacation was spent at Lake Atitlan for many people. For the field research, Monday was spend doing interviews with the artisans in Case Studies 4 and 5. The last interview was done around 6 PM and the team needed to travel from Comalapa to Chimaltenango, which had taken 45 minutes earlier in the day. The trip back took two and a half hours. This was not the only time during the field research that the team was stopped due to festivals. This happened one time in Sololá and another time traveling from Panajachel to Antigua. Detouring through towns meant taking small dirt roads.

#### 4.8 Personal Reflection

Being the first time in Guatemala and the first time outside of the country for the researcher, this experience was very eye opening and there was some culture shock felt. The very first thing that was noticeably different was the concern for safety. Nearly all of the vehicles had blacked out windows, except the expert guide we were traveling with, and this concerned some people. Everywhere we went there seemed to be an element of fear; fear of other Guatemalans, fear of repercussions, fear for safety. The effect of the war was still felt and there was also unrest in the government, as approximately 50 of the top officials in the country had recently been arrested. Being a group of three American women also brought attention, whether noticed or not by the researchers.

The second thing that was unexpectly challenging that added to the culture shock was that need for a translator for most everything. This was the first time being in an environment where no one spoke English and not being able to communicate directly with the artisans was frustrating and exhausting.

One other element that was actually mentioned by the expert translator, was that because it was the first time interacting with artisans and being in a different country, I may have had an overly optimistic view of the sector when writing the questions, which may have skewed the answers in a positive way. But I believe that because this was the first time interacting with artisans, it gave me the opportunity to come in with an open mind and I believe that the artisans were honest in their answers, even at some times making us skip questions because of their honesty.

## Chapter 5

## **DISCUSSION AND CONCLUSIONS**

# 5.1 Summary of Research

The purpose of the study was to determine how product development trainings affected the capabilities of the artisans and impacted their groups overall internal constraints and business success. In addition to this, external constraints, as well as artisan awareness of social and environmental responsibility, were taken into consideration to understand the context influencing artisan work and potential for long term business sustainability. Research questions for the study were as follows:

- 1) How has needs assessment been incorporated into product development training for artisan groups?
- 2) What are the similarities and differences in the trainings artisan groups have received?
- 3) How has product development training expanded the capabilities of the artisans?
- 4) How has product development training aided artisans in addressing the internal constraints they face?
- 5) What is the relationship between product development training and artisan group business success?
- 6) How aware are the artisan groups about social responsibility and environmental responsibility?
- 7) What external constraints are influential to artisans and their business success?

The research method used for this study was a multiple case study design with embedded units of analysis, with each artisan group being a unit of analysis and the NGO being the other. Each of the five case studies examined the relationship between an NGO and an artisan group and was based on data collected during field research in Guatemala. Brief profiles of each case study are below, they were named to reflect overarching themes from the cases. Interviews were conducted with additional NGOs, a business, a trainer, and a board member of a non-profit export assistance agency, AgExport, to provide more understanding of the context and constraints faced by the artisan groups.

## 5.1.1 Case Study #1: Building Baskets, Building Opportunity

Case Study #1 was of the relationship between an NGO and an artisan group they worked with. Founded in 1989, the NGO had locations in Guatemala City and Panajachel and sold home good products ranging from baskets to felt animals. They sold wholesale to stores in Guatemala and exported to different vendors in the United States. The NGO had extremely high standards for quality control and imported different materials to elevate the quality of their products. The artisan group studied was comprised of 12 women ranging in ages from 17 to 41. The group had been formalized in February of 2015 and created baskets for the NGO. While three women had been trained at a local training school, the other nine had learned from the first three. This group was led by a 21-year-old, who held the group to the same high quality standards the NGO expected.

#### 5.1.2 Case Study #2: 'Compassion' Training

Case Study # 2 analyzed the relationship between a second NGO and a second group of artisans. The NGO was founded in 1996 and had two different building locations in Panajachel, a headquarters and an educational facility. The NGO was directed by an American woman and relied heavily on international volunteers to run the organization. They had their own private line of textile goods (bags, table runners, etc.) they exported wholesale, but also worked with designers around the world to create specific products for those clients. The artisan group included of six women ranging in ages from 28 to 70. The group had the skills to create baskets, randas, tassels, hook rugs, neckties, clay beads, and embroidery. The group not only sold to the NGO in the case study but also to two other NGOs in the area. They had received randas training from the NGO but had only had two orders for the products. The artisans also had failed to learn all of the stitches taught, instead each woman was able to do one well. Because orders normally only included one stitch, this continued to segment a group that lacked cohesion.

## 5.1.3 Case Study #3: Weaving Opportunity

Case Study #3 was of the relationship between a third NGO and the artisans that worked with them. This organization was unique because the artisans were not a separate entity, instead they were essentially employees of the NGO. The NGO was founded in 1983 and was located in Santiago Atitlan, which is across Lake Atitlan from Panajachel. The NGO focused on creating upscale, fashion forward products that would be exported to the United States, Canada, and Hong Kong, sold in Antigua, or sold in their own store at their headquarters. Thirty women and 10 men worked for the NGO, all having different tasks on different products. Some would wind warps, some

would weave, and others would sew. Each product created would have multiple people working on it. The trainings the women had received were jaspe training and brocade training, both given by a local training facility. The NGO was the only one studied that reported it did not rely on grants to stay in business.

# 5.1.4 Case Study #4: Weaving in the Mountains

A fourth NGO facilitated interviews with two separate artisan groups they partner with for cases 4 and 5. The NGO had been founded in 1990, in Chimaltenango. This organization had been effected by the recession in 2008, which had caused them to re-evaluate their organization. They had not been able to consistently order from the groups interviewed, and there was a lack of trust of the organization. That being said, the organization was working towards creating new opportunities for the artisan groups. They exported textiles goods (yamikas, prayer shawls, bags, etc.) to the United States, Vietnam, and Germany.

The artisan group in this case study was located in a very small village called Agua Caliente, about 10 kilometers from Comolapa on very twisty dirt roads. The five women in the group created products with backstrap and footloom weaving, and they were able to sew. The training discussed was about how they learned to make mirrors with figures tied around the edges. The group lacked sales and had not had an order from the NGO in over a year and a half.

## 5.1.5 Case Study #5: Friends for Life

Case Study #5 consisted of the relationship between the fourth NGO and an artisan group from Comolapa. The original group of twelve women, only five of whom remained active in the group, had been together since they were children. They

had learned how to footloom weave and sew from a woman in Comolapa. They also were able to backstrap weave. They had learned how to sew baby hats and booties from the NGO, although there had not been orders from the NGO for some time. They tried to sell their products in the local market, but were not always successful.

# 5.2 Cross Case Analysis and Discussion

Based on the findings in previous literature, the model of Product

Development Training Impact on Artisan Capabilities and Sustainable Business

Success was developed to better understand how training affects capabilities and business success. The research questions developed for the study were based on the model. With this framework as a guide, a cross case analysis was carried out to answer the research questions.

## **5.2.1** Needs Assessment

The first research question asked how has needs assessment been incorporated into product development training for artisan groups? Need assessments is aimed at examining what artisans are able to do and the areas that can improve through training to be more successful (Fluitman, 1989). Surprisingly, none of the NGOs from the five case studies did needs assessments before beginning trainings. Instead, the need for training came from either a new market opportunity for the NGO or a need for increased production capacity for the NGO.

The first reason for training was because the NGO saw a market opportunity and trained based on the skills needed for the product, which happened in cases 3, 4, and 5. The artisans were either trained on a specific new product or trained on a skill for a specific new product. One surprising finding that arose when training was

offered for a new product was in Case Study #4. The artisan group was only willing to take the training offered by the NGO after they saw the product already for sale in Antigua. The artisans were not able to connect the value of creating a new item until they saw it. This finding connects back to the interview with the AgExport board member who said that it was a cultural norm to not be able to realize the value equation of products until the product was physically seen. This finding also supports Antrosio and Colloredo-Mansfeld's (2015) assertion that the need to fit in within the community was a large motivation, even when competition for income resulted.

The second reason for training was the need for increased production capacity for the NGO and was seen in cases 1 and 3. In cases 1 and 3, training was given because the NGO but did not have enough artisans to fulfill orders or the artisans who had the skill to complete the order were too far away, which made ordering difficult. But both the NGOs from cases 1 and 3 had demand for the product.

The NGO from Case Study #2 did not fit either situations but instead trained the artisan group on a skill because the group hoped to increase their income. The NGO wanted to help the women and would pay for products no matter the quality, which is also known as compassion exports (ILO, 2006). But this group also practiced compassion training, providing training for the group to potentially increase income on a skill that the NGO did not have a strong demand for. The trainer said that compassion exports and NGOs not demanding high quality products were two things that needed to stop in order for the industry to grow.

## **5.2.2** Similarities and Differences of Training

The second research question asked what are the similarities and differences in the trainings artisan groups have received? In order to compare and contrast the trainings, key elements for successful trainings as reported by the ILO Trainer Center Workshop from 1987 (Fluitman, 1989; Haan 2006) were used as they pertained to the current study. The elements needed for successful trainings were clear purpose, right environment, hands on trainings, trainings in the native languages of the participants, done by staff who understand the skill and are committed, and yielding early results.

