

SUPPORTING REINTEGRATION OF FORMER CHILD SOLDIERS WITH A SOCIAL ENTERPRISE

VIABILITY STUDY OF A BAKERY BUSINESS MODEL AND ITS
WORKFORCE DEVELOPMENT PROGRAM IN LIRA, UGANDA

Acknowledgements

We would like to thank Laurie Miller, Associate Director for CIPA Public Engagement and Capstone Instructor, Arpit Chaturvedi, CIPA International Capstone class teaching assistant, Jamie van Leeuwen, the Founder and CEO of GLI, Will Tesconi, the Director of Academic Partnership at GLI, for their active engagement in this project; Jerry Amabaya, Research Coordinator at GLI, Martina Namuddu, Administrative Assistant at GLI for their kind support in data collection and stakeholder coordination. We would also like to thank all the experts we interviewed for their insightful practical knowledge and experience, which guided our research.

Furthermore, we would like to thank the previous Capstone teams that have worked on the Phase I (Megumi Kawaura, Ravisara Hataiseree, Maira Zamir, Yuyao Lin, Mariko Hashizume, Lee Eonkyung), Phase II (JaeHyun Kim, Youngmin Song, Chingis Toregeldin, and Michael Veglucci) and Phase III (Clifford Chen, Katharine Reeves, and Yasuyuki Tezuka) of the project, for providing a solid starting basis for our research.

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Executive Summary

In the fall semester of 2017-2018 academic year, two student consultants from Cornell Institute for Public Affairs - Enkhzul Altangerel and Carolina Araya Chaves - worked on viability study of bakery business in Lira, Uganda, as part of an ongoing research project on reintegration of Former Child Soldiers (FCS) in Uganda. As phase IV of the research partnership between Cornell Institute for Public Affairs and Global Livingston Institute (GLI), the study continued the efforts of the previous studies, which focused on determining appropriate skills development and employment generation opportunities for the FCS. The viability study consists of primary and secondary research, which utilized various methodologies including qualitative analysis, literature and desk review. As a remote research conducted from Ithaca, New York, the study serves as a basis for further in-depth research with fieldwork, guided by the core principles of GLI, which emphasizes listening before acting.

The team first reviewed literature to contextualize the Small and Medium Enterprises (SMEs) in Uganda, to investigate the importance of Vocational Education and Training (VET) programs in promoting socio-economic development and how a social enterprise business model can further facilitate such process, distinct from business as usual. The literature we reviewed provided theoretical and empirical basis as to how SMEs function as a backbone to a country's economy, yet multiple barriers exist in their success, which, in the case of Uganda, we identified as lack of access to finance, skilled human resources and infrastructure. In addition, various studies pointed out to the importance of non-formal vocational training in enabling the marginalized students to gain skills and knowledge. In terms of the business model, studies have noted capacity of social enterprise business models to create social impact, as the core principle of the business is guided by its emphasis, not necessarily on profit, but on the social values and benefits it strives to create.

The market analysis section of the report consisted of analyzing the interview narratives with several stakeholders, which included experts from local and international NGOs operating in Lira, Uganda, and a social entrepreneur who specializes in bakery social enterprises and vocational training. Despite the existence of three main bakeries/cafes in Lira, the city still imports bakery goods from other cities such as Kampala, indicating potential market demand for baked goods in Lira, Uganda. That being said, it is important to reiterate that more in-depth research will be needed to quantify the market demand and pricing strategy.

In addition, the team also explored refugee camps as a potential target market for the selling the bakery's products. The current refugee crisis increased the food demand in the region, which is mostly provided by UN agencies and international humanitarian and development organizations. Yet, the current practices do not show direct partnership between those agencies and local small enterprises, save for smallholder farming groups, who are themselves beneficiaries of the programs that the UN implements.

The interviews also suggested important factors to consider in establishing the skills training program, such as gender, complementary services (e.g. meals, child care facilities, psychosocial help) and infrastructure related issues, including electricity and transportation. Considering the low educational attainment of FCS and the reintegration aspect, the training should teach not only baking skills, but also basic education, and fundamentals of nutrition. In addition, for the business to be locally run, few selected staff needs to be trained in business and management skills, in preparation for taking over the business once it reaches self-sustainability.

Based on these findings and analysis, the consultant team recommends GLI to adopt following recommendations in their efforts to support the reintegration process of FCS:

SMEs:

- Due to the barriers faced by SMEs in Uganda, we recommend GLI to provide initial seed funding for the bakery project, at least for one year, until it reaches self-sustainability, so as to minimize its failure risk.

Business model:

- Adopt social enterprise model in establishing the bakery, ensuring that the employees are provided higher than average market salary and other benefits.
- The business should be run by the locals (Ugandans) in order to promote locally owned businesses, and ensure sustainability.
- Consult the locals and conduct community assessment to evaluate the community's willingness to participate in the project.
- The project budget need to be properly estimated, using the price information provided by the consultant team.

Marketing Strategy Options:

- Target the general local population, specializing in affordable yet nutritious products.
- Target the refugee camps, specializing in high quantity productions.

For the second option, the consultant team recommends pursuing partnership opportunities with international and local NGOs working on the refugee crisis.

Vocational Education and Training:

- Evaluate potential partnerships with partners like Women's Bakery and Children of Peace, that are socially oriented, have experience in bakery training and in working with FCS.
- For the training participants, evaluate carefully the gender aspect, as well as the inclusion of both FCS and non FCS to create a proper mix of participants and contribute to the reintegration process.
- Consider complementary services such as meals, child care services, transportation and psychological support services.

The research findings demonstrate that there is a good potential for establishing a successful bakery business in Lira, Uganda, with the aim to improve the socio-economic conditions of the local community, including the FCS. Through adopting the abovementioned recommendations, coupled with an in-depth field study, we believe that GLI can contribute substantially to the reintegration process of the FCS.

Introduction

This report serves as a viability study for a bakery business and the associated Workforce Development Training Program in Lira, Uganda. The initiative aims to increase employment opportunities for the local community, specifically for FCS, and contribute to the process of reintegration through improving their skills and knowledge, socioeconomic and psychosocial condition.

The report builds upon the research conducted by the previous student consultant teams from Cornell Institute for Public Affairs who worked on the previous three phases of the project. By utilizing primary and secondary research, the consultant team contextualized the situation of SMEs in Uganda, conducted qualitative market analysis for the bakery and identified possible modules for the Workforce Development Training Program that goes along with the bakery business model.

The first three phases of previous research focused on identifying the opportunities and challenges for the FCS in reintegrating back into society, determined the need to skills training program for the FCS and specifically recommended a community farmer groups model and accompanying skills training program as a suitable approach to facilitate the reintegration process. The current phase of the project further analyzed skills development and income generation opportunities for the FCS by narrowly focusing on the non-agricultural sector, namely a bakery business model as proposed by the client, and focusing on a figure of a social enterprise.

Project Goals and Deliverables

The previous phases of the project conducted field research and proposed community farmer group models as a strategy to improve the skills and livelihood opportunities for FCS. The student consultants working on the phase IV of the project conducted a study which aimed to determine if the market and social conditions of Uganda are favorable in setting up a social business of a bakery with a Workforce Development Training program, as part of sets of interventions to support FCS.

The specific research tasks of the team included:

- Conducting literature review on social business models, SMEs, and training programs
- Conducting qualitative primary research through interview with stakeholders to:
 1. Contextualize the industry, challenges and opportunities for SMEs and social enterprises in Uganda
 2. Analyze the market needs, challenges and opportunities.
 3. Analyze the target population, logistics and resources needed to run the Workforce Development Training Program and the Bakery social enterprise.

Literature review

The researchers from the previous phases of the project determined that improving agricultural skills through trainings provided for subsistence farmers, including those who were FCS, would assist them in becoming self-sufficient and reintegrating into the society. Consequently, a community-based vocational training program was proposed to meet the skills development need of the FCS. The report also noted the need for the training program to match the labor market demands. Due to the fact that majority of the FCS are subsistence farmers, the previous groups recommended agricultural trainings as a way to boost income generation opportunities. On the other hand, as proposed by the client, the current consultant team inspected employment opportunities for the FCS and local community in the non-agriculture sector in Lira, Uganda. In this context, to understand the viability of a bakery business in the Lira region, and the required skills training program, the team reviewed selected literatures on SMEs and vocational training, and their implications for economic and community development, specifically in the context of Sub-Saharan Africa. Furthermore, the team investigated grey literature and online information on refugee camps in northern Uganda, to identify potential market opportunities in that arena.

Vocational Education and Training

Education is the pillar of human capital formulation, and an important means to development. Yet in many cases of Sub-Saharan African countries, the formal educational system is not accessible to many people, especially to the marginalized (Blaak, Openjuru & Zeelen, 2013). In their study, Blaak et al. (2013) found that with its low fees, adaptive teaching methods and appealing contents, non-formal Vocational Education and Training (VET) are more accessible for the marginalized, and “meet quality standards needed to contribute to development”. Another study by Tukundane, Minnaert, Zeelen & Kanyandago (2015) concluded that VET helps improve the labour market and livelihood opportunities of marginalised youth, as graduates of VET programs were able to obtain a job, or engage in activities that resulted in income. They were not only able to meet their basic needs and acquire livelihood assets, but some of them even went on to pursue higher levels of education, and start their own businesses. Moreover, the study also found that that training programs helped improve the self-confidence of the marginalized youth (Tukundane et al., 2015).