The length of the trainings varied from meeting three times over one week to once a week for four months. The clear purpose for the trainings relates to the first research question and the reason for the training. A clear demand for the product or for a new product served as the purpose of the trainings, as seen in Cases 1, 3, 4, and 5. Case study #2 did not have a demand for the products, which showed a lack of overall purpose for the training.

Environment for the trainings were either at dedicated training facilities, places with the right equipment, the artisan's homes, at the NGO headquarters, or a combination. Environment is important because past research has found that certain types of government trainings and NGO trainings do not have the right equipment for training (Fluitman, 1989; Haan, 2006). All of the trainings observed in the case studies were in a location that was appropriate for the training. The jaspe training for Case Study #3, which required the most equipment, was taught at a farm with the correct equipment. The other trainings were low technology and did not require any additional equipment than what the artisans had on hand.

All of the trainings from the case studies were hands-on but success of the trainings varied. Fluitman (1989) reported that hands-on trainings had the potential to limit confusion and did not leave room for misinterpretation. In two of the case studies (2 and 4), the artisans did not successfully learn how to do all the skills taught. Being

hands on did not necessarily mean the training was successful. However, some NGOs used feedback loops during trainings, asking the artisans to recite back the steps in order to limit confusion.

Four of the five case studies had trainings that were in the artisan's native language, with it being unknown about the fifth case. This was important because there was not trouble in translation and questions could be asked directly to the person conducting the training. All of the trainers, excluding those in Case Study #5 because of a lack of information, were knowledgeable in what they were training, which was different from previous research that said the NGOs who train often hire people that do not have background in what they are training (Haan, 2006). However, only two of the trainers were fulltime trainers, and taught at local non-profit training facilities. The others were employees of the NGOs and while they may have understood what they were doing, they did not have a background in how to conduct trainings.

Ultimately the success of the training varied because of the amount of skills learned. Two of the cases (2 and 4) had trainings either where the artisans failed to learn all of the skills taught or where only a small number of the women could execute the skill at the end of the training. Both trainings were taught by women from the organization who did not have backgrounds teaching. The results from the other three cases (1, 3, and 5) were positive, with the artisans in the training successfully learning the skills taught. The most successful trainings were ones that had a clear purpose, taught by people with a background in training, and resulted in the artisans being able to execute the skills they were trained on.

#### 5.2.3 Capabilities

The third research question asked how has product development training expanded the capabilities of the artisans? Capabilities, as defined in Chambers Web of Responsible Wellbeing, are the skills that people use to impact livelihood and can be improved by training, education, and practice (Chambers, 1997). The artisan groups from all the case studies said that through training they had learned a new skill, for example learning how to jaspe weave. In this aspect, the trainings could be seen as positively expanding capabilities of the artisans. However, the training for two of the cases (2 & 4) did not impact the capabilities as much as they should have, with the artisans successfully learning only part of the skills taught or only a few artisans completing the training.

While the training itself did expand on the capabilities, giving the women another skill to use, the partnership between the NGO and the artisan groups had a bigger impact on expanding capabilities. Quality control, while not addressed directly in many of the trainings, was a main concern for many of the NGOs and the artisans (cases 1 & 3) were directly involved in the execution of the quality control. Business skills were also developed by four of the groups (cases 1, 2, 4 & 5), using accounting skills to spilt up money. Lastly, production planning was developed for the artisan groups in cases 1, 2, 4, and 5, who had to split up production first based on skills needed for the products and then evenly between each other. The women would also assist others if there was limited time. The finding that the partnerships were influential builds on the finding from Littrell and Dickson (2006) who found that artisans working with an NGO in India had increased capabilities because of the partnership had and better quality of life.

#### **5.2.4** Internal Constraints

The fourth research question asked how has product development training aided artisans in addressing the internal constraints they faced? Internal constraints are constraints that affect artisan businesses but can be impacted through the actions of the artisans. The internal constraints were similar to those described in the literature (Bhatt, 2006; Haan, 2006; Harris, 2014; Rogerson, 2000) and included access to local markets, production levels, finances, and quality control. Product development training had three separate effects on internal constraints: internal constraints were positively affected, there was no change in internal constraints, or internal constraints were added. It is important to note that the four internal constraints were not affected the same way across all of the cases.

Product development training positively affected access to local markets and production levels for cases 1 and 3. The women were able to sell products to the NGOs they partnered with and the artisan group in case 3 was also able to make product to sell to the local community. The trainings for the two cases had similarities; both were successful because the artisans all learned the skills taught, they continued to practice and use of the skill in the groups as are some of on giving orders. The group in case study 1 practiced for a year before they sold to their NGO partner and the group in case study 3 offered an advanced class for the jaspe training.

Training did not influence the internal constraints of finances, quality control, or access to markets for case study 2 or access to local markets for cases 4 and 5 as they continued to face these constraints because of lack of demand from the NGO. Not having a partnership with a strong NGO seemed to hinder the internal constraints of the groups. The NGO in case 2 also would accept any product, which did not encourage the women to create high quality products. In addition to this, the women

had not had opportunities to continue to practice the skill, which meant they were not improving in quality.

Lastly, the internal constraint of limited production levels was added to the group from case 2 because while the women had training, they were not able to execute all the stitches taught in the training. This made splitting up orders nearly impossible because each product normally required only one stitch, meaning that one women would have to produce the whole order.

As with capabilities and similarities of the training, internal constraints were also influenced by having ongoing working with a strong NGO partner. In general, financial constraints were not seen because the NGO partners would typically assist in supplying materials. Even when financial constraints were visible, as was illustrated in case study 1, it was generally a lower constraint when compared to what other artisans who did not partner with NGOs face. Dickson and Littrell (1998b) found that being part of a group that was connected to an NGO reduced overall financial risk required by individuals. In addition, access to local markets was impacted because if the NGO had demand for the product, the more likely the artisan group would be positively impacted.

The overall effects training had on internal constraints had to do with how strong the NGO partner was and the demand for the products they trained on. The quality of the NGO partnership, along with continued practice and rigorous quality control, were three factors that positively influenced on the internal constraints of the artisan businesses.

#### **5.2.5** Business Success

The fifth research question was what is the relationship between product development training and artisan group business success? Business success was analyzed based on the 10 criteria for successful small businesses found by Gorgiexski, Ascalon, and Stephan (2011). These criteria were profitability, growth, innovation, firm survival/continuity, contributing back to society, personal satisfaction, satisfied stakeholders, work/life balance, public recognition, and utility of the businesses. While these criteria were developed for small western businesses, they were applied to the artisan sector because they can be classified as small businesses (Gobagoba & Littrell, 2003; Haan, 2001; Harris, 2014; King, 1980; Wherry, 2008).

The artisan groups in cases 1 and 3 seemed to be the most successful based on the 10 small business criteria. Both artisan groups saw an increase in income from the trainings because they were able to sell the items that they produced. In case study 1, the training and the partnership with the NGO gave the artisans a consistent income, which previously had not been true. Both cases had satisfied stakeholders in the NGO partners and their international consumers, mainly because of the high-quality control executed by the artisan groups. Ultimately both the businesses did what they were formed to do, which was create money, and had positive usefulness/utility. The artisan group in case 1 also saw growth because of the training and the partnership with the NGO. One element that was consistent across all of the cases was that being part of the artisan group brought positive personal satisfaction for the women. They could all find one element that made them proud, no matter how successful the business was overall.

Even though all the women in the cases could find positives, the other three case studies (2, 4 & 5) could be considered less successful. The trainings had not

provided substantial additional income, and all of the groups had experienced negative growth, having less members than they had started with. Additionally, because of the lack of substantial income, the artisan businesses were not meeting their intended outcomes, making them less useful than they should have been.

One criteria that was not listed as the ten found by Gorgiexski, Ascalon, and Stephan (2011) but that was a key criterion for success was the demand for the product created by the groups. When looking at the success of the business, the demand for the product was similar across cases 1 and 3, which were also the most successful of the cases. Cases 2, 4, and 5 did not have a demand for product and this limited the artisans' ability to have an income.

One interesting finding that was not anticipated, was that an increase of capabilities through diversifying skills (e.g., basket weavers learning tassel making) did not necessarily mean that the business would be successful. In contrast, the two that seemed the most cohesive and happiest with the partnerships (cases 1 and 3), had learned one new skill (basket weaving) or had built off existing skills. The group from case study #2 that had developed the most diverse skills was the most fragmented, which was observed in their body language during the interview and in how many NGOs the various individuals in the group worked with. The relationship between training and business success revolved around the demand for the product and the overall success of the training. If there was a strong demand or need for the product, then it was more likely the business would be successful because they had a sales outlet.

#### **5.2.6** Social and Environmental Sustainability Awareness

The sixth research question asked how aware were the artisan groups about social responsibility and environmental responsibility? ATOs, specifically those belonging to the Fair Trade Federation, work towards the goals of having "environmentally sustainable production practices... [and] assurance of safe and healthy working conditions" (Grimes, 2000, p. 13). There has not been previous research on how aware artisans are about these concepts.

There was some awareness of both social and environmental sustainability from the artisans. The women from case 3 knew that they could not sell items that were not their own, understanding that the artisans had to be hired by the NGO in order to sell products. This relates to social sustainability because the organization used to buy products made by artisan's young daughters. Artisans in case 4 seemed unaware that having their children help them weave if needed could be a social sustainability concern, but artisans from case 4 did have an understanding of the concept. For environmental sustainability, the artisans from the first case study had thought about what would happen to their craft if all of the grass for the baskets was pulled out. Since the grass was a main raw material for them, they understood the importance of it as an input. They also discussed how it had to be pulled from the root in order for the grass to be long enough.