On the other hand, there are clearly areas for improvement in utilizing VET as a means to empower the marginalized, in particular, the avenues of employment generation after the training is completed.

Tukundane et al. (2015) conclude that VET skills training for marginalised youth is supply-driven and not linked with the needs and requirements of the informal labor market, where most of the VET graduates will work. To improve the relevance of skills training to the requirements of the labor market, an in-depth analysis of the labour market, partnerships with potential employers, and new curriculum based on recent developments in technology should be considered (Tukundane et al., 2015). This point is also highlighted in the report from the previous phase of the project. It is imperative to examine the employment

opportunities, and the business environment before commencing any VET programs (Chen, Reeves & Tezuka, 2017). That being said, it is also crucial to note that any training programs must consider the limitations in infrastructure and technology common in rural areas.

Forms of Vocational Education and Training

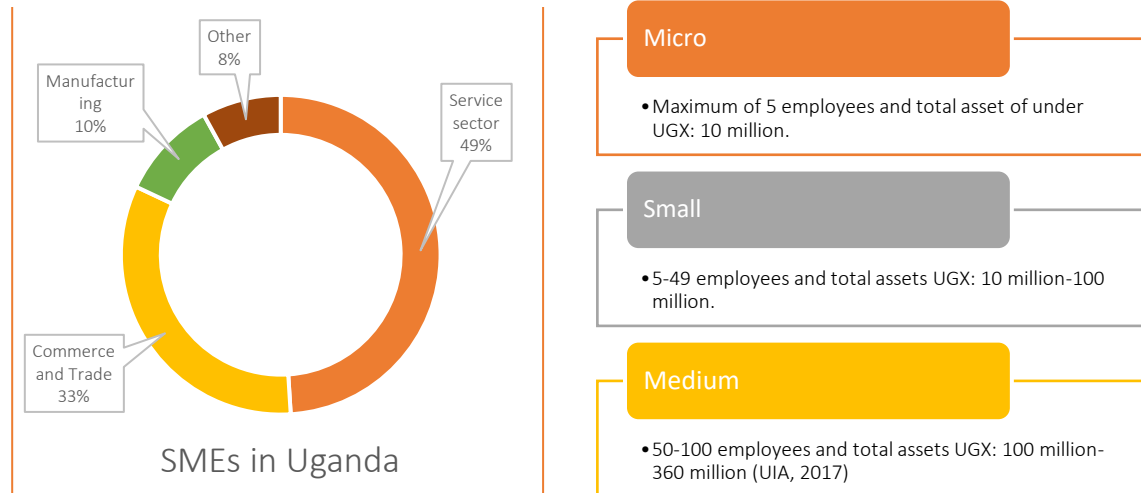
As previously mentioned, VET can be a form of non-formal education, and this study is looking to understand the best possible way a VET program can be applied, embedded in the bakery business. There are different methods to organize VET, explained in detail below.

A study by the Institute for Study of Labor (IZA) from Bonn, Germany looked into the three possible ways for the application of VET programs, distinguishing school-based, dual system and informal training modules.

- School-based VET: This constitutes trainings with “practice-oriented knowledge and skills required in specific occupations”. This type of application of VET includes the integration of formal education and occupation-specific knowledge. Developed countries can better find ways to finance these programs, and developing countries find more difficulties as poverty and lack of resources are the main challenges they face (Eichhorst, Rodríguez-Planas, Schmidl, Zimmermann, 2012).
- Dual Apprenticeship System: It is very important to find ways where the VET can work, one of which is using a dual system of VET. According to Eichhorst et al. (2012) it is through the collaboration of a “training company” that individuals are able not only to learn, but to possibly be employed by the same instructor, where the authors mention “apprenticeship graduates acquire occupation-specific skills that render them employable by the training company or other employers”. The added value in this type of models consists of how it might allow to fill the gap that individuals may have on previous school-based training systems or even consider those that might not even have previous training.
- Informal-Based VET: Distinguishing on the third possible way, (Eichhorst et al., 2012) brings out an important phenomena, specifically pointing out to African countries, where the case of “traditional or informal apprenticeship system” is mostly used, which consists of the complete informal system where “knowledge is transmitted between generations”. This constituted a series of effects in which the knowledge does not necessarily obey to formal previous education or work experience.

Situation of Small and Medium enterprises in Uganda

The Micro, Small, Medium, Enterprises (MSMEs) are the engine of growth for the economic development, innovation, wealth creation of Uganda. They are spread across all sectors, with 49% in the service sector, 33% in the commerce and trade, 10% in manufacturing, and 8% in other fields. More than 2.5 million are employed in SMEs, which account for nearly 90% of the private sector, generating 20% of the gross domestic product (GDP) (Uganda Investment Authority, 2017).



The MSMEs in Uganda are categorized based on the following criteria set by the Uganda Bureau of Statistics: number of employees, capital investment and annual turnover.

- Micro enterprises: Maximum of 5 employees and total asset of under UGX: 10 million.
- Small enterprises: 5-49 employees and total assets UGX: 10 million-100 million.
- Medium enterprise: 50-100 employees and total assets UGX: 100 million-360 million.

Although SMEs constitute a large part of the economy, up to 30% of the new businesses fail in the first year of their operations, and the number of SMEs decreased from 800,000 in 2001 to 25,000 in 2007 (Ishengoma and Kappel, 2011). The limited performance of SMEs have been associated with multiple factors, such as limited access to finance, high tax, inefficient government bureaucracy, low education and managerial skills and market access.

Nagler & Naude (2014) analyzed rural non-farm enterprises in Africa and found distance to markets, local infrastructure, rural isolation, and low population density, which increases the cost of production, to be the main challenges facing such enterprises. Rural non-farm enterprises, especially those located in the regions with a history of violent conflict, have been found less productive than urban ones, due to a greater risk and more prevalent market failures in rural areas. They are more likely to operate on a seasonal basis, which could imply that the farmers engage in non-farm activities during low seasons, as a consumption-smoothing strategy. This intermittent nature of the rural non-farm enterprises indicates their high likelihood of exit as well (Nagler & Naude, 2014).

A study by Eton, Mwirumubi & Edaku (2007), which looked into the challenges for commercial enterprises operating in the Lira District, based on the premise that these are drivers of economic growth, identified three main limitations that hinder business growth and result in high rates of business failures. First, and the foremost constraint was access to finance. The limited access to funding impedes the ability of the small businesses to make investment in infrastructure, personnel, resources for producing and marketing, an important factors for business success, especially for the initial stages (Eton, et al, 2007). Another limitation for business growth was lack of qualified personnel, which is crucial for operations efficiency and “long term sustainability”. The concept included management, human resources performance and training

programs, and again was an issue related to lack economic resources which could enable the enterprises to afford quality personnel (Eton et al., 2007). Third challenge was regarding “operational environment and regulations”. Issues such as “red tape”, high taxes, lack of infrastructure, and unstable political conditions and the conflict in the neighboring countries (Republic of South Sudan and Democratic Republic of Congo) and legislations which favored large firms were found to have negative effect on the development and growth of SMEs in the Lira region (Eton et al., 2007).

Social Enterprise as a Business Model

The main aim of establishing a bakery business is to foster economic and community development through employment generation among the local farmers. To maximize the social benefits of the business, we looked into the social enterprise model and how its different business principles might serve the project’s double goal of creating employment opportunities and contributing to social cohesion.

A social enterprise is defined as “any organization (not necessarily a non-profit one) providing goods or services primarily for their social or environmental benefits rather than to maximize profits for investors” (Chandler & Munday, 2017).

The concept highlights an important feature of social enterprises, which are mostly driven by “voluntary and community organizations” and look for common social benefits. Yet, this type of model need not detract the enterprises from the trading activities they pursue, which are as important as their social purpose. The main distinction to be made between a traditional business and a social enterprise are how the profit they generate are used for social/environmental purposes (Gerrell & Middleton, 2017).

For regions like Africa, there are circumstances of extreme poverty that might force a sense of innovation for social enterprise in order to ensure success on operations (Gupta, Beninger & Ganesh, page 97, 2015). The study of (Gupta et al., 2015) suggests that a model that aims for innovation is necessary, in the context of “widespread poverty, resource constraints and institutional voids”. The authors developed and proposed a model of “five capabilities” to achieve innovation in social enterprises:

- Comprehension: understanding of the environment (economical, political, individuals and local context)
- Creation: the creation of products and services (markets, distribution channels, supporting infrastructure).
- Connection: formal and informal partnerships (resources, managerial and technical, knowledge)
- Capability Building and Education: engagement in educational activities (consumers, beneficiaries and communities).
- Trust: the gained of confident by all (not having trust can difficult the activities of the enterprise) (Gupta et al., 2015)

The authors were careful to note that in the context of African countries, factors such as resources, culture, and politics can be an obstacle when developing this comprehensive approach. With that said, during

planning phase of social enterprise, developing a detailed business plan is essential, as it can provide a comprehensive understanding of resources needed (Gerrell et al., 2017).

Some of the main stages when establishing a social enterprise are: 1. motivation, 2. preparation, 3. assessment, 4. testing ideas, 5. exploration of viability, 6. business plan which may generally include success factors, organizational structure, capacity (suppliers, production, equipment, human resources, training), learning processes, market, industry, social purpose, social impact and financing. The stages culminate in stage 7, which is the start-up (Gerrell et al., 2017).

Furthermore, Ha Young (2017) argues that the model of social enterprise implies that people might have a perception of “social value” in it, which, according to the authors, brings positive results on “trust, reputation, and brand equity”. Related to this idea, if considering that funding or philanthropy can be used to help people set up normal businesses, the main difference that distinguishes a regular commercial business and a social enterprise is the mission it strives for, where “the fundamental purpose of social entrepreneurship is creating social value for the public good, whereas commercial entrepreneurship aims at creating profitable operations resulting in private gain.” (Austin, Stevenson and Wei-Skillern, 2006)

Implications for Setting up A Bakery

The concept and development of different kind of SMEs lean on the idea of attending market needs and opportunities. This opens up possibilities for various businesses and industries in which they can operate. The demand for better products and services, and innovative ideas to solve social problems, gave rise to the emergence of social enterprise models, outside and within Africa. The crucial point here is the demand, as it is important to determine that certain product or service has a potential market, to do research to find if the people might be willing to consume and pay for it, is a test to find if it is a good idea (Gerrell et al. (2017).

A living example of this model is “The Women’s Bakery” a type of social enterprise committed to developing a women-owned businesses. The bakery aims to attend the basic needs of people by offering a range of bakery products, contributing to the nutrition, health and well-being of the community. This is a successful model that couples vocational training for women with operational management support, which resulted in women managing the businesses and supplying food for their localities in Rwanda and Tanzania, with a series of social implications for themselves, their families and communities.

Data Collection and Methodology

The report utilized both primary and secondary research to gather necessary information and data for business analysis and the workforce development training program. The starting point of the secondary research was the review of the reports from the previous capstone teams which worked on the GLI and Cornell research partnership. These reports provided the background information on the situation of FCS in the Lira region and identified agricultural training program as a means to improve economic and

community development. As our research focus was to determine the viability of a bakery in the region to foster job creation, we reviewed select literature on SMEs in Uganda, social enterprises and VET.

Secondary Research

The previous phases of the project conducted interviews with the FCS, experts and relevant stakeholders and carried out quantitative and qualitative analysis on the data, to provide insight into the employment situation throughout the Lira region, and assess the risks and opportunities in agricultural training programs.

To assess the existing conditions for establishing a bakery in Lira region, and its potential to generate employment opportunities, the consulting team examined select literature on SMEs, social enterprises and workforce development. In particular, we examined the importance of and considerations in setting VET programs, the current situation of SME in Uganda and Lira region and explored social enterprise business models as a way to contribute to both the business and social objectives of the project.

Our analysis consulted variety of sources, both academic and non-academic. Utilizing library databases, and internet, we have identified relevant studies on social enterprise, SME in Uganda, and VET, and synthesized the most relevant sources to provide the basis of our primary research.

Furthermore, the team also conducted additional research on the types of non-formal VET schemes in Lira, complementing the analysis conducted by the phase II team of the GLI- Cornell research Partnership.

Primary Research

The analyses from the previous phases of the research concluded the need for employment and skills development for the FCS in their reintegration process, and recommended the establishment of community farmer groups and VET programs.

In the next phase of the project, the consulting team was assigned to look into the viability of a bakery business to generate employment and contribute to the reintegration of FCS to the society. Within this framework, to determine if such business with a social enterprise model can yield economic and social benefits, the consulting team carried out a series of interviews with experts, to identify the market demand and condition, required skills training for bakery employees, and the potential social impact of the project.

The interviews included conversation with professionals with expertise in managing VET Programs in Uganda or other East African countries, entrepreneurs who established similar business models, and other stakeholders who can provide insight into the business environment and market conditions, and potential social impact.

The experts we interviewed are as follows:

- **Alice Acan, the Director of CCF Pader Academy.** The interview with Alice focused on her experience working with local communities and vulnerable populations, including women and FCS, on conducting VET programs.
- **Markey Culver and Julie Greene, founders of Women's Bakery.** The interview with Markey and Julie Greene focused on their work with establishing social enterprise businesses in East African region,

Rwanda and Tanzania. They specifically develop the Bakery social enterprise model, leading the process of technical education and training to operations management guidance.

- **William Federer, Former Program Director of Mango Tree Uganda.** The interview with William focused on his experience and life time as a former program director for Mango Tree Uganda, who lived in Lira for 1.5 years. He provided information from the perspective of an expat, and presented a general overview of the community dynamics, local bakeries, and international community presence in Lira.
- **Jane Ekayu and David Kur’o, Director and Communication Officer of Children of Peace.** The interview with Jane focused on her experience as the Director of Children of Peace, an NGO in Lira, Uganda that works to rebuild the lives of children and youth who have returned from being in captivity with the LRA. She gave us her perspective as an expert with profound experience in post-conflict recovery, and a local resident of Lira, and provided critical insight into the local market and the community. Also, the David provided general market information for bakeries and training programs in Lira.

Through analysing the interviews, the consultant team strived to provide market analysis that identifies the needs and opportunities, potential target consumers (local residents, refugee camps, international agencies, schools, hospitals, stores and restaurants) and competitor businesses (number of bakeries), as well as identify suitable training programs and aspects that can make it successful. In addition, the interviews served as the data basis for analysing the supply chain that characterizes the availability of raw materials needed for a bakery business.

Main Findings

Interviews

Alice Acan, Director of Christian Counseling Fellowship (CCF) Pader Academy

Alice has been working with educational and vocational education training programs with the establishment of Educations Centers in Northern Uganda. She explained that the target group for educational programs at the organization is women, specifically because women are a disadvantaged group and generally require additional help as they are mainly single young mothers.

Based on her experience in working on these kind of programs, Alice highlighted that complementary services are necessary to get women to study. This relates to providing support in terms of child care facilities, because most of the students have children, so with these complimentary services provided, women can bring their children to school and leave them in daycare during classes.

Also, Alice explained that the vocational training programs CCF Pader Academy offers include catering and hospitality as main trainings. Specifically for the catering they learn how to cook and bake.

Another important aspect we found was the focus that these programs had on supporting girls that were in the war conflict of The Lord's Resistance Army (LRA), because situations like being forced to live on their own without any close relatives, experiencing sexual assault, getting married because of poverty, and the lack of opportunities to get education, surrounded them. These are some of the circumstances that justify the importance of helping this vulnerable group and could be an opportunity to reintegrate them into the mainstream society.

It was found that normally when creating projects an organization like CCF Pader Academy would conduct community assessments in order to understand the needs of the community. On the other hand the process to choose the candidates to do the programs, consists of working very closely with the police and with the District Community Services Department, because they know what the exact needs of the communities are and refer some cases to this organization. This is how this organization after making first points of contacts, follows up and does critical assessments to identify the exact problem at the homes of the referred women. Finally, they design the strategy of how to help these women, considering who wanted to go to school, who wanted to go to formal education and then who wanted to go for vocational studies.

Alice Acan, has also developed some projects related to Bakery business models. On this aspect, she gave a general overview of the process of setting up a bakery business. She shared that based on the market conditions, these types of bakeries are suitable for selling bread as people nowadays in Uganda buy a lot of bread. These revealed that a market for selling bread existed. This market was in part composed by presence of international community like the workers from UN. The idea was to train women to learn how to bake and sell that bread to them and the community members for personal consumption.

When developing training for bakery, the program normally targeted women because it was considered that girls are more vulnerable. This idea is based on the premise that girls, once they get pregnant do not get admissions into schools. However, a program focused on girls would help them gain education and contribute to their development.

Alice further explained how some cultural and economic circumstances lead to women being deprived of education. Due to the disproportionate economic power of men owing to their ownership of land and crops (eg. bananas, coffee, beans) especially in some regions of Northern Uganda like Kwoya, women are seen more fit for marriage while men get more education. Women meanwhile are left to tend to big families with many children.

A key point mentioned by Alice, is that based on her experience some characteristics of Lira as many other regions of Uganda, are problems of poverty and HIV.

One of the main takeaways from Alice's interview was her position on how important it is to maintain a balance between improving agriculture to provide food security and meeting educational needs, especially for women, because of the conditions they face.

An important point related to the balance between agriculture and education is that of the use of "positive agriculture" in the sense that it can be used to feed, integrate, and to meet other basic needs such as education. This could be a great area of opportunity to explore and work in.

Markey Culver and Julie Greene, Founders of Women's Bakery.

The capstone team had an interview with the founders of Women's Bakery - Markey Culver and Julie Greene. Markey and Julie established Women's Bakery, a social enterprise working for women's empowerment and women-owned enterprises through education and training in Rwanda and Tanzania. Women's Bakery provides a "Bakery in a Box" training package, where the women learn baking skills, and gain knowledge on the fundamentals of nutrition and business.