#### **5.2.7** External Constraints

The last research question was what external constraints are influential to artisans and their business success? External constraints are any constraints on businesses that cannot be impacted by artisan actions. The external constraints observed in this research were similar to those described in the literature (Bhatt, 2006;

Haan, 2006; Harris, 2014; Rogerson, 2000) and included education levels, transportation, raw materials, and sector formation and practices.

The education levels of the artisans in the case studies ranged from no education to third year in junior high, and understanding how to approach trainings and issues that arose during the training had to consider this. The ILO training workshop recommended that training be hands on to avoid confusion (Fluitman, 1989) and all of the trainings were hands on. In addition to the hands-on approach of the trainings, one NGO interviewed for context found it was important that they have artisans repeat back the processes they learned to ensure that there had been no misunderstanding, especially when working with measurements or chemicals. Adding this feedback loop into trainings was a conscious attempt to navigate the educational differences.

Transportation had been listed as a challenge for rural artisan (McGrath et al. 1994) and was a constraint that impacted the artisans in Guatemala. Distance to and from the NGOs and also to the garment district in Guatemala City from many of the artisans homes was not only time consuming, but also could be very dangerous for the women, even in pairs. While the war ended in 1996 (Caldon, 2002-2011), extreme poverty meant that violence was still a reality for the people in Guatemala. The artisans and NGO employees told stories about women getting attacked on busses, and pay checks being stolen from artisans by people they knew while they were on the busses. Being afraid of violence was a constant for many people and dictated how the artisans traveled to and from the NGOs.

Access to local raw materials for production was a sector wide problem for the artisans in the case studies, and could have the potential to make delivering correct

orders on time difficult. The trainer interviewed also explained how the lack of materials could derail a training and make it unsuccessful. For Case Studies 1 and 2, the pine needles and the grasses needed to be sourced from specific regions during the correct seasons. Access to yarn was a sector wide problem, specifically because Guatemala had two suppliers for yarn, one that was reliable but has poor quality, and the other, who had great quality but very inconsistent delivery, sometimes shutting down for long periods of time or not stocking popular colors. The findings here support those of Durham and Littrell (2000) regarding the importance of local raw material availability when starting a handicraft enterprise. They found that artisans are very reliant on local materials and very few depended on imported materials for their crafts.

Yet, in contrast to the previous literature (Durham & Littrell, 2000) it was found that some NGOs were very reliant on imported raw materials, using them to differentiate products from traditional local products. One NGO interviewed for context initially had imported all inputs for hook rugs, except t-shirts, although those could be found at second hand import markets. They had since contracted with a local textile manufacture for the fabric foundation of the rugs, but still imported other inputs. The NGO from Case Study #1 imported wool and raffia. The imported materials added an additional element of quality and distinction that was not available in locally sourced materials. These two NGOs did not have strong bases of sales in Guatemala, instead exporting almost all products. Not selling the products in the local market was said to be a way the NGO from case study 1 stayed competitive.

An additional finding related to importing materials that was surprising was the addition of a completely new product and skill set for the rug hooking. This was surprising because previous literature had suggested that many of the products that were being produced were solely focused on traditional crafts and keeping traditional skills alive was a motivation for NGOs (Liebl & Roy, 2004). Rug hooking had no connection back to traditional skills, the only cultural elements included were traditional motifs and colors but the NGO had a strong international following, selling at the Sante Fe International Craft Festival. While this goes against what has traditionally been found in literature (Liebl & Roy, 2004) UNESCO says that in safeguarding intangible heritages (UNESCO, n.d.), there is room for creativity and recreation, which supports the incorporation of new ideas.

Finally, sector formation and practices were constraints for the artisans and NGOs, specifically hyper competition and quality control. Hyper-competition is intensively over-saturated markets that make it difficult for firms to gain any advantage; it has been found to be prevalent within artisan sectors because of low barriers of entry and low skill levels needed for production (Harris, 2014). Hyper-competition was observed in all of the markets visited, with the majority of the artisans selling products that were very similar. While each market had its own feel and there was slight differentiation of products based on consumer groups that shopped in the area, the product categories rarely varied. For example, bags made from upcycled huipiles were in every market visited, but the bags in the Antigua shops seemed to be of higher quality than those found in some stalls in Panajachel.

Where product differentiation was observed within the case studies, the two of the three artisan groups had more business success. Cases 1 and 3 differentiated their products with imported inputs or fashion forward products. Cases 2 and 4 did not have a strong demand for their products, neither domestic or international, nor did they have products that were different from what could be found in the local markets. For cases 2 and 4, the community near the NGO already produced similar products, making it difficult for the artisans to sell products in the markets around them, illustrating that hyper-competition was an issue that was faced in the markets. Case 5 was unique because the baby products they were trained on were differentiated but they group had low demand from the NGO.

In addition to hyper-competition being found in markets, the trainings seemed to foster more hyper-competition because three of the five case studies taught a skill that was already in the community and one taught skills that were from other regions in Guatemala. The NGO from Case Study 3 had initially attempted to work with artisans from the region where the skills originated from but struggled because of the distance to and from the artisans. They chose to teach the artisans they already worked with the skill to avoid the struggles with transportation. The artisans that were trained were also able to sell products created to their neighbors because jaspe was used by the people in the region but not traditionally created there. The artisans from case 2 were trained on skills that were found near to where the artisans lived and the artisans from case 4 were trained on a skill that was observed by the artisans in a market, meaning that the artisans were directly competing with their neighbors for sales. However, the artisans from case #3 learned skills that were rather difficult in comparison to the embroidering randas, and very time consuming. These differences potentially could lead to less hyper-competition, normally typified by production that takes very little skill (Harris, 2014) within the area that the artisans live.

But all of the trainings bring up culture appropriation because it was also observed within the trainings themselves. Traditionally, each region in the highlands

of Guatemala had a different huipil style and the skills that when along with that style were specific to that region (Hecht, 2001; Miralbes de Polanco, 2013), giving that region a comparative advantage for those skills (Wherry, 2008). Teaching artisans from nearby areas or regions can give less significance to the skills and hurt the competitive advantage of the community that traditionally claimed that skill.

The sector practices around quality control also were an external constraint felt by the NGOs and artisan groups. There was a disconnect between Guatemalan quality and expectations of western buyers throughout the whole sector, specifically being found in Cases 1, 2, and 3, as well as by one of the additional NGOs that was interviewed. Artisans would create products to the wrong specifications or with the wrong colors, causing a loss of production capacity and sales. While some of the NGOs would pay a lower price or delay payment for lower quality goods, they would still accept most of the products. The NGO in case 1 would accept lower quality products, but because of the high initial standards, the defects on these products were not easily seen by an untrained eye. The trainer interviewed explained that this was a cultural practice and if the sector wanted to grow and continue, the artisans needed to commit to making higher quality items and the buyers needed to demand higher quality goods and not pay for goods that did not meet the standard. These findings provide support for past research that has shown that quality control had created problems for ATOs (Dickson & Littrell, 1998b) and that NGOs who engaged in compassion exports, specifically those who were more interested in helping people than buying high quality crafts, had the potential to be hurting the sector more than helping the artisans (ILO, 2006).

The findings for external constraints show that, specifically for Guatemalan artisans and NGOs, education levels, transportation, raw materials, and sector formation and practices are all present in the sector. But through hands on trainings, differentiation of products through raw materials, and demanding high quality products, the NGOs and the artisan groups could make positive changes in the industry. But what makes these elements external constraints is that the changes that needed to occur to make the biggest difference in the sector had to be industry wide change. Individual changes would potentially make an impact for a small amount of time for each group, but until sector wide changes were made, there would not be substantial change.

#### 5.3 Conclusions

There are two main conclusions that can be made from this study. First, product development trainings had an impact on artisan capabilities but the trainings only positively impacted business success when two things were present, demand for the product and a strong NGO partner. There needed to be a demand for the product from either a new market opportunity or a production capacity need. The demand for the products created through the training was crucial, otherwise the NGO would be engaging in compassion training, which would be contributing to oversaturation of skills and ultimately did not help the artisan group improve their business.

Furthermore, without order for products using the new skills, artisans were unable to perfect what they had learned.

Additionally, the artisan groups needed to have a strong NGO partner that was focused on business and demanded high quality goods. The demand for high quality goods made the products different from what could be found traditionally in the

markets, which could help them sell to NGO international cliental. The focus on business was important because it ultimately helped foster strong artisan businesses because the NGOs were able to give consistent orders and jobs to the artisan groups. It was also important that the NGO continue to ideate and use the skills learned in trainings for long-term production. The artisans that had spent considerable amount of time learning the skills and had opportunities to perfect them over continued orders were more successful.

A second implication and conclusion from the study was about the raw materials and product differentiation. Traditionally, it has been recommended that NGOs use raw materials found locally, but one of the partnerships that was observed to be the most successful in business differentiated their products with imported materials. Other NGOs interviewed also found that this was the best method for differentiating products and for creating the highest quality items. While some did use local raw materials for areas of the products not visible or were trying to source materials from local vendors that had initially been imported, the reliance on imported goods can be seen to undermine the local markets and does not push other sectors, such as the wool industry, to establish high quality goods.