The capstone research team asked sets of questions on the market, operations, and financial as well as social impact related aspects of establishing a bakery. The Women's Bakery is established as a social business, and is supported by a non-profit in the US. The non-profit provides financial support to the training and bakery start-up costs, and once the bakery is in business, all profits generated thereafter go to the women who run it.

The main service provided by the Women's Bakery is the comprehensive training process, which takes about a year. After 3 months of initial training, the bakery launches and operates for 6-9 months under the supervision of the operations manager placed by the Women's Bakery, to ensure sustainability and profitability of the bakery. The initial training curriculum begins with basic education, life skills training on themes such as decision making, self-awareness and personal finance. The next phase of training is focused on teaching baking skills, nutrition essentials, and business skills which comprises marketing and sales, accounting and operations management. The bakeries vary in size: small bakeries consists of a staff of 7 to 8 people, while larger bakery employs 10 to 12 persons, for which at least one supervisor from the Women's Bakery co-manages the operations.

As their name suggests, Women's Bakery mostly works with women who are unemployed and not formally educated. Their target group occasionally includes men, depending on their particular circumstances. Their policy is to train a cohort of people, of which 75% are women, usually chosen through a partnership with local or international NGOs.

As practitioners with several years of experience working in East African countries, Markey and Julie provided important insights on the markets. In Rwanda, the baked good most in demand is "amandazi" - an inexpensive local donut, which is consumed in great quantity. There is a greater emphasis on quantity over quality, as the customers generally prefer affordable and filling options. Their products are sold in their own bakery, in grocery stores, and also supplied to local schools. Yet, one important characteristic of the Women's Bakery's operations is that their main site is in Kigali, which is a rather sophisticated market. It is an urban area with a high population density. Markey and Julie pointed out that while the urban setting of the Women's Bakery market may be different from many other markets within and across the country, there could be a fair level of similarities in operations, market needs and management facilitating drawing of useful parallels and lessons for our project.

In terms of the budgets, the "Bakery in a Box" training package budget is approximately 48,000 USD for Rwanda, including the training fee and other costs associated with opening the bakery such as the materials, start-up, and infrastructure costs and the management fee. 30% or 15,000 USD of this budget is the initial training fee, which takes at least 3 months to complete. The remaining costs are materials and

start-up costs, including tools, equipment, and furnishings for the bakery, which is estimated to be around 25,000 USD; project management fee of 6200 USD, and infrastructure related expense of approximately 1200 USD. More details on cost breakdown and cash flow projection can be found in the budget document provided by the leadership team at the Women's Bakery.

Another crucial takeaway from our meeting was how the Women's Bakery really focuses on creating a social impact through their project. This was evident from the way they approach social impact. The commitment towards creating a social impact is embedded in their mission and vision, their business model, and monitoring and evaluation systems. For measuring social impact, they have a team of experts who have designed an impact evaluation framework. They determined that for their usual projects, the social return on investment was four times higher.

When it comes to risks and opportunities related to establishing a new business and training people, Markey and Julie finally noted that there can be various unexpected challenges in setting up the project, but the most important thing is to understand that setting up a business is a continuous process, which requires a certain degree of flexibility.

Jane Ekayu, Director of Children of Peace

Jane Ekayu is the Director of Children of Peace, an NGO in Lira, Uganda that works to rebuild the lives of children and youth who have returned from being in captivity with the LRA. As an expert with extensive experience in post-conflict recovery, and a local resident of Lira, Jane provided critical insights into the local market and the community.

One of the main takeaways from our conversation was that there is a potential for the bakery project, as many of the baked goods in Lira are supplied from the neighboring cities or Kampala, and the local bakeries are not meeting the current demand.

There are two well-known bakeries, which are usually full with customers. One of them is called Daily Bread, a bakery which specializes in ordinary white bread, while the other one is a smaller one, which makes and sells cakes. Jane noted that in order to compete with these two bakeries and other similar business, the new bakery should have an excellent quality in their products, or offer different types of products. In terms of product placement, Jane explained that the bakeries mostly sell their products at their own shops, and do not supply to schools or hospital. She further suggested we explore other opportunities, such as supplying to hotels and guest houses in town. Jane clarified that while there's no refugee camp in Lira, there are many camps in the surrounding district around the border, the closest of which is located 4 hours away from Lira.

Jane believes that while there might be locals who received previous vocational education in baking and other skills, they need further training as they had limited chance to practice what they learned. She also noted that while the trainings should be organized in a place that's close to the community, it needs to be considered that most villages don't have electricity, an essential requirement for a baking workshop to take place.

Jane also noted that when considering FCS for the training programs, their mental health needs to be considered, as this is a vital aspect that facilitates reintegration.

David Kur'o, Communications Officer Children of Peace

The capstone team also had the opportunity to obtain additional information on some aspects of the market through written correspondence with David Kur'o, who is the current Communications Officer of Children of Peace. We explored aspects related to demographics and marketing, including products, price, placement and partnership, and also some other important factors to consider in the workforce development training program.

Diet of people in Uganda: The population of Uganda is not homogeneous and therefore each grouping has its own diet, yet a common categorization can be made:

- Carbohydrates and fibre – potatoes, cassava, corn (maize flour – posho), yams, millet, sorghum
- Proteins – (animal) – beef/meat, fish, milk, eggs, chicken; (plant) – cereals generally e.g. beans
- Fats – oils
- Vitamins and minerals – fresh vegetables and salt.
- But largely across board the mostly consumed foods are: potatoes, cassava, corn, yams, millet, sorghum, beef, fish, milk, eggs, chicken, beans, vegetables, oils, salt as well as pastries and breads.

David also pointed out that the diet has been increasingly changing to include various food types. Bakery products are commonly consumed nowadays, as they are sold in markets and grocery stores in Lira. He argues that the fact that baked products are sold out at stores indicates the substantial demand for the good. He further elaborated that breads are sold faster in small quantities at an affordable price, perhaps indicating the purchasing power of the local population.

Discussing the options for target market, David affirmed the possibility of partnering with NGOs working with the refugee populations, and the local boarding schools which provide meals for children.

As an expert working with an organization with notable experience in providing skills training for FCS, David provided important points to consider in establishing the training program. In the case of Children of Peace, the types of training they implement in similar situations included management and technical skills trainings. They train the participants in managing the bakery environment, hygiene standards, operating the equipment, and making various baked products, while paying particular attention to nutritional value of each ingredient used.

In addition, David noted that based on the experiences of Children of Peace, the bakery training should be a minimum of three months, depending on the type of baking skills and other necessary knowledge one wants to acquire. He notes that an ideal training should be given at a formal training institution, as bakers need to acquire theoretical and practical knowledge on nutrition and food safety, yet more apprentice type of trainings also work, depending on the context. An estimated cost for these trainings will be approximately USD 450 per person during this period, which includes the materials and transportation costs. For cost effectiveness and other reasons, the training needs to be organized close to the participants'

communities, and while training supplies can mostly be obtained locally, equipment are usually brought from Kampala.

Both David and Jane noted that the bakery business model can support the reintegration process of the FCS, through increasing employment opportunities for them. He also affirmed Jane's position on incorporating mental health aspect to the bakery trainings, as well as to involve relatives of the FCS, so as to facilitate the reintegration process.

William Federer, Former Program Director of Mango Tree Uganda

The capstone team conducted an interview with William Federer, a former program director for Mango Tree Uganda, who lived in Lira for 1.5 years. William provided valuable information from the perspective of an expat, and presented a general overview of the community dynamics, local bakeries, and international community presence in Lira.

William explained that many businesses in Lira are distinguished by its management and ownership by Indians, who bring various imported goods and products to the region. Also, he noted access to electricity and internet services as common challenge.

When characterizing the market, one of his main reflections was that in Lira, there are only few places to buy food. Bakery products can be found mainly in three bakeries, which are Sankofa, Daily Bread Bakery and Path Center Cafe, whose products include white bread (very sweet), muffins, and donuts. Such bakery products are also sold in supermarkets and corner stores as well. The following are a range of prices for mainly bakery products found in Lira according to William:

- Muffin - 1000-1500 ugx
- Donut - 1000-1500 ugx
- White bread - 4000 ugx
- Chapati - 500 ugx
- Omelette (roll egg) in the chapati - 1000 ugx
- A meal at local restaurant - 4000-5000 ugx
- Western fast food at Sankofa cafe - 12,000 - 15,000 ugx

William advised that while the idea of bakery with a social mission is not new, as Sankofa is based on a similar idea, differentiation for quality and variety of products might be the key to compete and gain market.

Finally, William elaborated on the presence of NGOs in Lira, which have increased over the years, helping boost the economic activity in the city. Some of these organizations include GIZ, Mango Tree Uganda, ChildFund, WarChild Holland, Children of Hope, Peace Corps, some missionaries and the Korea International Cooperation Agency (KOICA). Yet he noted that, due to its limited infrastructure, more and more organizations are now moving their offices Gulu.