From these conclusions, as well as the findings from the research questions, several revisions were made to the model of Product Development Training Impact on Artisan Capabilities and Sustainable Business Success, in order to illustrate what was observed in the Guatemalan artisan sector.

First, needs assessment was removed and replaced with market opportunity and production capacity need because this was observed to be a vital element to the success of the trainings, impacting capabilities, and business success. Secondly,

product development training from high quality training facility was replaced with product development training and strong NGO partner. The elements were separated because having a strong NGO partner had a strong influence on capabilities and success, and was not related only to the training itself. Technology was removed from the model because the artisans interviewed used very little machinery for the products. Technology does not include internet or phone use, although. Environmental and

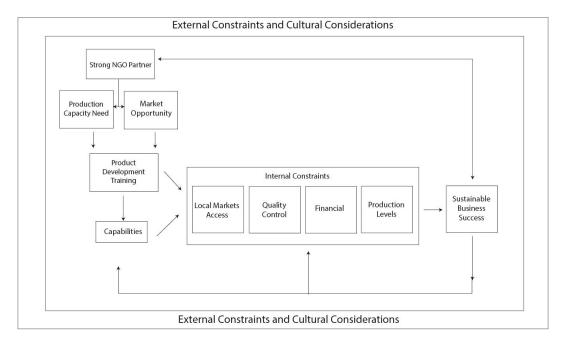


Figure 5.1 Revised Model of Product Development Training Impact on Artisan Capabilities and Sustainable Business Success

social sustainability were combine with sustainable business success because they fit within the criteria for successful businesses.

Feedback loops were added from business success to market opportunity and production capacity need because these elements were key in the continuation of the

business. External constraints remain on the outside because of the support found for the influence they have on artisan businesses and NGOs.

### 5.4 Limitations and Future Research

A limitation of this study was that there were not as many trainers interviewed as was anticipated to fully understand how the trainings were executed and planned. The data collected gives an overview of the training but leaves room for interpretation on how trainings were approached, especially for research question one and the needs assessment. The model developed from the findings in the study illustrates the best observed practices for trainings to impact artisan capabilities and business success within Guatemala. However, further research is needed to investigate how different training models (traditional, social welfare, PTMS) affect business success and if the model can be applied to other artisan communities in other developing countries.

Another opportunity for further research is to analyze the economic impact that choosing imported raw materials rather than locally available materials have on the local community, the artisans, the NGO and how the consumers react to the products. Because of the extent different NGOs use imported materials, additional research needs to be done on the impact these materials have.

A third limitation for the study and an opportunity for additional research about how environmental and social sustainability were understood by the artisans. There was a limited understanding from the artisans, but there was some, showing an opportunity for further research to see if this is specific to the Guatemalan sector or if this is an international theme. Another opportunity for research is analyzing the connection between the Maya culture and sustainability because the Maya culture was briefly mentioned by the trainer when discussing life purpose. Other elements of Maya

tradition were said to be the earth and because it is such a large part of the culture,
Maya culture for the artisans is an area for additional research that was not included in
this research. A limitation that came from the limited awareness of the artisans was the
additional need for the expert translator to explain the concept in terms that the
artisans were more likely to understand. Responses may have been different or
interpreted differently had more direct communication taken place.

## REFERENCES

- Adams, A.V., Middleton, J., & Ziderman, A. (1992). The World Bank's policy paper on vocational and technical education and training. *Prospects*, 22(2), 125-140.
- Alliance for Artisan Enterprises (2014). *Impact Report*. Retrieved on 11 March 2016 from http://static1.squarespace.com/static/52669d1fe4b05199f0587707/t/563cac9ee 4b0bfc7c1abddba/1446816926754/2014+AAE+Impact+Report+FINAL.pdf
- Alumni, (n.d.). Retrieved from http://kala-raksha-vidhyalaya.org/alumni.php
- Alwani, K., & Bulmer, C. (2016, April 16). Guatemala's civil war ended 20 years ago today. Here are 4 things to know about its path to democracy. *The Washington Post*. Taken from https://www.washingtonpost.com/news/monkey-cage/wp/2016/04/16/guatemalas-civil-war-ended-20-years-ago-today-here-are-4-things-to-know-about-its-path-to-democracy/
- Antrosio, J., & Colloredo-Mansfeld, R. (2015). Fast, easy, and in cash: Artisan hardship and hope in the global economy. Chicago: The University of Chicago Press.
- Arnopoulos, S. M., (2010). Saris on scooters: How microcredit is changing village India. Toronto, Canada: Dundurn Press.
- Arvelo-Jimenez (2004). Kuyujani Originario: The Yekuana road to the overall protection of their rights as a people. In J.M. Finger & P. Schuler (Eds.) *Poor people's knowledge: Promoting intellectual property in developing countries,* (pp. 37-51). Washington, DC: The International Bank for Reconstruction and Development/The World Bank, Oxford University Press.
- Birks, S., Fluitman, F., Oudin, X., & Sinclair, C. (1994). *Skills acquisition in microenterprises: Evidence from West Africa*. Paris: Organization for Economic Co-operation and Development.
- Bhatt, E.R. (2006). We are poor but so many. New York: Oxford University Press.
- Brown, K.R. (2013). *Buying into Fair Trade: Culture, morality, and consumption*. New York: New York University Press.
- Calderon, M. J. (2002-2011). *Timeline: Guatemala's history of violence*. WGBH Educational Foundation. Retrieved from http://www.pbs.org/frontlineworld/stories/guatemala704/history/timeline.html

- Canadian Museum of History. (n.d.). *Maya History*. Retrieved 16 June 2016 from http://www.historymuseum.ca/cmc/exhibitions/civil/maya/mmc01eng.shtml
- Creevey, L. (1996). Changing women's lives and work: An analysis of the impacts of eight microenterprise projects. London, England; Intermediate Technology Publications.
- Chambers, R. (1997). *Whose reality counts? Putting the first last.* London, England: Intermediate Technology Publications.
- Dickson, M.A., & Littrell, M.A. (1997). Consumers of clothing from Alternative Trade Organizations: Societal attitudes and purchase evaluative criteria. *Clothing and Textiles Research Journal*, *15*(1), p. 20-33.
- Dickson, M.A., & Littrell, M.A. (1998a). Consumers of ethnic apparel from alternative trading organizations: A multifaceted market. *Clothing and Textiles Research Journal*, 16(1), 1-10.
- Dickson, M.A., & Littrell, M.A. (1998b). Organizational culture for small textile and apparel businesses in Guatemala. *Clothing and Textiles Research Journal*, *16*(2), 68-78.
- Durham, D.E., & Littrell, M.A. (2000). Performance factors of Peace Corps handcraft enterprises as indicators of income generation and sustainability. *Clothing and Textiles Research Journal*, 18(4), 260-272.
- Education. (n.d.). Retrieved from http://kala-raksha-vidhyalaya.org/education.php
- Finger, J.M. (2004). Introduction and overview. In J.M. Finger & P. Schuler (Eds.) Poor people's knowledge: Promoting intellectual property in developing countries, pp. 1-36. Washington D.C.: The International Bank for Reconstruction and Development/The World Bank, Oxford University Press.
- Finger, J.M., & Schuler, P. (Eds.) (2004). *Poor people's knowledge: Promoting intellectual property in developing countries.* Washington D.C.: The International Bank for Reconstruction and Development/The World Bank, Oxford University Press.
- Fluitman, F. (1989). *Training for work in the informal sector*. Geneva: International Labour Organization.
- Foster, P.J. (1968). The vocational school fallacy in development planning. In M. Blaug (Eds.) *Economics of education (Vol. 1)*, pp. 396-423. Harmondsworth; Penguin.

- Fridell, G. (2004). The Fair Trade network in historical perspective. *Canadian Journal of Development Studies / Revue canadienne d'études du développement*, 25(3), 411-428, DOI: 10.1080/02255189.2004.9668986
- Fundap. (2016). History. Retrieved from fundap.com.gt.
- Gianturco, P., & Tuttle, T. (2000). *In her hands: Craftswomen changing the world.* New York: PowerHouse Books.
- Gorievski, M.J., Ascalon, M.E., & Stephan, U. (2011). Small businesses owners' success criteria, a values approach to personal differences. *Journal of Small Business Management*, 48(2), 207-232.
- Grierson, J.P. (1993). 'Self-employment in developing countries: Analyzing the effectiveness of enterprise-based training approaches' Paper presented at the Development and the Strategies of SMEs in the 1990s Conference, Mikkeli, Finland.
- Grierson, J. (1997). Where there is no job: Vocational training for self-employment in developing countries. St Gallen, Switzerland: SKAT.
- Grimes, K.M. (2000). Democratizing international production and trade. In K.M. Grimes & B.L. Milgram (Eds.), *Artisans and cooperatives: Developing alternative trade for the global economy*, pp.11-24. Tuscon: University of Arizona Press.
- Gobagoba, M.R., & Littrell, M.A. (2003). Profiling micro apparel enterprises in Botswana: Motivations, practices, challenges, successes. *Clothing and Textiles Research Journal*, 21(3), 130-141.
- Gordon, B. (1993). *Identity in cloth: Continuity and survival in Guatemalan textiles*. Madison, WI; Helen Louise Allen Textiles Collection.
- Haan, H.C. (2001). Training for work in the informal sector: New evidence from Eastern and Southern Africa. Geneva: The International Training Center of the International Labour Organization (ILO).
- Haan, H. C. (2006). *Training for work in the informal micro-enterprise sector: Fresh evidence from Sub-Sahara Africa*. UNESCO-UNEVOC Book Series, Volume 3. Dordrecht, The Netherlands: Springer.
- Hart, K. (1973). Informal income opportunities and urban employment in Ghana. *Journal of Modern African Studies*, 11(1), 61-89.

- Harris, J. (2014). Meeting the challenges of the handicraft industry in Africa: Evidence in Nairobi. *Development in Practice*, 24(1), 105-117. DOI: 10.1080/09614524.2014.867478
- Hecht, A. (2001). *Textiles from Guatemala*. Seattle, WA; University of Washington Press.
- ILO (2006). Easing the barriers to formality: Registration procedures for microenterprises and handicraft exports in Cambodia. Artisans' Association of Cambodia. Retrieved 13 March, 2016 from http://www.ilo.org/wcmsp5/groups/public/---asia/---robangkok/documents/publication/wcms\_bk\_pb\_131\_en.pdf
- IXOQI. (2013a). Crafts. Retrieved from <a href="http://ixoqi.org/?p=147">http://ixoqi.org/?p=147</a>.
- IXOQI. (2013b). *Projects*. Retrieved from http://ixoqi.org/?page\_id=62
- IXOQI. (2013c). Start. Retrieved from http://ixoqi.org/
- IXOQI. (2013d). *Textiles*. Retrieved from http://ixoqi.org/?p=181
- IXOQI. (2013e). *Training*. Retrieved from http://ixoqi.org/?page\_id=35
- Kreps, D. (2004). *Microeconomics for managers*. New York: W.W. Norton and Company.
- King, K. (1980). Education and self-employment. In Carnoy, Levin, & King. (Eds.), *Education work and employment* (vol. 2). Paris: UNESCO.
- Liebl, M., & Roy, T. (2004). Handmade in India: Traditional craft skills in a changing world. In J.M. Finger & P. Schuler (Eds.) *Poor people's knowledge:*Promoting intellectual property in developing countries, pp. 53-74.

  Washington DC: The International Bank for Reconstruction and Development/The World Bank, Oxford University Press.
- Littrell, M.A. (1990). Symbolic Significance of textile crafts for tourists. *Annals of Tourism Research*, 17, p. 228-245.
- Littrell, M.A., & Dickson, M.A., (1999). *Social responsibility in the global market:* Fair trade of cultural products. Thousand Oaks, CA: SAGE Publishing.
- Littrell, M.A., & Dickson, M.A. (2006). Employment with a socially responsible business: Worker capabilities and quality of life. *Clothing and Textiles Research Journal*, 24(3), 192-206.

- Littrell, M.A., & Dickson, M.A. (2010). *Artisans and fair trade: Crafting development*. Sterling, VA: Kumarian Press.
- Lohmar-Kuhnle, C. (1992). Occupation-oriented training and education for target groups from the informal sector. Bonn, Germany: Federal Ministry for Economic Co-operation.
- McGrath, S., King, K., Leach, F., Carr-Hill, R., Boeh-Ocansey, O., D'Souza, K., Messina, G., & Oketch, H. (1995). *Education and training for the informal sector*. Vol 1. Ser. 11.
- Miralbes de Polance, R. (2013). Maya attire and the process of its massification. In Shaughnessy, R., (Eds.), *Ancestry and artistry: Maya textiles from Guatemala*, pp. 88-99, Toronto, ON: Textile Museum of Canada.
- Nash, J. (1993). Introduction: Traditional arts and changing markets in Middle America. In Nash (Ed.), *Crafts in the world market: The impact of global exchange on middle American artisans*, pp. 1-22, New York: State University of New York Press.
- Pier 1 Imports (2017). About us. Retrieved from https://www.pier1.com/about\_us.html?icid=footer-nav-about\_us
- Pollard Row, A. (2013). The Elaboration of the Guatemalan Huipil. In Shaughnessy, R., (Eds.), *Ancestry and artistry: Maya textiles from Guatemala*, pp. 66-87, Toronto, ON: Textile Museum of Canada.
- Popelka, C.A., & Littrell, M.A. (1991). Influences of tourism on handicraft evolution. *Annals of Tourism Research*, 18, pp. 392-413.
- Richard, N. (2007). *Handicrafts and employment generation for the poorest youth and women*. Paris, France: United Nations. Educational, Scientific and Cultural Organization. Retrieved on 13 March 2016 from <a href="http://unesdoc.unesco.org/images/0015/001567/156772e.pdf">http://unesdoc.unesco.org/images/0015/001567/156772e.pdf</a>
- Rogerson, C.M. (2000). Rural handicraft production in the developing world: Policy issues for South Africa. *Agrekon*, *39*(2), 193-217. DOI: 10.1080/03031853.2000.9524938
- Salesians of Don Bosco (1994-2017). Who are the Salesians? Retrieved from http://www.salesians.org/salesians.html

- Schoeffel, P. (1995). Craft, Prestige goods, and women's roles in the pacific island. In L. Kaino (Ed.), *The necessity of craft*, pp. 1-23. Nedlands, West Australia: University of Western Australia Press.
- Scrase, T. J. (2003). Precarious production: Globalisation and artisan labour in the Third World. *Third World Quarterly*, 24(3), 449-461, DIO: 10.1080/0143659032000084401
- Shaughnessy, R., (2013). Ancestry and artistry: Maya textiles from Guatemala. In Shaughnessy, R., (Eds.), *Ancestry and artistry: Maya textiles from Guatemala*, pp. 12-49, Toronto, ON: Textile Museum of Canada.
- Sustainable Apparel Coalition (2016). The Higg Index. Retrieved from <a href="http://apparelcoalition.org/the-higg-index/">http://apparelcoalition.org/the-higg-index/</a>
- Strawn, S. & Littrell, M.A. (2006). Beyond capabilities: A case study of three artisan enterprises in India. *Clothing and Textiles Research Journal*, 24(3), 207-213.
- The World Factbook (2016-17). Washington, DC: Central Intelligence Agency, 2016. Retrieved from <a href="https://www.cia.gov/library/publications/the-world-factbook/index.html">https://www.cia.gov/library/publications/the-world-factbook/index.html</a>
- Triplett, T. (1994). Changing times. *Marketing Management*, 3(2), 4.
- UNESCO. (n.d.). Safeguarding without freezing. Retrieved from <a href="http://www.unesco.org/culture/ich/en/safeguarding-00012">http://www.unesco.org/culture/ich/en/safeguarding-00012</a>
- UNESCO. (2003). Convention for the safeguarding of the intangible cultural heritage. Retrieved from <a href="http://unesdoc.unesco.org/images//0013/001325/132540e.pdf">http://unesdoc.unesco.org/images//0013/001325/132540e.pdf</a>
- Wherry, F. (2008). *Global markets and local crafts: Thailand and Costa Rica compared.* Baltimore, MD: The Johns Hopkins University Press.
- World Bank. (2013). *Methodology for enterprise surveys*. Retrieved from http://www.enterprisesurveys.org/Methodology
- Yin, R.K. (2014). *Case study research: Design and method* (5<sup>th</sup> ed). Thousand Oaks, CA: SAGE Publications.
- Zwane, P., Richards, L. & Edmond, E. (2002). Apparel production in Swaziland: The need for industry education. *Clothing and Textiles Research Journal*, 20(4), 276-281.

## Appendix A

#### INTERVIEW SCHEDULE – ARTISAN GROUP MEETINGS

Introductions of ourselves, the research, modified informed consent We would like to start by getting to know a little about your group and the products you make.

- 1. What year did your group begin?
- 2. How many people worked with the group in the beginning?
- 3. How many work with this group now?
- 4. Are the people working with this group all women? All men? Both?
- 5. Where are the products you make sold? Probe, local market? Export? Do you sell in the local market or export to the U.S./another market?
- 6. Do you do this work year round?
- 7. Would you please show us the products you currently make?

## Look at these before starting to ask questions!

- 8. Which products sell best?
  - a. How long have you been making/selling those?
  - b. Do you like making these products? Why/why not?
  - c. Would you use these products?
  - d. Would you choose these colors/motifs/designs for your own use?
  - e. Who came up with the idea/design for these products? (distinguish if they designed any).
- 9. Which products don't sell very well?
  - a. How long have you been making/selling those?
  - a. Do you like to make these products? Why/Why not?
  - b. Would you use these products?
  - c. Would you choose these colors/motifs/designs for your own use?
- 10. Could you show us some of the products you no longer make? Why don't you make these anymore?
- 11. How many of you knew how to sew/weave [relevant skill] before starting to work with [group name]? Men\_\_\_\_\_ Women \_\_\_\_\_
  - a. How did you learn your skills? (family member, class/course, on the job).

We are especially interested in learning about training you have had to make new products or to improve your skills for production.

12. Would you tell us about the trainings you have had to make products? (Go through as many trainings as they can remember) Probe.

Note. Go through questions with one training and then see if there are other trainings; go through the questions again.