Costs Related to Setting up The Bakery and the Training Program

The consultant team attempted to provide an overview of estimated costs in Ugandan Shillings (UGX) for the setup of a bakery and accompanied training program, based on the program budget of the Women's Bakery, which considers training program of up to 20 individuals. Information over prices of materials and resources needed to start the bakery and the training (see tables 1-3 below) were acquired from the perspective of GLI team at Uganda and by Children of Peace staff, who approximate the cost to be 13,056,500 UGX (\$3,528.78) and 10,824,500 UGX (\$2,925.54) respectively.

The following are considerations that need to be taken into account when looking at the costs:

- All the information was based on the approximation of the cost of living in Uganda.
- The costs approximate one-time cost. For example, the salaries are estimated on a monthly basis for one person.
- The costs of the training do not include training fees that might be charged by the organization providing the training.
- Abbreviation for Children of Peace (COP) is made.
- Dollar section was added to help understand the costs easier to international audience, with the exchange rate 1 USD = 3700 UGX.

GLI team, Kampala, Uganda

Considerations made by the time on estimating costs:

- Estimates are based off the Kampala prices, Lira prices will be higher than the Kampala ones, but this still a good estimation.
- For items like tiles, water and electricity it was difficult to estimate costs since the size of the room is not known.
- For salaries section, the wages are paid on a monthly basis and are shown as a one-time cost for one person.
- For the baking ingredients section, the cost of kilograms for solid items and cost of liters for liquid items are presented.
- Baking ingredients costs are based on single measures of units. The amount needed will be determined depending on the program.

Children of Peace, Lira, Uganda

Considerations made by the time on estimating costs:

- Electricity, water and sink installation depends on the premises. Some have electricity fixed as well as water but payments has to be done as billed by the service provider.
- It is only on a new premise (house) where installations are necessary.
- The calculations were given by two different professionals.

MATERIALS & START-UP COSTS		
Materials	GLI	COP
Pots, Trays, Baking utensils	500,000	1,000,000
3 Working tables	300,000	750,000
3 Storage bookshelves	250,000	900,000
1 locking cabinet for baking materials	300,000	500,000
4 chairs	150,000	200,000
2 small tables	100,000	300,000
1 Dishdrying rack	100,000	50,000
Marketing Materials	150,000	
Office Supplies	100,000	
Opening bank account	100,000	100,000
Business Registration	2,000,000	500,000
Total	4,050,000	4,300,000
INFRASTRUCTURE COSTS		
Aspect	GLI	COP
Water Installation	1,500,000	
Electricity Installation	2,000,000	
Sink intallation	400,000	
Transport of materials	500,000	1,000,000
Tile	3,000,000	2,000,000
Total	7,400,000	3,000,000
SALARIES COSTS		
Aspect	GLI	COP
Salaries of the bakery employee (month	500,000	1,200,000
Salaries of a trainer (monthly basis)	800,000	1,800,000
Total	1,300,000	3,000,000
TOTAL SHILLINGS	12,750,000	10,300,000
TOTAL USD	3,445.95	2,783.78

Table 1

BAKING INGREDIENTS COSTS	
Ingredients	Cost/ kilo/ litre
Wheat Flour	5,000
Peanut Flour	6,000
Soy Flour	7,000
Baking Soda	5,000
Tea Masala	5,000
Salt	8,000
Yeast	8,500
Bananas	4,000
Carrots	10,000
Beets	15,000
Pumpkin, cooked	6,000
Cooking oil	10,000
Milk	3,000
Water	2,000
Honey	30,000
Icing Sugar	20,000
Sugar	7,000
Eggs	10,000
Citric Acid	25,000
Oats	30,000
Coffee	20,000
Tea	15,000
Peanut Butter	20,000
Raw Ginger	10,000
Peanuts, whole	25,000
TOTAL SHILLINGS	306,500
TOTAL USD	82.84

Table 2

BAKING INGREDIENTS COSTS		
Ingredients	Metric Units per Package (grams)	Cost per Package
Wheat Flour	24kg	72,000
Peanut Flour	1kg	5,000
Soy Flour	1kg	6,000
Baking Soda	1kg	10,000
Tea Masala		
Salt	1kg	2,000
Yeast (instant)		98,000
Bananas	a cluster	5,000
Carrots	1kg	2,000
Beets		8,000
Pumpkin, cooked	a piece	5,000
Cooking oil	a litre	7,000
Milk (fresh)	a litre	2,000
Water	20 litres	500
Honey	1kg	14,000
Icing Sugar		100,000
Sugar		95,000
Eggs	1 tray	12,000
Citric Acid	l litre	20,000
Oats	1kg	10,000
Coffee	500g	12,000
Tea	500	12,000
Peanut Butter	1kg	10,000
Raw Ginger	1kg	12,000
Peanuts, whole	1kg	5,000
TOTAL SHILLINGS		524,500
TOTAL USD		141.76

Table 3

Additional secondary research

Refugee camps in Uganda

Multiple stakeholders in the project pointed out to the potential of the bakery business partnering with the refugee camps, supplying bakery products to the camps directly or to the markets operating nearby the camps. In this respect, the team conducted additional secondary research to examine food demand within refugee camps near Lira using online resources.

Uganda is host to world's third largest refugee population (WFP, 2017). The current refugee influx into Uganda is mainly driven by the conflict in South Sudan, with over 1 million Sudanese seeking asylum in the country, followed by refugees from the Democratic Republic of Congo and the Burundi (WFP, 2017). The Government of Uganda, with the support from United Nations and World Bank, is providing resettlement assistance to the refugees, supplemented by the support from various international and local NGOs. The primary agency responsible for providing the overall coordination structure, program and project implementation in response to refugee needs in Uganda is the Office of the Prime Minister (OPM) – Department for Refugees, supported by the UN Refugee Agency. Together with their local and international partners, they provide basic needs assistance including food, shelter and protection, as well as livelihood, education, health, water and sanitation support. UNHCR lists around 40 organizations, including various other UN agencies, local and international non-government organizations, as partners working on the South Sudan refugee crisis in their report, of which Uganda hosts the most refugees (UNHCR, 2017).

Refugees coming to Uganda have freedom of movement, the right to work, own business and property, and access to public education and health services, making Uganda one of countries with most favourable environment for refugees in the world (UNHCR, 2017). This has been made possible through the Ugandan government's innovative approach of integrating refugee management and protection into their Second National Development Plan (NDP II) through the Settlement Transformative Agenda (STA). The STA aims to sustainably support the refugees through enhancing socio-economic development in the refugee hosting areas (UNHCR, 2017). In Uganda, 90 percent of incoming refugees are hosted in a settlement within a refugee hosting districts, a scheme which enables refugees to live independently and with dignity. These settlements include Bidibidi, Kyaka II, Nakivale, Oruchinga, Kyangwali, Kiryandongo, Paralonya, Rhino Camp, and the integrated camps of Adjumani (UNHCR, 2017).

While there is a noteworthy focus on long term aspects, addressing the immediate needs of refugees such as food and shelter constitute crucial part of the assistance provided by the UN and the partner agencies.

In total, around 700,000 South Sudanese refugees received food assistance from the UN Refugee Agency, of which 650,000 were reached through in-kind assistance, while the remaining 50,000 received cash assistance (UNHCR, 2017). In 2016, the agency spent 4.5 million USD on nutrition and food security programs to assist the refugees in Uganda, and projected to spend 5.2 million USD in 2017 (UNHCR, 2017).

Also, UN World Food program, the organization currently focuses its operations for two target populations in Uganda: refugees and severely food insecure populations in the Karamoja region, through providing food assistance in the form of food and cash-based transfers, treatment and prevention of malnutrition;

prevention of stunting and addressing micronutrient deficiencies through mother-and-child health and nutrition (MCHN) programs; and asset creation and rehabilitation schemes (WFP, 2017).

Within this framework, WFP trains local farmers in agricultural marketing, including collective marketing, farming as a business and how to do business with WFP, and awards contracts to the selected small scale farmer groups to supply maize grain to the organization, supporting the farmers improve their income. Currently the WFP has 29 small scale farmers shortlisted in their vendor list. The program's assistance reaches over 1.3 million people in Uganda, of which 1.2 million are refugees (WFP, 2017). Yet, due to the increasing number of refugees, the operation requires additional funding to meet the need, which is currently short of 51.2 million for the next six months (October 2017 - March 2018) (WFP, 2017).

As for businesses interested in doing business with UN WFP, the qualifications to enter into the roster include the following:

- Legal capacity to enter into a contract with the United Nations.
- Proven financial capacity (annual turnover of a minimum USD 5,000,000).
- Proven ability to perform (supported by reference letters from reputable clients).
- Minimum three years of experience in the production and trading of commodities of interest to WFP.
- Experience and licenses to operate as a commodity exporter (WFP, 2017).

The Program mostly aims to procure the commodities such as cereals, pulses (including chickpeas, split peas, beans, lentils, and green peas), vegetable oil, sugar, salt, rice, bulgur wheat, wheat flour, yeast, and, pre-packed food rations (WFP, 2017).

All in all, the information we found through online search indicates significant food and nutrition needs among refugee populations, where several UN agencies and international organizations are working together. The food assistance through cash transfer enables refugees to buy the food they need at markets, enabling opportunity to supply baked products through the local market to meet the refugees' needs.

Vocational Training in Uganda

As part of the strategies to aim for reintegration of FCS to society, previous phases have noted the importance of vocational training as a strategy for reintegration. The phase II of the research identified in Uganda the existence of twelve programs that target "social vulnerable classes", a category which characterizes the FCS; and 48 programs that target people who have general level of education and can receive support from their families (Kim, et al., 2016).

It is also important to contextualize how such services are offered in Uganda, as our literature review concludes how such vocational training program don't obey to market need for the non-formal sector. According to UNESCO (2014), in Uganda, informal sector lacks training programs, even though a great percentage of the employment occurs in it. This situation has been already recognized by the Government

of Uganda, which is now trying to direct their efforts to programs to informal sector, and include it as part of the whole training system the country already has (which includes formal education).

- In Uganda, a high number of Technical Vocational Education Training (TVET) programs exist. According to data collected in 2014, private providers of TVET programs have a strong representation in the market, constituting approximately 81% percent of the VET program providers, including the government-run programs. (Approximately 1000 institutions).
- The Ugandan Government has established a set of organizations to support TVET programs, such as the Uganda Association of Private Vocational Institutions (UGAPRIVI) in 2000, that defines itself as a “an umbrella organization for Private Vocational Training Institutions” with eight regional offices. Their main goal is to bridge institutions and establish standards to meet labor market needs.
- According to (UGAPRIVI, 2017), in Northern Uganda there are approximately 112 institutions providing TVET services, with one regional office in Lira. Appendix I shows the list of these private providers.

Analysis

SMEs

While SMEs are the driving force in the Ugandan economy, they face significant challenges, especially the ones located in rural areas and region with history of violent conflicts. Although Lira is technically considered a city, with its low population, and distance major urban areas, it has the characteristics of a rural area, and the common challenges faced by rural enterprises therefore would be applicable to the bakery social enterprise. As mentioned in the findings, these include lack of access to finance, lack of qualified personnel, and operational environment and regulations. In the case of the bakery project, the first two barriers are somehow been resolved through the potential seed funding and the workforce training program by the GLI. Having said that, there are still various barriers to the success of the bakery, one of which is access to market. As proposed by GLI, the team has looked into the possibility of working with refugee camps, supplying baked products to the refugee population. Yet their distance to Lira, of which the closest is 4-hours’ drive away, presents a substantial barrier in distribution. On another note, having a support from GLI will be a major advantage for any small business, as two major challenges faced by small enterprises - finance and human resources - will be addressed through the utilization of the social enterprise business project.

Market Analysis

For the bakery project to create a social impact, it is essential that the business itself is successful in its operations. Business success hinges on various factors, such as its resources, both human and capital, a great part of it depends on whether there is a market demand for their product. In the case of the bakery,

in order to generate employment for the locals, including the FCS, the business itself needs to be profitable and sustainable.

The findings from our research shows positive signs of potential demand for the bakery. While traditional Ugandan diet does not contain bakery goods, Ugandans are increasingly consuming breads and other similar products in their diet, as demonstrated by the number of bakeries in the Lira city alone and the market they have. While there are several international NGOs that exist in the city, the number of expats is quite low. In this context, it seems wiser to identify local Ugandans as the bakery's target market, and make products based on their taste and needs.

Another potential option for target market is the refugee camps in Northern Uganda. There are currently approximately 10 refugee settlements along the border between the South Sudan and Uganda, where UN Refugee Agency operates. In addition to UNHCR, UN World Food program (WFP, 2017) also provides food assistance to refugee camps as well as severely food insecure region of Karamoja. The fact that WFP works with smallholder farmers in the region presents substantial market opportunity for the bakery. Yet, the procurement process is embedded within their comprehensive food security and livelihood program, as they purchase from the farmers who received specialized training on marketing and doing business with WFP.

The target market could also be extended to include local hotels, guesthouses, even school and hospitals, as in Rwanda, Women's Bakery supplies their products to local schools as well. A field survey and meeting with the potential customers will be essential to better identify the opportunity.

As for the competition, there are currently at least two well-known bakery/cafes in the Lira city, which produces various types of baked goods such as bread, muffin and chapati. As suggested by William (Former Program Director of Mango Tree Uganda), one of our interviewees, Sankofa is a cafe that was established with similar principles. The existence such competition implies that GLI needs to be very strategic in their decision in establishing the bakery, as they need to either focus on product differentiation, offering unique or quality products, or target a different market than the current cafes and bakeries in Lira do. Another approach could be to offer the most affordable products for the locals as suggested by the owners of Women's Bakery, as their similar strategy in Rwanda worked well in the market.

Based on the information provided by our interviewees, the price of various baked goods in Lira range from 1000 UGX to 4000 UGX (0.28~1.10 USD), making an estimated 20-35% net profit at this price. Depending on the target market and products offered, the bakery could pursue a similar pricing strategy, or a lower price strategy with a focus on quantity, and even a price strategy for refugee camps. In addition, as the products from various bakeries in Lira are sold both at the cafes, and at grocery stores, the bakery could pursue a multiple distribution channels. On another note, when it comes to partnering with the refugee camps, as mentioned earlier, the distance to the market is another barrier in product distribution, as the underlying infrastructure is not well developed.

Training Program

Primary and secondary research analysis indicates that Vocational Education Training (VET) Programs are common in Uganda. For the specific case of training the Lira locals for working at the bakery, our analysis suggests that a non-formal VET program can be a good fit, as the model aims to work in part with FCS, which previous I, II, III Capstone Phases characterized as a group with lack of formal education who urgently needs skills training in order to earn livelihood.

Furthermore, our findings indicate that the training should have different components, teaching not only baking skills, but also some basic education in numeracy and literacy, and fundamentals of nutrition and business to the bakery workers. Additionally, for the bakery to be sustainable and locally run, few selected staff needs to be trained at least for a year for the management position. In the case of Women's Bakery, an operations manager placed by them guides the future managers until they are ready to take on the business. This model is a good fit for GLI's bakery business, as the model aims to transfer the business to the local ownership when they reach self-sustainability, both in terms of human resources and business operations.

The analysis of interview narratives also revealed that many VET are targeted towards women, both in Uganda and several other Sub-Saharan countries such as Rwanda and Tanzania. This was because of several reasons, such as the gender norms in those countries which leave many women to stay uneducated, tending to domestic work. As such, the programs prioritized improving educational opportunities for women.

Therefore, in creating the training program, although most of FCS are men, the training participants should be a proper mix of men and women, taking into the consideration of gender aspects, and FCS and community members who are non-FCS, so that the training program can both contribute to the reintegration efforts and the community development efforts, which are interconnected.

As for the resources needed for running the VET program, energy and telecommunications infrastructure limitations present a challenge, as the nature of training will require electricity for operating the bakery equipment (oven etc.) at some point. Furthermore, in terms ingredients supply for the production and the training, main supplies such as flour and egg can be found in the local market, yet the supply is not secure, and some special ingredients, as well as various kitchen tools and equipment also need to be purchased from the capital city of Kampala. Also, complementary services as transportation and child care facilities will be needed, to enable and encourage the trainees to participate and engage fully in the training.

Estimates of costs were based on the information provided by GLI team in Uganda and personnel from Children of Peace, providing a general perception of how much things cost in Uganda. Further research is necessary in terms of better estimating the VET program training fees and complementary services, all of which will depend on the number of trainees and the type of services offered by the service provider.

Case studies of VET programs on Bakery

When considering VET programs, analysis shows that mostly non-profit organizations provide such trainings in Uganda, and sub-Saharan Africa in general.

- CCF Pader Academy provides educational and complementary VET programs, mostly in Northern Uganda and recently in Kwoya. They focus on education for young women, including single mothers, and try to bring FCS women. Catering and hospitality skills are offered as main trainings, teaching the girls how to cook, and bake. The impact of CCF Pader Academy on these women were significant, as their interventions helped change the course of their lives, which, in most cases, would have resulted in forced marriage or destitute due to their limited livelihood opportunities due to lack of education.
- Children of Peace provides support to children and youth who are victims of the conflict to integrate to society. Currently they train this target group on various support programs, including the bakery trainings. The offered trainings tend to take place close to main communities, to facilitate the attendance.
- Women’s Bakery is a social enterprise, with projects in Rwanda and Tanzania. The model focuses on training women through a program named “Bakery in a Box” which includes training package, where the women learn baking skills, and gain knowledge on the fundamentals of nutrition and business operations.
- Furthermore, the idea of a Bakery Business Model aims to act as a social enterprise, which means that the training needs to incorporate not only baking and nutrition skills, but also basic education and life skills, including but not limited to decision making, self-awareness and personal finance skills. In other words, the social mission of the business needs to be prioritized along with the business goal of the bakery.

Social impact of the Bakery Business Model

Evidence from similar projects points that the education received over an occupation brings better possibility to improve the life conditions to individuals, as job opportunities increase and lead to socio-economic benefits.

Furthermore, as the interviewees agreed, the bakery in the form of social enterprise with an embedded not only improves skills and provides job opportunities, but also could create a space for FCS to interact with community members, facilitating the process for reintegration. To maximize the results, an additional guidance and counseling services could prove to be success factor, as they also addresses the healing process of traumatic personal experiences.

Recommendations

Based on the findings and analysis above, the consultant team recommends GLI to adopt following recommendations in their efforts to support the reintegration process of FCS:

SME

- Due to the barriers faced by SMEs in Uganda, we recommend GLI to provide initial seed funding for the bakery project, at least one year, until it reaches self-sustainability, so as to minimize its failure risk.

Business model:

- Social enterprise business models have been shown to have high potential to create social impact based on our analysis. Therefore, we recommend GLI to adopt social enterprise model in establishing the bakery, ensuring that the employees are provided higher than average market salary and other benefits, that can help improve their mental and socio-economic well-being.
- We recommend for the social enterprise to be Ugandan run. Yet, recognizing the lack of local capacity, we recommend GLI and its partners not only co-manage the business for a period of at least a year, but also train the future managers of the business until they are ready to take the operations.
- To better evaluate community needs and business opportunities and challenges, GLI and its partners need to conduct community assessment, not only to further understand the market, but also to evaluate if the local community, especially the FCS are willing to participate in the bakery project. In other words, to ensure the success of the business, stakeholder consultation is needed.
- In terms of budgeting, we recommend GLI and its partners to utilize the information we collected on the prices of materials, resources and wages to properly estimate a formal budget for the project. The budget will depend on a set of factors, such as the number of trainees, the complementary services and the trainer fees.

Marketing strategy

- The qualitative market analysis showed that the bakery business model social enterprise might be a viable idea, in terms of revenue generation and job creation. Based on the qualitative research analysis, we recommend two marketing strategy options below:
 - Target the general local population, specializing in affordable yet nutritious products.
 - Target the refugee camps, specializing in high quantity productions.

However, due to the study limitations, we recommend conducting further field market research to better understand the market segmentation and define price strategy.

- The analysis indicate that there is a potential for product supply to the refugee camps, a partnership which could have significant implications for the bakery’s success and sustainability. In the case of UN organizations such as UNHCR and WFP, the procurement process might complicate potential partnerships, and thus we recommend GLI to pursue partnership opportunities with international and local NGOs providing assistance to the refugees.

Training program

- The Vocational Education Training (VET) Program needs to be a part of the establishment of the Bakery business, to ensure that the activities promoting reintegration process of FCS is embedded into the business operations. This is why we recommend to GLI to carefully evaluate the possibility to make partnerships to set up this project. For that, GLI needs to consider partners with experience in bakery training and social businesses, as well as a partner that has experience in working with FCS who has the context knowledge and capacity to provide specialized support. Based on this, it is recommended to consider Women’s Bakery and Children of Peace as potential partners as both meet expectations for VETs providers for this specific project.
- A common pattern found in similar vocational training programs suggest that this type of training is mainly oriented toward women. With the assumption that most FCS are men, we recommend GLI to carefully look into gender aspect, as well as the inclusion of both FCS and non FCS in order to create a proper mix of participants to support the reintegration process. For this, we recommend seeking further guidance of partners and stakeholders.
- We also recommend to consider additional complementary services to the training program, such as giving guidance and counseling that involves psychological support, providing child care facilities, transportation and other needs that may rise during the setup process of the VET program. In addition, we recommend to take a long-term approach and consider the future needs once the training is over, such as using the businesses profits to provide complementary services like means of transportation such as bicycles. Furthermore, food and stipend for participation should also be considered, to encourage and incentivize the FCS and the locals to join and actively engage in the training.
- The project cost estimation was based on the information provided by GLI and Children of Peace personnel. As such, we recommend GLI to seek detailed budget proposals from their partners, if they decide to pursue partnership with other NGOs and business entities.

Conclusion

Based on the primary and secondary research, the consultant team concludes that there is a good potential for establishing a successful bakery business in Lira, Uganda, with the aim to improve the socio-economic conditions of the local community, including the FCS.

With GLI's support, several barriers that hinder SME success can be overcome, which, coupled with the market demand for bakery products, can facilitate the bakery's business success. With the evidence provided by Women's Bakery in Rwanda, we conclude that the business success can be translated to social benefits for the locals, and contribute to the reintegration process of FCS.

On the other hand, due to the limitations of the study, which was conducted remotely from Ithaca without any field work, the consultant team recommends conducting further field market research to understand the market segmentation and define price strategy. Also, by the same reason, while the exact budget for the setting up the business and the accompanying training was not proposed in detail, based on the case study of Women's Bakery, we conclude that the budget for one year period will approximately be the same as the case of Rwanda.

Moreover, we want to reiterate that the bakery business should be seen as a part of holistic approach to support the reintegration process of FCS into society, and the strategies recommended by the previous consultant teams should be further explored to maximize the impact of the interventions.

References

- Austin, J., Stevenson, H. and Wei-Skillern, J. (2006), Social and Commercial Entrepreneurship: Same, Different, or Both? *Entrepreneurship Theory and Practice*, 30: 1–22. doi:10.1111/j.1540-6520.2006.00107.x
- Blaak, M., Openjuru, G. L., & Zeelen, J. (2013). Non-formal vocational education in Uganda: Practical empowerment through a workable alternative. *International Journal of Educational Development*, 33(1), 88-97.
- Chandler, D., & Munday, R. social enterprise. (2017). In *A Dictionary of Social Media*. : Oxford University Press. Retrieved 24 Sep. 2017, from <http://www.oxfordreference.com/view/10.1093/acref/9780191803093.001.0001/acref-9780191803093-e-1390>.
- Chen, Reeves & Tezuka. (2017). *Connecting Communities through Reintegration: Agricultural Vocational Opportunities in Lira, Uganda*.
- Eichhorst W, Rodríguez-Planas N, Schmidl R, Zimmermann KF (2012). A roadmap to vocational education and training systems around the world. IZA Discussion Paper, No. 7110 <http://ftp.iza.org/dp7110.pdf>
- Eton, M., Mwirumubi, R., & Edaku, C. (2017). Challenges faced by development partners in supporting the growth and development of commercial enterprises in Lira district, northern Uganda. *Journal of Education and Practice*, 8(11), 88.
- Gerrell, S. Middleton, B. (2017). A business planning guide to developing a social enterprise. Retrieved 24 Sep. 2017, from http://www.forthsectordevelopment.org.uk/documents/New_BusPlanGuide.pdf
- Gupta, S., Beninger, S., & Ganesh, J. (2015). A hybrid approach to innovation by social enterprises:

- Lessons from Africa. *Social Enterprise Journal*, 11(1), 89-112. Retrieved from <https://search.proquest-com.proxy.library.cornell.edu/docview/1674417304?accountid=10267>
- Ha Young, K. (2017). Customer's Social Value Perception and Enterprise's Sustainability: Focus on Social Enterprise. *Journal Of Marketing Thought*, 4(2), 71-77. doi:10.15577/jmt.2017.04.02.6
- Kim, J., Song, Y., Toregeldin, C., & Veglucci, M. (2016). Making the Most of Reintegration: Partnering with Former Child Soldiers in Lira, Uganda. Cornell University.
- Ishengoma, E. K., & Kappel, R. (2011). Business Environment and Growth Potential of Micro and Small Manufacturing Enterprises in Uganda. *African Development Review/Revue Africaine De Developpement*, 23(3), 352-365.
- Nagler, Paula; Naude, Wim. 2014. Non-farm enterprises in rural Africa: new empirical evidence. Policy Research working paper; no. WPS 7066. Washington, DC: World Bank Group.
- Tukundane, C., Minnaert, A., Zeelen, J., & Kanyandago, P. (2015). Building vocational skills for marginalised youth in Uganda: A SWOT analysis of four training programmes. *International Journal of Educational Development*, 40, 134-144.
- Uganda Investment Authority. (2017). SMEs Driving the Economy. Retrieved from <https://www.ugandainvest.go.ug/smes-driving-economy/>
- UNESCO International Centre for Technical and Vocational Education and Training (UNEVOC). (2014). World TVET Database Uganda. Retrieved from: http://www.unevoc.unesco.org/wtdb/worldtvtdatabase_uga_en.pdf
- UGANDA ASSOCIATION OF PRIVATE VOCATIONAL INSTITUTIONS (UGAPRIVI). (2017). UGAPRIVI Institutions. Retrieved from: <https://www.ugapriv.org/members/#1469598289750-cc277bfa3f73>
- World Food Programme. (2017). Doing Business with the United Nations World Food Programme. International Food Procurement. Retrieved from http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp236434.pdf?_ga=2.221021400.1348960868.1513008526-496287364.1513008526
- World Food Programme. (2017). Uganda. Retrieved from <http://www1.wfp.org/countries/uganda>
- World Food Programme. (2017). WFP Uganda Country Brief. Retrieved from http://documents.wfp.org/stellent/groups/public/documents/ep/wfp272249.pdf?_ga=1.13185631.1799879439.1481286284
- United Nations High Commissioner for Refugees. (2017). Uganda. Retrieved from <http://reporting.unhcr.org/node/5129?y=2017#year>
- United Nations High Commissioner for Refugees. (2017). SOUTH SUDAN REGIONAL REFUGEE RESPONSE PLAN - REVISED January – December 2017. Retrieved from http://reporting.unhcr.org/sites/default/files/2017%20Revised%20South%20Sudan%20Regional%20Refugee%20Response%20Plan%20-%20Jan-Dec%202017%20%28May%202017%29_0.pdf

Appendix

Appendix I

Private providers of Vocational Education Program in Northern Region, Uganda

Uganda Association of Private Vocational Institutions (UGAPRIVI)

1	Adwoki Technical School	21	Gulu Community Voc. School	41	Pader Vocational School	61	Umoja VTI	81	Agwata Technical & Vocational Training School for the Deaf	101	Inomo Progressive Technical School
2	Agricultural Training Research & Empowerment Cen.	22	Gulu Technical School	42	Padibe Voc. Training Centre	62	Unity College Ngetta	82	Gulu Youth Development Association(GYDA)	102	Truth Vocational & Technical Institute-LIRA
3	Agwata Tech. Voc. Training School for the deaf	23	Gulu Youth Development Association	43	PAG Technical School	63	Universal Standard College	83	Unity Vocational Training School	103	Bulluge Technical School
4	Alarm Tech. & peace building Centre Pader	24	Human Technical Development Training Centre	44	Pajule comprehensive School	64	Zablon Voc. Training Centre	84	Lalugi Technical School	104	The Nile Valley Agro-Technical Academy
5	Alebtong River Blue VTC	25	Jerusalem Institute of Science & Technology	45	Purnaga Vision Technical School	65	Fountain Tech & Voc. Institute	85	John Dewey Vocational Training Centre	105	Unity Technical School-Amugu
6	Amolator VTC	26	Kangai Technical Institute	46	Rachele Comprehensive S.S.	66	Midland Progressive Tech & Vocational Institute	86	Rural Child Vocational Training Centre	106	Oasis Farm Institute-AROI
7	Amuka Institute & TC	27	Keyo Community Polytechnic	47	Railway Voc. & Youth Development Training Centre	67	Future Prospects Technical Institute	87	Albeko Vocational & Technical Institute	107	Paicho Community Vocational School(P.C.V.S)
8	Amuru Technical School	28	Kitgum Unity Voc. School	48	Rhino Agricultural College	68	Dtimai Vocational & Technical School	88	Ororo Community	108	Ardi College
9	Anaka Technical School	29	Kweyo Voc. Training Centre	49	Rock side Vocational & Technical Institute	69	Lokung Technical School	89	Escom Technical Institute Kole	109	Unity College Ngetta

10	Ave Maria VT & Youth Development Centre	30	Lakeside Comprehensive School	50	St. Bakitha VTC	70	Deno School of Catering & Hotel Management	90	St. Martin's Vocational Training Centre	110	Ave Maria Vocational Training & Youth Development Centre
11	Blessed Daniel Comboni VTC, Padibe	31	Light Vocational Institute	51	St. Francis VTS, Dokolo	71	Agago Institute of Technology	91	Bethany Voc & Technical Institute-LIRA	111	Cur-Irwot Women Development Training Centre
12	Brother Konrad Voc	32	Lira Institute of Technology	52	St. John Bosco TTC, Ngetta	72	Gulu Community Vocational School	92	Alternative to Violence Centred Organisational for Humanity	112	Youth Empowerment Training (YET) Centre
13	Bukola Voc and Technical Institute	33	Lira School of Catering & Hotel Management	53	St. Joseph's Technical School	73	Blessed Daniel Comboni V.T.S-PADIRE	93	Given Voc. Tech School		
14	Bulluge Technical School	34	Modern Vocational School	54	St. Martin's VTC, Opit	74	Kitgum Unity Vocational School	94	Ocamonyang Technical School		
15	CAVI Technical Service	35	Modern VTC, Loro	55	St. Monica Girl's Tailoring Centre	75	St. Janani Luwum Vocational Training Centre	95	Dokolo Vocational Training Institute		
16	CEASOP VTC	36	Nanga Printex Computer Training centre	56	St. Victor's Tech& Voc Institute, Odokonit	76	Awach Vocational Training Centre	96	Adigo Community Vocational Training Project Institute		
17	Cur Irwot Women Development Training Centre	37	Naoi Technical School	57	St. Comboni Voc. Training & Youth Centre orgn. ltd	77	Daniel Comboni Vocational Institute	97	Bata Vocational & Tech Institute		
18	Daniel Comboni Vocational Institute	38	Oasis Farm School, Aloii	58	Team vocational Training Institute	78	Padibe Technical School	98	Amolatar Technical Institute		
19	DJRA Comprehensive Sec. School	39	Omoro Voc & Technical Institute	59	Too Ipur Voc. Training Centre	79	Gracious Strikes School of Catering & UTC	99	Amwoma Tech & Voc Training School		
20	Friends of Orphans Voc, PADER	40	Oret Technical School	60	Truth Vocational School	80	Obuma Vocational Training School	100	Friends of Orphans Vocational Training School		

Appendix II

Interview Questions

Alice Acan, Director of CCF Pader Academy

1. What is your experience working with social projects?
2. What do you analyze when creating such projects? How do you know what people need?
3. When you created the project of the Bakery, how did you know that was a good idea?
4. How did the project go? Who did they employ, just girls or boys as well?
5. How is the Lira region like? What would you recommend us to do to understand the market?

Markey Culver and Julie Greene, founders of Women's Bakery

Administrative

1. How is the process of creating a bakery? This includes, legal aspects? Management?
2. How much follow up is made on the bakeries after they were created? What kind of follow up is made?
3. Is the social impact measured? If so how do you do this process?
4. What are the main challenges and risks in establishing a bakery?

Market/ competitors/ products/ services

1. What kind of competition did you find when creating the bakery?
2. Would it be possible to partner with NGOs providing assistance to refugees?
3. How do we assess the market?
4. If there isn't any market, how do you create it?
5. Do the local school provide meals to the students? If so, how can we take advantage of it? Also hospitals?
6. What do the markets sell? Do they sell bread and other bakery products?
7. What is the diet of people in Uganda, especially in the rural areas?

Capacity and Learning

1. How do you train the people, which kind of skills are taught? (Management, technical)
2. How long does a training for people working in bakeries take?
3. How many people can work in a bakery?
4. How do you obtain the supplies for the bakery?
5. Do you have any continuous learning program when the bakery is created?
6. Challenges with training?
7. How do you choose the people for training?

Financing

1. How much does the training cost?

2. What is the net revenue of selling bread, what price do they sell it and how much does it cost to produce it?
3. What are the start-up costs and year one operating costs?

Jane, Director of Children of Peace

1. How many bakeries there are in Lira? What are the names of those bakeries?
2. Where are normally bakery products sold? (Grocery)
3. Do you know how many refugees camps are there in Lira and do you know if local companies provide food to them?
4. The supplies/ingredients (eggs, flour, grains, milk) for bakery products, where do we find them? How is the availability of those ingredients? Can we purchase them locally? How do you see the situation?
5. What do you think of establishing a bakery? Do you think it can fit the needs of the former child soldiers and their reintegration?
6. Who do you think should work there?
7. If doing this training program what do you think we need to consider, should we train people close to their communities, or bring people from various areas to Kampala for example?
8. The model will be directly impact economic development. Do you have any recommendations for ways in which we can address the mental health issue? In other words, how do we make sure that economic development and social cohesion go together?
9. Where specifically, where does the bakery training [offered by Rachele Rehabilitation](#) Centre occur? Which regions? Are they already selling bread, if so in which ways?
10. We see from some of the reports there have been FCS that have received vocational training, what happened to them, are they employed?

David Kur'o Communications Officer Children of Peace

1. What is the diet of people in Uganda, especially in the rural areas?
2. What kind of competition did you find when creating the bakery?
3. What do the markets sell? Do they sell bread and other bakery products?
4. How many products does the bakery make and sell?
5. Where do you sell the bakery products? At the shop or at the markets?
6. And on average, how many customers do you serve each day?
7. Do the local school provide meals to the students? If so, how can we take advantage of it? Also hospitals?
8. Would it be possible to partner with NGOs providing assistance to refugees?
9. How do you train the people, what kind of skills are taught?
10. How long does a training for people working in bakeries take?
11. How many people can work in a bakery?
12. How do you obtain the supplies for the bakery?
13. How much does the training cost?

14. What is the net revenue of selling bread, what price do they sell it
15. What do you think of establishing a bakery? Do you think it can fit the needs of the former child soldiers and their reintegration?
16. Who do you think should work there?
17. If doing this training program what do you think we need to consider, should we train people close to their communities, or bring people from various areas to Kampala for example?
18. The model will be directly impact economic development. Do you have any recommendations for ways in which we can address the mental health issue? In other words, how do we make sure that economic development and social cohesion go together?
19. Where specifically the bakery training does occurs? Which regions? Are they already selling bread, if so in which ways?'

William Federer, Former Program Director of Mango Tree Uganda

1. Based on your experience of living in Lira as the former Director of Mango Tree Uganda, can you tell what your sense of Lira is and how the market conditions are for small businesses, especially bakeries?
2. What are the main bakeries you can find in Lira?
3. What kind of products/ bread do they sell?
4. What is the cost of bakery products?
5. How many expats are there in Lira?
6. Do you see potential in establishing a new bakery in Lira?