Note. If they are unsure if they have had training (or believe they have not), then "How did you learn to make these products?" (Then adjust language used in probes)

- a. What did you learn? What did you learn to make? How many products did you learn to make?
- b. Who taught the course?
- c. How long was training?
- d. Did you have to pay for training?
- 13. How did you receive training? Did you look for someone who can provide it? Did someone you know offer it? What did you need help with?
- 14. What happened before training? Did anyone come and talk with you about what you needed?
- 15. What did you think of the training? Probe.
  - a. What do you like most? What do you like least?
  - b. Was training difficult? How?
  - c. What was the most valuable thing you learned in training?
  - d. What were things that you wished you had learned?
  - e. Did the training include things you already knew how to do? Give an example.
- 16. What's different now that you have had training? How are you/ the group members better at your work now that you have had the training?
  - a. What products have you made since training? Would you be able to make these without training? Can we see products from before and after?
  - b. What equipment have you added? Why did you add it? Did you learn about it during training?
  - c. How has production changed since you had training? (e.g., faster production, better quality, other? Give examples

  - e. How about how much you worked? How many hours a week did you work before training? How many hours a week do you work now?

- i. Probe. Are those hours spread throughout the week? How many hours a day do most members work on production for (name of the group)?
- a. In one day, how many items would a typical member produce for (name of group)?
- b. Does anyone else in your household help you with your production? If yes, who helps and how often?

Note. Are there other trainings to discuss? Go through questions again.

## Let's talk a little about the business your group does now, ok?

17. Who is responsible for the following business activities (ask if relevant)? Show raise of hands

Cutting
production planning
collecting fabric/string from suppliers
sourcing buttons/threads/trims
picking up/delivering orders
maintaining records
handling money
quality control
other: (describe)

- a. How did you learn these things?
- 18. How do you buy materials for your products? Probe:
  - a. Down payment from customers? Loan from bank? Other?
  - b. Where do the raw materials for your products come from? Are they made in Guatemala?
- 19. Where does your group work?
  - a. If group/organization facility (versus private home), how have you improved the space since the group started?
- 20. Who are your customers? Probe.
  - a. How many customers (e.g., businesses/organizations that order products)?
  - b. How do you get orders?
  - c. Where do you have to deliver orders?
  - d. Who handles exporting?
- 21. How many groups sell the same type of products? How are your products different from what others sell?

- 22. Is your group successful? What makes your group successful? Probe.
  - a. Annual sales, now and before training?
  - b. Satisfies a need in the community
  - c. Innovation-products/processes
  - d. Is satisfying work
  - e. Gives time for other responsibilities (e.g., family, farming)
- 23. What are some of the biggest challenges you face in production? In being successful in business?
  - a. Phone and Internet access?
  - b. Competition

Would you give an example of a problem the group had and how it was solved?

24. Do you worry that making these products damages the earth? The water? Uses a lot of electricity? Have these topics ever been addressed in training?

## Finally, we would like to know a little more about you as individuals.

- 25. What would you be doing to make money if you were not part of this group?
- 26. How many years of school did you complete/have most group members completed?
- 27. Do you want to continue this work in the future? Why/why not?
- 28. Do you want your sons/daughters to do this work? Why/why not?
- 29. What gives you the most pride for your group? What makes your group special?

Thank you for all the time you have spent answering our questions. What would you like to ask us?

Can we tell you a little about what we do in our jobs? (see Deb's note)

# Appendix B

## **OBSERVATION SCHEDULE**

Group:
Group:WW Products made:
Equipment used (and power requirements):
Space:  Privacy of space Setup of space if where they produce (Are there designated areas for each step Does each person have their own space or is it communal? Do they produce and package in the same space?)
Products Details:  Traditional elements (colors, motifs, styles, skills used, etc.):
Modern elements (colors, motifs, styles, skills used, etc.):
Other:

## Appendix C

### **INTERVIEW SCHEDULE - TRAINERS**

Introduction of ourselves, the research, modified informed consent

We would like to start by getting to know a little about you and the products that you work with.

- 1. Please tell us a little about yourself. Probe.
  - a. Job title
  - b. scope of work/work background
  - c. goals/mission, why do you work with artisans?
  - d. How long have you been involved with craft exporting?
- 2. Now please tell us a little about the organization that you work for? Probe.
  - a. Is it formally registered with the government?
- 3. How many years have you worked with this organization? How did you get connected to the group that you trained?
- 4. When training is carried out, how do you keep the customer in mind? Probe:
  - a. International/domestic.

We would like to talk now about the training that was g	given to[	group we
are talking/have talked to].		

- 5. Tell us about the training that was provided to \_\_\_\_\_ [group]? Probe.
  - a. What did the training include?
  - b. What about your skills/experience made you the best person to do this training?
  - c. Did training teach a totally new skill or build off of traditional methods?
  - d. How long was training? Is there a reason that this amount of time was best?
- 6. When you were initially to prepare for offering this group training, what key things do you consider? Probe.
  - a. How was the training customized for the group's needs?
- 7. Did the artisans pay for the training?
- 8. When planning and executing training, do you take into consideration environmental sustainability? Please describe.

- 9. What has been the biggest gain as a result of the training?
- 10. What kind of changes would you make with the training, if you were to offer it again with this group?
- 11. Since product development training, how has the group made improvements to production? Probe.
  - a. Quality
  - b. Productivity
  - c. Any more trainings?
  - d. Technology
- 12. From what you have seen, do the artisans from \_\_\_\_[group we visited] innovate and develop their own designs/motifs or do they strictly rely on designs/motifs created/influenced by the organization they sell too?
- 13. Is keeping traditional methods for production an important aspect to training?
- 14. How do you define success for the artisan groups you train? Please give some examples of groups that have been successful and highlights of their success.
- 15. What have you seen with artisan training that has caused the biggest negative impact on artisan businesses, in general?
- 16. What have you seen that is the most effective training? Why? (This can be more general trainings too)
- 17. What are areas that could be strengthened to create a stronger artisan industry?

Thank you for all the time you have spent answering our questions. What would you like to ask us?

## Appendix D

### INTERVIEW SCHEDULE – EXPORT AGENCY EMPLOYEE

Introduce ourselves, the research, modified informed consent We would like to know your thoughts and what you have seen in the artisan export businesses in Guatemala. But first, a little about you.

- 1) What is your job title?
- 2) How long have you been in this position?
- 3) What kind of jobs have you had in the past that are relevant to this work?
- 4) How long has your organization worked with artisan exports?
- 5) What are the primary ways your organization works with artisans/craft exporters? (scope of work)

## Please tell us more about the craft export business in Guatemala.

- 6) What does the artisan export sector look like in Guatemala? Probe.
  - a. How many different exporters are there?
  - b. Volume of exports
  - c. Range of product categories
- 7) Do the people involved with craft exports, both the artisans and international customers, place value on "Made in Guatemala?" Give an example.
- 8) What makes your international customers purchase the products they purchase? Probe.
  - a. cultural elements
  - b. aesthetics
  - c. price
- 9) What are some of the challenges that arise for artisans who are exporting products? Probe.
  - a. Logistics/infrastructure
  - b. Education
  - c. Equipment
  - d. Access to financing

- e. Regulatory
- f. Market
- g. Competition
- 10) What unique strengths have you noticed among the artisans that export? Give an example.
- 11) How important is the craft exporting businesses to the people of Guatemala? What about to Guatemala's government?
- 12) As an organization, do you offer financial assistance to the artisans you work with? Please describe the financial assistance programs that are available. (Example: Microfinance)
- 13) What are the policies in Guatemala related to environmental sustainability that the artisans required to be in compliance with?
- 14) What are the policies in Guatemala related to labor/workplace conditions are the artisans required to be in compliance with?
  - a. minimum wage requirements
  - b. Working hour laws
  - c. Other?

The study itself is about training for product development. We would like to know some of your thoughts on this or other types of trainings provided to craft artisans.

- 15) Does your organization offer any types of training? Please describe. Probe. *If yes continue to 15a. If not continue to 16.* 
  - a. Where do the trainings take place?
  - b. What equipment is used during the training?
  - c. Do artisans pay for the trainings?
  - d. How often are the trainings offered? Does the content ever change?
  - e. Who teaches the trainings?
  - f. How long do the training courses run?
- 16) What have you seen that is the most effective training? Why? (This can be more general trainings too)

17)	What have you seen with artisan	training that has	caused the l	biggest negative
	impact on artisan businesses?			

18) What are areas that could be strengthened to create a stronger artisan industry?

Thank you so much for your time! Do you have any questions for us?

## Appendix E

# SCRIPT FOR MODIFIED INFORMED CONSENT TO PARTICIPATE IN RESEARCH – ARTISAN INTERVIEW

Title of Project: Product Development Training Impact on Artisan Capabilities and Sustainable Business Success

## Principal Investigator(s): Elizabeth Davelaar and Dr. Marsha Dickson

You are being invited to participate in a research study. The information I will read to you tells you about the study including its purpose, what you will be asked to do if you decide to take part, and the risks and benefits of being in the study. Please listen to the following information and ask us any questions you may have before you decide whether or not you agree to participate.

#### WHAT IS THE PURPOSE OF THIS STUDY?

We are conducting research about the impact of product development training on artisan businesses through up to six different case studies of artisans like yourselves for a graduate thesis. Each of the case studies will include 8-15 artisans and an interview with an individual who has provided you with product development training or understands what happened. The purpose of this study is to analyze the impact of product development training on artisan groups and determine how different product development training approaches affects the capabilities and skills of the artisans and impacts the overall internal constraints and business success. Each artisan group has been selected based on experience with different approaches for product development training that have been offered. We will be asking you, as a group, a series of questions about the training you received and your overall business.

The interview will last between two to four hours, but we will take breaks as necessary and also use some of that time to look at the products you make. If at any time you are uncomfortable with questions that are being asked, we can skip the question or you may choose to stop participating at any time without repercussions of any sort.

All information will be kept confidential to the extent possible. Given that this is a group interview; we cannot guarantee that information will be kept confidential by each other, but your names and organizations will be kept confidential by us and will not be shared in any publications that come from this study. There are no risks associated with this study. There will be compensation for the study, which will be given to anyone who decides to participate. We would be willing to give you a summary of the study when the study is completed. It is hoped that the knowledge gained from this study will give guidance to future product development training developments. Your decision of whether or not to participate will not impact your standing with the organization who has set up the interview or the University of Delaware. We do hope, however, that you do choose to participate.

If you have any questions or would like a copy of the results, please contact Dr. Marsha Dickson (dickson@udel.edu). If you have any questions regarding your rights as a participant, you may contact the University of Delaware Institutional Review Board at hsrb-research@udel.edu or (302) 831-2137.

Do you consent to participate in this study? [wait for verbal response]

We would also like to record the group interview via tape recorder for accuracy and clarity during our data analysis. We will refrain from using your name during the recording, nor will we use your name in any transcripts that are needed from the recording. All the tape recordings and data will be kept confidential and all physical data will be kept locked in a secure location and all electronic data will be kept on a password protected computer with the key to subjects/companies on a separate document. All data and recording will be destroyed when the research is complete.

Do we have your permission to audio tape the interview? [wait for verbal response]

## Appendix F

# SCRIPT FOR MODIFIED INFORMED CONSENT TO PARTICIPATE IN RESEARCH - TRAINER

Title of Project: Product Development Training Impact on Artisan Capabilities and Sustainable Business Success

## Principal Investigator(s): Elizabeth Davelaar and Dr. Marsha Dickson

You are being invited to participate in a research study. The information I will read to you tells you about the study including its purpose, what you will be asked to do if you decide to take part, and the risks and benefits of being in the study. Please listen to the following information and ask us any questions you may have before you decide whether or not you agree to participate.

#### WHAT IS THE PURPOSE OF THIS STUDY?

We are conducting research about the impact of product development training on artisan businesses through up to six different case studies of artisans like yourselves for a graduate thesis. Each of the case studies will include 8-15 artisans and an interview with an individual who has provided the artisans with product development training or understands what happened. The purpose of this study is to analyze the impact of product development training on artisan groups and determine how different product development training approaches affects the capabilities and skills of the artisans and impacts the overall internal constraints and business success. You have been selected because you were responsible for the training of [group name]. We will be asking you a series of questions about the training you preformed.

The interview will last between one and two hours, but we will take breaks as necessary. If at any time you are uncomfortable with questions that are being asked, we can skip the question or you may choose to stop participating at any time without repercussions of any sort.

Your name and organization will be kept confidential and will not be shared in any publications that come from this study. There are no risks associated with this study. There is no compensation for the study, although we would be willing to give you a summary of the study when the study is completed. It is hoped that the knowledge gained from this study will give guidance to future product development training developments. Your decision of whether or not to participate will not impact your standing with [company name] or the University of Delaware. We do hope, however, that you do choose to participate.

If you have any questions or would like a copy of the results, please contact Dr. Marsha Dickson (dickson@udel.edu). If you have any questions regarding your rights as a participant, you may contact the University of Delaware Institutional Review Board at hsrb-research@udel.edu or (302) 831-2137.

Do you consent to participate in this study? [wait for verbal response]

We would also like to record the interview via tape recorder for accuracy and clarity during our data analysis. We will refrain from using your name during the recording, nor will we use your name in any transcripts that are needed from the recording. All the tape recordings and data will be kept confidential and all physical data will be kept locked in a secure location and all electronic data will be kept on a password protected computer with the key to subjects/companies on a separate document. All data and recording will be destroyed when the research is complete. Do we have your permission to audio tape the interview? [wait for verbal response]

## Appendix G

# SCRIPT FOR MODIFIED INFORMED CONSENT TO PARTICIPATE IN RESEARCH – EXPORT AGENCY INTERVIEW

Title of Project: Product Development Training Impact on Artisan Capabilities and Sustainable Business Success

## Principal Investigator(s): Elizabeth Davelaar and Dr. Marsha Dickson

You are being invited to participate in a research study. The information I will read to you tells you about the study including its purpose, what you will be asked to do if you decide to take part, and the risks and benefits of being in the study. Please listen to the following information and ask us any questions you may have before you decide whether or not you agree to participate.

#### WHAT IS THE PURPOSE OF THIS STUDY?

We are conducting research about the impact of product development training on artisan businesses through up to six different case studies of artisans for a graduate thesis. Each of the case studies will include 8-15 artisans and an interview with an employee who executed the training or understands what happened. The purpose of this study is to analyze the impact of product development training on artisan groups and determine how different product development training approaches affects the capabilities and skills of the artisans and impacts the overall internal constraints and business success. Each organization has been selected based on the different approaches taken for product development training. We would like to talk with you, as a larger export agency, about the macro- level challenges facing the artisan industry in Guatemala.

The interview will last between one and two hours. If at any time you are uncomfortable, we can skip the question or you may choose to stop participating at any time without repercussions of any sort.

Your name will be kept confidential and will not be shared in any publications that come from this study. We would like to use the name of your organization for publications. There are no risks associated with this study. There is no compensation for the study, although we would be willing to give you a summary of the study when the study is completed. It is hoped that the knowledge gained from this study will give guidance to future product development training developments. Your decision of whether or not to participate will not impact your standing with the University of Delaware. We do hope, however, that you do choose to participate.

If you have any questions or would like a copy of the results, please contact Dr. Marsha Dickson (dickson@udel.edu). If you have any questions regarding your rights

as a participant, you may contact the University of Delaware Institutional Review Board at hsrb-research@udel.edu or (302) 831-2137.

Do you consent to participate in this study? [wait for verbal response]

We would also like to record the interview via tape recorder for accuracy and clarity during our data analysis. We will refrain from using your name during the recording, nor will we use your name in any transcripts that are needed from the recording. All the tape recordings and data will be kept confidential and all physical data will be kept locked in a secure location and all electronic data will be kept on a password protected computer with the key to subjects/companies on a separate document. All data and recording will be destroyed when the research is complete. Do we have your permission to audio tape the interview? [wait for verbal response]

## Appendix H

## **HUMAN SUBJECTS PROTOCOL**

## **University of Delaware**

Protocol Title: Product Development Training Impact on Artisan Capabilities and Sustainable Business Success

Principal Investigator Name: Elizabeth Davelaar Department/Center: Department of Fashion and Apparel Studies Contact Phone Number: 605-370-2265 Email Address: davelaar@udel.edu
Advisor (if student PI): Name: Dr. Marsha Dickson Contact Phone Number: 302-831-4475 Email Address: dickson@udel.edu
Other Investigators:
Investigator Assurance:
By submitting this protocol, I acknowledge that this project will be conducted in strict accordance with the procedures described. I will not make any modifications to this protocol without prior approval by the IRB. Should any unanticipated problems involving risk to subjects occur during this project, including breaches of guaranteed confidentiality or departures from any procedures specified in approved study documents, I will report such events to the Chair, Institutional Review Board immediately.
1. Is this project externally funded? $\square$ YES $old X$ NO
If so, please list the funding source:
2. Research Site(s)
☐ University of Delaware
X Other (please list external study sites) Guatemala (Guatemala City, Panajachel, and Antigua). Research will be conducted August 8- August 18, 2016

Is UD the study lead?	$old X$ YES $\square$ NO (If no, list the institution that is serving as
the study lead)	

### 3. Project Staff

Please list all personnel, including students, who will be working with human subjects on this protocol (insert additional rows as needed):

NAME	ROLE	HS TRAINING COMPLETE?
Elizabeth Davelaar	PI/Interviewer/Data Analysis	Yes
Marsha Dickson	Advisor/Interviewer/Data Analysis	Yes

### 4. Special Populations

Does this project involve any of the following:

Research on Children? No

Research with Prisoners? No

If yes, complete the Prisoners in Research Form and upload to IRBNet as supporting documentation

Research with Pregnant Women? No

Research with any other vulnerable population (e.g. cognitively impaired, economically disadvantaged, etc.)? please describe

Many of the artisans in Guatemala are from the poor rural communities; therefore, many of the artisans will be economically disadvantaged.

5. **RESEARCH ABSTRACT** Please provide a brief description in LAY language (understandable to an 8<sup>th</sup> grade student) of the aims of this project.

This study focuses on the impact of product development training on artisan groups. Overall, the purpose of this study is to determine how different product development training approaches (e.g., training done by skilled professionals, training done by people without product development background,

etc.) affects the capabilities and skills of the artisans and impacts the overall internal business constraints and business success.

Research questions for the study are as followed:

- 1. How has needs assessment affected product development training for artisan groups?
- 2. Do different structures of NGOs influence how product development is approached?
- 3. How has product development training affected the capabilities of the artisans?
- 4. How have different types of product development training aided artisans in addressing the internal constraints they face, specifically markets, finances, and production levels?
- 5. What is the relationship between different types of product development training and artisan group business success?
- 6. How are social responsibility, environmental responsibility, cultural considerations, and external constraints a) addressed in product development training and b) associated with business success?
- 7. How has the artisan groups' technology advanced since receiving product development training?

The products that artisans have been trained on will be textile related, such as weaving or macramé.

6. **PROCEDURES** Describe all procedures involving human subjects for this protocol. Include copies of all surveys and research measures.

This study will utilize a comparative case study method to compare the training that has been received for up to five or six separate artisan groups and the training organizations they have worked with. Each case will include a semi-structured group interview with approximately 8-15 artisans and include topics of (A) product development needs assessment, (B) experiences with product development training, (C) artisan capabilities and responsibilities (D) external and internal constraints to business, and E) business success. Interviews will be conducted in Spanish or in the native dialect and translated to English. Our translator, Deborah Chandler, is a scholar and professional experienced in the textile craft sector of Guatemala who currently lives in Guatemala. In addition to taking field notes, the interviews will be recorded and will last around two to four hours. Besides having participants being over the age of 18 and having participated in some type of product development training, there is no other criteria for the artisans to participate in the study.

For each case, a second interview will also be done with the person who executes the trainings. These interviews will be semi-structured and be conducted in English, with exception if the trainer does not speak English, then they will be conducted in Spanish and translated to English. These interviews will also be recorded and will last around one hour.

Lastly, an interview will be conducted with an employee of a government export agency responsible for craft product exports. This semi-structured interview will be

included in order to understand the greater macro/external constraints of the artisan businesses in Guatemala. This interview will be around one hour long and will be recorded.

#### 7. STUDY POPULATION AND RECRUITMENT

Describe who and how many subjects will be invited to participate. Include age, gender and other pertinent information.

Up to five or six different artisan/non-government organization partnerships have been purposively selected in Guatemala to analyze the impact of different training methods. Each artisan group interview will include 8-15 artisans, all of whom will be invited to participate by the non-government organization they work with because they have received product development training.

We will also be talking with one employee from each of the non-governmental organizations that has been involved with the training of the artisans. This participant will most likely be in a management position.

One other interview will take place with a purposively selected governmental export agency. This interview will be with an upper-level manager involved with export of artisan crafts.

Attach all recruitment fliers, letters, or other recruitment materials to be used. If verbal recruitment will be used, please attach a script.

Initial introductions to the organizations will be made by Deborah Chandler in Guatemala and then the following script will be used as an email. Script is as follows:

Hi XXXX,

I want to thank you so much for your willingness to work with us and coordinate the interviews for our research. We are excited about what this study could show us about what makes the biggest impact.

We are wanting to have two different interviews in order to gather the data that is needed for our research. We would like to do one large group interview with the artisans and then interview the person who did the training.

For the group interview with the artisans, we are hoping to keep it approximately two to four hours and will be asking questions mostly about the business conducted by of group and not as much on individuals. On this end, we would like to know what products the group have been trained on, so we can get a little background on the product.

We would also like to interview the person who has done training for the artisans. The interview will most likely take around an hour. If this person is not in Guatemala, we would love to do a Skype interview with them after we are back in the States. If you could send us the name of the person that did the training, that would be wonderful!

If you have any questions, comments, or concerns, please feel free to let us know! Again, thank you so much for working with us. We are looking forward to hearing from you!

Describe what exclusionary criteria, if any will be applied.

#### NA

Describe what (if any) conditions will result in PI termination of subject participation.

#### None.

#### 8. RISKS AND BENEFITS

List all potential physical, psychological, social, financial or legal risks to subjects (risks listed here should be included on the consent form).

#### No risks are anticipated.

In your opinion, are risks listed above minimal\* or more than minimal? If more than minimal, please justify why risks are reasonable in relation to anticipated direct or future benefits.

#### N/A

(\*Minimal risk means the probability and magnitude of harm or discomfort anticipated in the research are not greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests)

What steps will be taken to minimize risks?

During the group interview, questions will be skipped if the question makes the participants uncomfortable.

Describe any potential direct benefits to participants.

Artisans volunteering to take part in the group interview will be offered a small amount of compensation for loss of work that day. Beyond that, there are no potential direct benefits to the participants but engaging in this research will help the participants understand different training methods and what has a history of supporting successful business and what does not.

Describe any potential future benefits to this class of participants, others, or society.

It is anticipated that this research will show the impact that different types of product development training have on the overall success of artisan businesses. The findings will give recommendations on how new and established partnerships with artisan groups should approach product development training and what has a history of working well so that they can better improve their programs and artisan business success

If there is a Data Monitoring Committee (DMC) in place for this project, please describe when and how often it meets.

### NA

#### 9. COMPENSATION

Will participants be compensated for participation?

Artisans volunteering to take part in the group interview will be offered compensation for loss of work that day. The typical compensation by other researchers who have worked with these groups in Guatemala is US\$50 offered to the group who then splits it equally among the participants.

If so, please include details.

#### 10. **DATA**

Will subjects be anonymous to the researcher?

No

If subjects are identifiable, will their identities be kept confidential? (If yes, please specify how)

No names of individuals participating in the interviews will be recorded. No names of the organizations or artisan groups will be used in publications

How will data be stored and kept secure (specify data storage plans for both paper and electronic files. For guidance see

http://www.udel.edu/research/preparing/datastorage.html )

In addition to writing field notes for each group visit, with the permission of the participants, interviews will be electronically recorded using a tape recorder and the English translation will be transcribed verbatim. Both the paper and electronic data will be kept secure. The student will not keep the data after transcribing and no individuals will be identified by name. Electronic files will be kept in protected files belonging to Dr. Marsha Dickson on a secure University network. The paper copies and tape recordings will be stored in a locked file cabinet in Dr. Marsha Dickson's office.

How long will data be stored?

## Approximately three years

Will data be destroyed?  $\mathbf{X}$  YES  $\square$  NO (if yes, please specify how the data will be destroyed)

Paper copies will be shredded and tape recordings will be deleted and then destroyed. Any electronic files will be deleted and data will be scrubbed.

Will the data be shared with anyone outside of the research team?  $\square$  YES X NO (if yes, please list the person(s), organization(s) and/or institution(s) and specify plans for secure data transfer)

How will data be analyzed and reported?

Data will be analyzed using qualitative data analysis techniques through deductive and inductive methods in order to find key themes that are similar and different for product development training and business success.

#### 11. CONFIDENTIALITY

Will participants be audiotaped, photographed or videotaped during this study?

All interviews will be audiotaped in order to ensure clarity and accuracy of data transcription and analysis.

How will subject identity be protected?

Names of the individuals interviewed will not be recorded and the data will be organized by a coding system for the artisan group and the non-government organization.

Is there a Certificate of Confidentiality in place for this project? (If so, please provide a copy).

#### No

#### 12. CONFLICT OF INTEREST

(For information on disclosure reporting see: http://www.udel.edu/research/preparing/conflict.html )

Do you have a current conflict of interest disclosure form on file through UD Web forms?

Yes, the faculty advisor does.

Does this project involve a potential conflict of interest\*?

#### No

If yes, please describe the nature of the interest:

#### 13. CONSENT and ASSENT

<sup>\*</sup> As defined in the <u>University of Delaware's Policies and Procedures</u>, a potential conflict of interest (COI) occurs when there is a divergence between an individual's private interests and his or her professional obligations, such that an independent observer might reasonably question whether the individual's professional judgment, commitment, actions, or decisions could be influenced by considerations of personal gain, financial or otherwise.

Consent forms will be used and are attached for review (see Consent Template under Forms and Templates in IRBNet)
Additionally, child assent forms will be used and are attached.
X Waiver of Documentation of Consent (attach a consent script/information sheet with the signature block removed).
Waiver of Consent (Justify request for waiver)

We prefer to use modified informed consent because of the barriers we have observed that can be created between the interviewee and the interviewer as a result of the requirement for formal documentation, <u>especially</u> in international settings. The informed consent scripts attached reflect this and will be used at the beginning of each meeting.

## 14. Other IRB Approval

Has this protocol been submitted to any other IRBs?  ${f No}$ 

If so, please list along with protocol title, number, and expiration date.

## 15. Supporting Documentation

Please list all additional documents uploaded to IRBNet in support of this application.

Waiver of Documentation of Consent - Artisans
Waiver of Documentation of Consent - Managers
Waiver of Documentation of Consent - Export Agency
Interview Schedule- Artisan Group
Interview Schedule- Trainers
Interview Schedule- Export Agency Employee
Observation Schedule

## Appendix I

## IRB APPROVAL FORM



RESEARCH OFFICE

210 Hullihen Hall University of Delaware Newark, Delaware 19716-1551 Ph: 302/831-2136 Fax: 302/831-2828

DATE: July 29, 2016

TO: Elizabeth Davelaar FROM: University of Delaware IRB

STUDY TITLE: [924958-1] Product development training impact on artisan capabilities and

sustainable business success

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: July 29, 2016

REVIEW CATEGORY: Exemption category # (2)

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office. Please remember to notify us if you make any substantial changes to the project.

If you have any questions, please contact Nicole Farnese-McFarlane at (302) 831-1119 or nicolefm@udel.edu. Please include your study title and reference number in all correspondence with this office.

CC: