UNIDOS
A Path to Healthy Honduran Communities

By
Danielle de Silva

Supervised by
Dr. Sarah Flicker

A Major Project Report

submitted to the Faculty of Environmental and Urban Change in partial fulfillment of the requirements for the degree of

Master in Environmental Studies

York University, Toronto, Ontario, Canada

July 31, 2021

Abstract

This major project examined how community members in rural Honduras understand the relationship between environmental factors and community health and well-being. It also explored how their most pressing challenges could be addressed by relevant stakeholders, including governments, non-governmental organizations, and communities themselves. In collaboration with the sustainable development organization, Global Brigades, the research team conducted eleven interviews with community members across seven rural Honduran communities. Interviews were filmed and edited to create the documentary *UNIDOS: A Path to Healthy Honduran Communities*. The film outlines the major environmental factors impacting community health in rural Honduras, which include issues in WASH access and infrastructure, environmental contamination, and climate change. The film also outlines how relevant actors have previously addressed these factors, as well as noted the gaps that exist within their initiatives and operations. This project concludes that adequately addressing these environmental factors and improving health outcomes in rural Honduran communities will require a high level of unity, commitment and accountability amongst all relevant actors.

Key words: environmental determinants of health, structural determinants of health, sustainable development, WASH (water, sanitation, hygiene), climate change, community participation, community engagement, capacity-building, healthy communities

Foreword

Just under two years ago, I began drafting my Plan of Study for my Master of Environmental Studies degree at York University. My Area of Concentration changed a handful of times and was often rearranged as I debated which areas and topics best represented my project. In the end, I chose “Health, the Environment and Sustainable Development”. In my Plan of Study, I described how I sought to research the relationship between the physical environment and health outcomes, and how this relationship can be further complicated in under-resourced communities. I stated how I would use community-based participatory research to identify environmental and structural determinants of health, as well as speculate how local actors can better serve these communities.

Using participatory research methodologies, I conducted eleven interviews with community members in seven rural Honduran communities. This process allowed me to fulfill one of the learning objectives outlined in my Plan of Study, which is:

1.1 To study and execute community-led programme evaluations on the various health promotion and development approaches used to alleviate the structural barriers to health in the Global South in order to identify successful and unsuccessful strategies.

As I began data analysis and codifying the results from these interviews, I successfully fulfilled my remaining four learning objects:

1.2 To study the unique structural factors that affect health outcomes in the Global South in order to better understand the challenges faced by these communities.

1.3 To gain a greater understanding of the physical and socio-economic factors impacted by the physical environmental (including climate change) in the Global South in order to more clearly understand the interrelatedness of environment and health.

2.1 To identify case studies of successfully implemented sustainable development and community-led programmes and how they have improved health and economic outcomes in the Global South in order to demonstrate the viability of these programmes in mitigating structural burdens.

2.2 To better understand how sustainable development and active community participation approaches can be used to mitigate the environmental burdens placed on vulnerable communities.

Dedication

This report is dedicated to the memory of my mother, Claire “Colleen” de Silva, whose kind heart, caring spirit, and love for all living things brought light, joy, and positivity wherever she went.

May I follow in her footsteps.

Acknowledgements

First and foremost, I would like to take this opportunity to thank my research supervisor, Dr. Sarah Flicker, who has provided immense amounts of support and guidance throughout this entire process. I am so grateful to have had the opportunity to pick your brain and learn from your extensive experience in the fields of community-based participatory research, community development, and public health. Thank you for challenging me throughout this process and giving me the opportunity to develop skills I never would have otherwise!

I want to thank Global Brigades and Global Brigades Honduras for agreeing to enter this partnership with me, as well as for lending their time, staff, and materials to help make this project possible. A special thank you to Global Brigades staffers Gerardo Espinal, Ben Erker and Francis Ramos, for helping me execute my vision. Despite the numerous challenges we faced throughout the process, you were always willing to make accommodations to help us hit the ground running.

I owe a debt of gratitude to the leadership of Chichimora, El Jute, Granadilla, Las Pilas, San Pedro Calero, Prados and Tomatín. Thank you for welcoming us into your communities and entrusting us with the responsibility of representing the challenges you face, as well as the goals and ambitions you have, to a wider audience.

I am incredibly grateful for the community residents who chose to contribute their time and participate in the interview process: Brenda Trinidad Santos, Fredy Alvarez Martinez, Hermelinda Guevara Hernandez, Isidro Gomez Murillo, Maria Reyes Maldonado, Melvin Molina Sanchez, Nancy Baca Paz, Rosario Banegas Salgado**,** Sandra Giron Paz, Santos Garcia Cerrato and Sonia Isidro Dominguez. Thank you for your openness and honesty. Without your collaboration, this project would not have been possible.

I want to thank my MES peers for the fellowship we created throughout this programme, both inside and outside the classroom. I am so grateful to have had the opportunity to be around such passionate and driven individuals, as well as learn about your areas of expertise and how vast the field of environmental studies truly is. I know we have bright futures ahead of us, time to grab some sunglasses!

Finally, I want to thank my friends and family. Even though they repeatedly asked, “what are you studying again?”, they never failed to provide support and encouragement when I needed it most.

Table of Contents

Abstract……ii

Foreword……iii

Dedication…….....iv

Acknowledgments…….....v

Table of Contents……..vii

List of Tables……viii

List of Commonly Used Abbreviations……..ix

Introduction……..1

Methodology…….....4

Challenges and Adaptations……...12

Documentary: Results, Discussion, Reflection…….....15

Conclusions……22

Declaration of Conflicts of Interest…….....24

Interview Questions……...…25

Works Cited……...31

List of Tables

Table 1. List of participants, organized by community……...6

Table 2. Documentary storyboard and content outline……..10

List of Commonly Used Abbreviations

CHW	Community Health Worker
FEUC	Faculty of Environmental and Urban Change
GB	Global Brigades
MES	Master of Environmental Studies
UNSDG	United Nations Sustainable Development Goals
WASH	Water, sanitation, and hygiene
WHO	World Health Organization

Introduction

This research project examined how community members in rural Honduras understand the relationship between environmental factors and community health and well-being. It also explored how their most pressing challenges could be addressed by relevant stakeholders, including community leadership, governments and non-governmental organizations. I created a film to share their insights and outline how various actors can better serve and support rural Honduran communities.

The primary output of this project is the documentary *UNIDOS: A Path to Healthy Honduran Communities*, which can be found in this Google Drive. The semi-structured interviews conducted with participants were recorded via video camera and compiled alongside video footage of their communities to create the final film. The purpose of this documentary is two-fold: firstly, to illustrate some of the answers to my initial research questions in a way that will reach a wide range of audiences; and secondly, to incorporate participatory visual research methodologies. I felt it was important to give participants a platform to represent themselves, as well as their community, as they see fit.

As someone who has a fair amount of experience in the sustainable development field, and as someone with a television who is no stranger to the "You can help save them with a gift of just 50 cents a day" (UNICEF USA, 2014) commercials, I have grown extremely frustrated with the "poverty porn" imagery (Lentfer, 2018) that many non-profits and international aid agencies broadcast. Many of these commercials represent rural, Global South communities as helpless, without agency, and strip these individuals of their dignity (2018). The taglines of "just 50 cents a day", "just the cost of a cup of coffee a day" may be beneficial for recruiting new donors, but it oversimplifies the issues faced by these communities and provides a false sense of accomplishment in the donor (2018). I wanted to create a documentary that outlined the issues faced by these communities, but also highlighted the work of the communities themselves in overcoming these obstacles.

I also wanted to hear from community members themselves: what are your goals for your community? What interventions do you believe would be beneficial? How would you like to be involved in these interventions? I wanted to remind audiences of participants' agency and

represent them as dignified individuals with the capability of improving their own circumstances with a bit of support.

Background

Honduras

I chose to conduct my research in the Central American country of Honduras. Honduras is a lower middle-income country that experiences high levels of income inequality and poverty, and the majority of the population (60%) lives in rural communities (World Bank, 2020). Residents of rural areas face multiple barriers to good health and well-being. Approximately 17% of Hondurans have no regular access to healthcare facilities (PAHO, 2020), with only one physician per 1000 people in rural communities (Global Brigades, 2021). We partnered with seven rural communities across four different departments within Honduras to further investigate the factors impacting their health and well-being.

I chose Honduras due to my own positive personal experiences with the country. I have travelled twice to Honduras as an international volunteer with the organization Global Brigades. I worked alongside local leaders and volunteers in multiple rural communities and gained a great appreciation for them and the dedication they have towards improving their communities.

Global Brigades

This project was conducted in partnership with Global Brigades (GB), referred to as *Brigadas Globales* in Latin America, a non-profit sustainable development organization that operates in Honduras, Panama, Nicaragua, Guatemala, Ghana, as well as within refugee settlements in Greece. GB's mission is "to inspire, mobilize, and collaborate with communities to achieve their own health and economic goals," (Global Brigades, 2021). Its vision is "millions of empowered community members with the resources and capacity to thrive," (2021). GB utilizes an interdisciplinary approach called its "Holistic Model" to achieve results in its partner communities, focusing on good health, WASH (water, sanitation, and hygiene) access and economic well-being (2021). The organization also incorporates capacity-building within each level of its programming to help community members develop their skillsets and became local leaders. GB's Holistic Model is also aligned with three of the United Nations' Sustainable Development Goals (UNSDG): Goal 3: Good Health and Well-being, Goal 6: Clean Water and Sanitation, and Goal 8: Decent Work and Economic Growth (2021).

As a former volunteer and current Board member for Global Brigades Health and Development Canada, I am extremely passionate about GB's mission and vision, and have seen the positive impact it has in its partner communities. I also understand that the organization is not perfect and that key variables impacting health and well-being undoubtedly fall through the cracks – especially those related to the environment. Through this project, I sought to understand how community members view the initiatives operating in their community (both GB-related and otherwise), in order to provide relevant actors with the information they need to improve the ways they serve and interact with community partners. My work has always been in service of helping communities to achieve their health and wellness goals.

Key Frameworks

Determinants of Health

This project draws from the World Health Organization (WHO)'s health framework, which defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). This definition outlines that health outcomes are a product of structural and environmental factors, in addition to genetic factors and exposure to disease. This project is concerned with identifying the environmental determinants of health in rural Honduras, as well as understanding how these environmental factors intersect with structural determinants of health.

Sustainable Development

In 2015, the United Nations took a leading role in acknowledging the inter-relatedness of structural factors and health through its UNSDG, which explicitly acknowledge that all factors in a society are interconnected and initiatives that tackle health must also address socio-economic and environmental factors for results to truly be sustainable (UN, 2020). The sustainable development framework used in this project draws from the UNSDG, recognizing that development requires the integration of many social, environmental, and economic factors for its effects to be sustainable in the long-term (UN, 2020).

Community Participation

Community participation is an integral framework used in this project. Not only have I integrated participatory practices within the project's methodologies, including the use of

participatory visual research (PVR), but many of the interview questions specifically address the role of community participation in community development. Many studies have highlighted the benefits of community participation in academia, as well as in community development initiatives (Chavez et al., 2004; Mitchell et al., 2018; Baumann et al., 2020).

Healthy Communities

My project incorporates aspects of the "healthy community" approach outlined by Hancock and Minkler (2012). A healthy community, in this context, is defined as one that is "continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential" (p. 157). Thus, a healthy community is not an endpoint, but rather, a never-ending process involving collaboration between multiple stakeholders to continuously improve quality of life, health, and well-being within a community. My project intends to understand what steps are necessary in helping communities begin, or continue, the process of being a healthy community.

Methodology

Part 1: Preparation

Before beginning research, I worked with GB's Director of Impact and Evaluation, Ben Erker, to first approve this project and partnership. We maintained consistent communication as we solidified methodologies and arrangements. After receiving ethics approval from York's Office of Research Ethics (ORE), I was put in contact with GB staff member Gerardo Espinal, who would act as interviewer throughout the fieldwork process. We met using Google Meet to conduct a training session which briefed Gerardo on my research's methodologies and goals, as well as the more technical aspects of the project.

I also provided GB with a list of materials needed for the project, accompanied by a budget, which were purchased in Honduras. We purchased a Canon Vixia HF R800 videocamera, compatible tripod mount, a memory card and backup, as well as a protective case for the camera. These materials were donated to GB Honduras after project completion.

Documentation

I developed the list of research questions, a health assessment screening for COVID-19, as well as a consent document script to be read by the interviewer to participants prior to their interview. These documents were written in English and then translated by myself and GB translators into Spanish.

The interview questions were developed over a period of three months, with continual additions and edits. The final list of the questions used in these interviews can be found on page 25 in both English and Spanish.

The health assessment form included criteria from the Government of Ontario's COVID-19 Self-Assessment Tool (Government of Ontario, 2021) and York's Self-Screening Tool (York University, 2021). Gerardo was required to undergo this health assessment, in addition to GB's own assessment, prior to each day of fieldwork. He also administered this health assessment to each participant prior to their interview. If a participant or Gerardo had any symptoms of COVID-19, they would not be able to participate until they were symptom-free.

Consent

Honduras has an illiteracy rate of approximately 13% (World Bank, 2020). Many children leave school after grade six to help support their families (OECD, 2016). Due to the low literacy rates and risk of alienating potential participants, I chose to develop an informed consent script that Gerardo read to each participant prior to their interview. After the consent document was reviewed, Gerardo obtained signatures from those who are literate, or thumbprints from those who are not.

Community Selection

To minimize risk of spreading COVID-19, we chose to partner with communities that were already receiving a visit from Global Brigades during the three-week interview period. Gerardo was scheduled to travel to multiple communities to work on multiple Healthcare Professional Access (HPA) visits. Prior to arriving in the community, he performed outreach to Community Health Workers (CHWs) working in the area. He discussed the project with CHWs and asked for their support and consent, as community leaders, for this research to be conducted within their community.

By the end of the fieldwork, we had partnered with seven rural communities across four departments: Chichimora, El Jute, Granadilla, Las Pilas, Prados, San Pedro Calero, Tomatín.

Part 2: Fieldwork

Participant Selection

Inclusion criteria for participants was as follows:

- Participant is over the age of 18.
- Participant is a resident of participating community.
- Participant does not exhibit or have any signs/symptoms of COVID-19.

After receiving approval from local leadership, Gerardo informed CHWs of the dates he would be visiting the community and encouraged them to perform outreach and invite other community members to participate.

Table 1: List of participants, organized by community.

Community	Department	Participant(s)
Chichimora	El Paraíso	Fredy Alvarez Martinez
El Jute	El Paraíso	Brenda Trinidad Santos Isidro Gomez Murillo Rosario Banegas Salgado
Granadilla	El Paraíso	Sonia Isidro Dominguez
Las Pilas	Valle	Hermelinda Guevara Hernandez
Prados	Choluteca	Melvin Molina Sanchez
San Pedro Calero	Valle	Maria Reyes Maldonado Nancy Baca Paz Sandra Giron Paz
Tomatín	Francisco Morazán	Santos Garcia Cerrato

Of the participants, five explicitly mentioned that they are CHWs, another had a close relative who is a CHW, and the three participants from San Pedro Calero (the only participating community with a health centre in the community) were volunteers at the health centre. Four of the participants were involved with Global Brigades' *Cajas rurales*, community-run banks.

Three participants were involved with Global Brigades Basic Sanitation Committees. It is important to note that participants were not required to have had any previous experiences with GB, however, due to the recruitment techniques used, all but one participant were community leaders trained by Global Brigades' capacity-building programmes. It is possible that participants' previous, and often positive, experiences with GB may have impacted how they responded to certain questions in their interview.

Semi-Structured Interviews

Gerardo conducted semi-structured interviews over a period of three weeks in seven communities. The interviews were conducted one-on-one in a well-ventilated, outdoor space with a minimum distance of 2 metres between Gerardo and the participant. Interviews were recorded using the Canon video-camera mounted onto a tripod so that the participant's upper body was in-frame. The duration of interviews spanned 21 minutes to 39 minutes, with an average length of approximate 28 minutes.

Data Upload

I created a Google account solely to be used for this project and shared this password with Gerardo. Using this account, I set up a private Google Drive with sufficient space to host video recordings. Only Gerardo and I had editing access.

Gerardo first uploaded interview recordings onto a GB-issued laptop. When he returned to Tegucigalpa or an area with stable Internet access, he uploaded them to our shared Google Drive. I created folders organized by community for Gerardo to use. Within these folders, he created subfolders for each participant that contained their interview recording, as well as their health assessment clearance and signed and/or finger-printed consent document.

I then downloaded these videos to my own laptop computer and organized them similarly. Once all interview recordings and documentation were uploaded to the Google Drive, I changed the password and editing access so that I was the sole editor of the Drive.

COVID-19 Protocols, Health and Safety

This project held itself to a high standard to ensure the health and safety of participants and research staff. Thus, we employed and enforced multiple health and safety measures and protocols to prevent the spread of COVID-19.

Supplies and Personal Protective Equipment (PPE)

Following typical GB protocol (Global Brigades, 2021), Gerardo was given a quantity of single-use, surgical masks, and hand sanitizer to use for his own safety, as well as to offer to participants on request. He also had a store of cleaning and disinfecting supplies to clean work and interview spaces.

Participant Safety

The consent script included a section advising prospective participants to reconsider their participation if they are at high-risk for developing severe illness if infected with COVID-19 or live in a household with high-risk individuals, including older adults, individuals who have chronic medical conditions, or are immunocompromised (Government of Canada, 2021). As mentioned previously, all participants were also required to undergo a health assessment that screened them for COVID-19 symptoms.

Participants were given the option of removing their mask solely for the duration of their interview and once physically distanced at least 2 metres from Gerardo, whose mask would remain on throughout the process. Though this option was available, all eleven participants chose to wear a mask during their interview. All interviews were conducted outdoors, which ensured good ventilation.

Contact Tracing

As part of the consent process, we collected the personal contact information of each participant, as well as the date their interview was held. This information was retained to contact them or conduct contact tracing if they had been exposed to COVID-19 during the interview process. We also provided each participant with the contact information for Gerardo and myself, instructing them to notify us, or a community leader who is able to contact us, if they experience

any COVID-19 symptoms post-interview. As of July 30, 2021, we fortunately have not experienced any cases of COVID-19 to necessitate contact tracing.

Part 3: Analysis and Production

Data Analysis

I reviewed each interview multiple times and took diligent notes throughout the process. Though the interviews were conducted in Spanish, I recorded my notes in English with the aid of my own Spanish proficiency, and I also reached out to other members of the research team if I was uncertain of a translation. I made note of the timestamps of key quotes so I could easily revisit them when time to begin video editing.

Coding the Data

After I completed my notes on the interviews themselves, I began to develop a codebook with categories of common themes that appeared throughout the interviews. I transferred all my interview notes onto one document and began going through this document, highlighting, and searching key terms and themes which became individual categories in my codebook. I then began organizing responses into these categories which became the building blocks of my film.

Creating a Storyboard

Creating a storyboard for the documentary was undoubtedly one of the more challenging aspects of this project. I drafted and scrapped multiple iterations of storyboards in search of an approach that would be most impactful.

I ultimately decided to create a storyboard whose flow followed that of my secondary research questions: *what environmental factors do community members identify as most impacting their health and well-being*; *how are these factors currently being addressed by relevant actors*; and *how can community participation be better used by these actors*. A concluding monologue was also used to tie the documentary back to my primary research question: *how can relevant actors more adequately address common and/or pervasive environmental factors impacting community health in rural Honduras?*

Table 2. Documentary storyboard and content outline.

Chapter	Content	Relation to Research Questions
Ch. 1: Introduction	Featured clips of community landscapes, participants. Introduced my primary research questions.	-
Ch. 2: Introduction to Global Brigades	Featured clips of myself, Ben Erker, and Gerardo Espinal providing context and further information on GB as an organization.	-
Ch. 3: Outline of Most Common Environmental Factors	Featured myself outlining the major findings, including which environmental factors community members identify as most problematic.	Identifying the most common environmental factors impacting health and well-being in partner communities.
Ch. 4: WASH	Featured clips of participants discussing WASH issues in their community. They also discussed the benefits of GB-constructed *pilas* in improving WASH access.	Identifying one of the most common environmental factors impacting health and well-being in the community. Outlining how this issue has previously been addressed by relevant actors.
Ch. 5: Environmental Contamination	Featured clips of participants discussing air pollution and improper waste disposal in their community. They also discussed the role of GB eco-stoves in improving air quality.	Identifying one of the most common environmental factors impacting health and well-being in the community. Outlining how this issue has previously been addressed by relevant actors.
Ch. 6: Climate Change	Featured clips of participants discussing climate and weather changes in their community, as well as how these changes have affected agriculture and financial well-being.	Identifying one of the most common environmental factors impacting health and well-being in the community. Outlining how this issue has previously been addressed by relevant actors.

Ch. 7: Participation and Capacity-Building	Featured clips of participants discussing their pleasure to hold various leadership positions in their community. Also included clips from Ben Erker and Gerardo Espinal describing the importance of community participation in the monitoring and evaluation process.	Highlighting the importance of community engagement and participation within development initiatives.
Ch. 8: Looking Forward	Featured clips of participants discussing how they would like to see their community grow and improve.	Identifying prospective initiatives that can be used by relevant actors to support communities.
Ch. 9: Conclusions	A final voice-over from myself summarizing the results from this project and describing how it can be used to better serve our partner communities.	Responding to main research question, how can actors better serve these communities.
Ch. 10: Credits	-	-

Additional Recordings

As I finalized my storyboard, I identified that there were a few gaps that needed to be filled. My film was missing contextual information, especially regarding the country of Honduras and GB. I also noticed that transitional clips and voice-overs were also necessary to help weave the documentary together.

To fill these gaps, I developed two sets of interview questions for Gerardo and the Impact and Evaluation staff, however Ben was the only member available to participate. The questions (which can be found on page 29 and 30, respectively) mostly pertained to their knowledge of and experience with GB, as well as addressed some aspects of this project, such as community engagement and participation. Both Gerardo and Ben recorded their interviews on their own time. Gerardo recorded his interview on the Canon video camera, and Ben recorded his on a smartphone.

After reviewing these additional interviews, I wrote scripts for myself to further fill in any remaining informational and contextual gaps. I also developed scripts to introduce the project, its goals, outline the major themes found in the interviews, and the concluding statement. I recorded landscapes and areas throughout Toronto to also include in the film as transitional

clips, and also created graphics to provide extra contextual information. My segments were recorded with my smartphone, as well as with a Canon EOS Rebel camera.

Video-Editing, Film Production

I used Adobe Photoshop Elements 2021 and Adobe Premiere Elements 2021 to create graphics and perform video-editing, respectively.

Challenges and Adaptations

Multiple challenges presented themselves throughout this process, which encouraged the research team to continuously adapt our methodology to accommodate these challenges.

COVID-19

My project timeline overlapped with the global COVID-19 pandemic, which undoubtedly presented a unique combination of challenges to my research. Due to the transmission patterns of the virus, countries worldwide have enforced multiple public health recommendations, including international and domestic travel restrictions (Government of Canada, 2021). Many countries, including Canada and Honduras, implemented country-wide lockdowns and a large majority closed their borders to non-residents to limit the spread of COVID-19 (2021).

Closed borders and travel restrictions prevented me from travelling to Honduras to conduct interviews. This pushed me to make arrangements with GB Honduras to find a local staff member who would be willing to conduct interviews on my behalf. I then created training documents to brief the prospective interviewer on my project goals and methodologies. I initially had some hesitancies about an interviewer conducting interviews without my oversight, which encouraged me to discuss many aspects of the project in-depth with Gerardo during our training session. Though there were some leads I wish were followed, Gerardo was a very valuable member to the team and there were multiple times where his own local knowledge and interactions with participants helped me to greater understand the context of responses.

Research Ethics

As Dr. Flicker and I began preparing to start research with the aid of international staff, other issues began presenting themselves. On January 25, 2021, I submitted the required ethics package, including all necessary documents, through the FEUC Dossier. This process – which typically lasts a couple of weeks – did not end until May 4, 2021.

Due to COVID-19, my project, which required interviews to be conducted in-person, was considered "higher than minimal risk" and thus, I was required to make multiple alterations to my initial research plan to gain approval from York's ORE. Firstly, I was required to explain why it was not feasible to simply switch these interviews to an online format. When examining the situation using a "Canadian" mindset, this would appear to be a clear solution, as virtual technologies such as Zoom, Google Meet and FaceTime have facilitated both professional and personal meetings throughout the pandemic. Due to this ubiquity of virtual meetings in Canada, it was necessary for me to explain the accessibility issues that exist within rural Honduras. Most rural Honduran communities do not have any Internet access, and those that do have extremely inconsistent connections (Evans, 2020). This would make it difficult to for me to perform coherent and fluid interviews with participants virtually. Secondly, technology is another limiting factor. Many rural residents do not own the technology necessary to perform interviews virtually (2020). Thus, attempting to perform interviews virtually would have only served to further underscore the disadvantages and issues in access faced by community members.

After much back-and-forth, the ORE agreed that my research did require an in-person aspect, and I then made the following accommodations to my methodology in order to be granted approval by the ORE so that I could begin conducting my research project:

- Interviews were held outdoors in a well-ventilated space.
- The number of participants was reduced from 24 to 12[1].
- GB agreed to perform contact-tracing in the case that a participant or member of research staff tests positive for COVID-19.
- Interviews were only to be conducted on previously scheduled community visits, using staff that was scheduled to be on these visits as interviewer.

- Prior to this revision, we had originally planned to choose one community to partner with and the interviewer would travel to that community solely for the purpose of this research.

Though the back-and-forth between myself and the ORE was, at times, extremely tedious, I believe that the risk-reducing measures I incorporated into my project's methodologies were ultimately beneficial and respectful of the health of our community partners and participants. After this process, I felt much more confident that we were doing all we could to prevent an outbreak of COVID-19 in one of our partner communities.

[1]12 interviews were approved by the ORE, but we elected to perform 11

Community Selection

The decision to conduct interviews only on previously scheduled community visits created a few additional challenges. Though Ben Erker approved this change in methodology, GB Honduras' Executive Director, Luis Quan, disagreed, believing it would inconvenience the staff and interfere with their work. Ben had multiple conversations with Luis to convince him why this was necessary, and after some time, Luis agreed. We also assured him that Gerardo would prioritize completing his work duties prior to conducting interviews.

After gaining Luis' approval, I worked with Francis Ramos and Gerardo to schedule interview days according to Gerardo's work calendar. Gerardo was scheduled to work on HPA visits in multiple communities over the span of three weeks and as mentioned previously, contacted local CHWs to ask permission to conduct interviews in their community. There were some instances of community leadership rejecting the proposal due to anxieties related to COVID-19. These rejections were respected. Only communities where leadership gave express permission were included in this project.

Participant Selection

In the follow-up interview with Gerardo, he described the challenges he faced in finding participants. There were several community members who felt uncomfortable participating in interviews due to COVID-19-related anxieties. Many of these communities do not have accessible or well-staffed health centres and the risks of contracting COVID-19 can be very

severe. Gerardo respected the unease of community members and only performed interviews with those who felt comfortable with participating in this process.

Data Upload

As mentioned previously, the majority of rural Honduras does not have adequate Internet access. This made it extremely difficult for Gerardo to upload interviews and participant information to our Google Drive quickly. Some evenings, he returned to Tegucigalpa late into the night and did not have the time to upload the interviews, which often took several hours. He did, however, dedicate his full days off and weekends to uploading all the information I needed to begin data analysis. Despite the delays in receiving the interviews, I was able to have them all saved to the Google Drive and my computer within the necessary timeframe.

Documentary: Results, Discussion and Reflection

When beginning the interview process, I had some anxiety about the responses I would receive. I worried about whether some nuance would get lost in translation, I wondered if my questions and prompts would yield the depth of responses necessary for this project, and as mentioned before, I was concerned about not having any direct oversight over the interview process. While reviewing the interview records, I quickly saw how many of my fears were unfounded. I was overjoyed at many of the responses I received, not only did participants answer the interview questions as asked, but they also went above and beyond and began discussing topics surpassing my wildest expectations. Throughout this process, I also recognized that my major project helped me achieve all five of the learning objectives detailed in my Plan of Study in a multitude of ways.

Environmental Factors

As I discussed in earlier sections, I arranged the flow of the documentary to parallel that of my research questions, beginning with: what do community members identify as the most common environmental factors impacting their health and well-being? After reviewing the interviews, I saw that there were three primary problematic environmental factors: barriers to

WASH access and other WASH-related issues, environmental contamination, and climate change.

WASH

I expected barriers to WASH access and other WASH-related issues to be a main environmental factor impacting health and well-being in my partner communities. There is a significant amount of literature detailing WASH-related challenges in Honduras.

Issues in WASH access primarily stem from lack of infrastructure and local and national governments' inability to provide this infrastructure. As of 2019, the Honduran national government did not have the financial capacity to adequately address the WASH needs of both rural and urban areas (GLAAS, 2020). The same report also found that the government did not have any plans to ensure environmental sustainability of water services, nor to ensure drinking-water quality meets national standards (2020). These barriers to access are ultimately structural in nature and exemplify Honduran governments' "downloading" of state responsibilities onto non-state actors, including GB. In addition, inadequate WASH access can lead to a multitude of health problems, including incidences of parasitic and water-borne infections (WHO, 2021) which further disadvantage community members.

The majority of participants expressed gratitude towards GB for implementing water projects in their community, including identifying and developing safe water sources, laying piping throughout the community, and installing in-home *pilas* with water storage units, latrines and showers (Public Health Brigades, 2021; Water Brigades, 2021). They described how they now have access to clean water 24/7, which has revolutionized their lives. Those who do not yet have a *pila* in their home described the issues they have in accessing clean water, including sacrificing significant amounts of money each week to purchase barrels of water, or being forced to use dirty water from nearby creeks. One participant also mentioned how he is impressed with GB's water projects, as Plan International had installed latrines in the community years earlier, but they have now mostly collapsed and are contaminating nearby water sources – he did, however, also request that GB address these old latrines so that they do not continue causing problems in the community. Those who were also members of Basic Sanitation Committees were also proud of their role in ensuring that WASH infrastructure reaches the entire community. Nearly all participants expressed that scaling-up GB's water projects is one of the most, if not the

most, important initiative to improve health and wellness in their communities.

Environmental Contamination

Similar to issues in WASH access, I also anticipated that participants would discuss issues in environmental contamination, specifically air pollution. After reviewing the interviews, I was also surprised to learn about the amounts of litter and improper waste removal in these communities.

Nearly all participants discussed how Honduras does not have adequate waste or trash removal services in rural communities, with many mentioning that they wish their municipalities would build a crematorium and collect garbage from all local households. In one interview, the participant discussed how her municipality does have a crematorium, however the local government does not send any trucks out to collect garbage and thus, this service is rendered useless. Many participants discussed that most members of their community burn their garbage as a form of waste removal, despite it polluting the air and causing multiple respiratory health issues. Others described how they buried their garbage on their property because they believe the smoke from burning trash is dangerous to breathe in. In other communities, specifically Las Pilas and Tomatín, participants described the enormous amounts of litter that is scattered throughout their community. Two participants described how many community residents simply no longer care about litter throughout their community, believing that since there is no adequate waste removal on the government-level, there is not much else they can do on an individual level to attempt to properly dispose of it. Others described how garbage that is buried in the ground often washes up to the surface in the rain and then becomes more litter in the community. Though many participants acknowledged the respiratory dangers associated with burning garbage, they believed it was a cleaner form of disposal compared to burial or simply littering.

Similar to burning garbage, traditional stoves used in rural Honduras are also responsible for air pollution, especially in the home (Young et al., 2019; Public Health Brigades, 2021). Many of these traditional stoves are inefficient, requiring large amounts of wood in order to properly cook a meal (2019; 2021). In addition, many of them do not have proper ventilation systems, which cause them to release large amounts of smoke within the house (2019; 2021). A participant who still owns a traditional stove described how even though her stove is outside the

home, the smoke will still blow into her home, along with smoke from neighbours' stoves. Most participants discussed how dangerous these stoves are to their health and well-being, one participant described how his mother has many issues with her lungs likely due to all the time she spent cooking in the home. As part of its Public Health programming, GB works with international volunteers and local masons to build "eco-stoves" in households (Public Health Brigades, 2021). These stoves have two primary benefits; first, they are more resource-efficient and require less wood than traditional stoves, and second, they have proper ventilation and chimneys that release smoke above and outside the home, decreasing the risk of respiratory disease (2021). The majority of community members who owned eco-stoves discussed how beneficial they are and have mentioned that they have greatly improved their health and wellness due to the decrease in air pollution both inside and outside their homes. There was one participant who mentioned how she prefers her traditional stove to the eco-stove, though she recognizes the health benefits of the eco-stove, she believes the traditional stove cooks better.

Something that was interesting was there was not one, but two participants from separate communities who used the same phrase to describe the issues of air pollution in their community, asking if the smoke in the air and in their homes is black, what is the state of their lungs? This demonstrates that many community members are concerned about the impact of air pollution on their health and wellness and highlights the need for GB and other actors to scale up eco-stove and similar programming, as well as for local governments to step up and develop waste removal services. Nearly all participants described how they want their community to be cleaner, both on the ground and in the air.

Climate Change

Climate change was the third key environmental factor impacting health and wellness that participants identified. As I began this project, I was uncertain about the results I would receive for this section. USAID (2017) described Honduras as one of the most vulnerable countries to climate change, due to its vulnerability to extreme weather events and its reliance on agriculture. Parts of Honduras, including all my partner communities, lie in the "Dry Corridor" that spans Honduras, Guatemala and El Salvador (2017). This region often experiences extreme droughts which impact crops and harvest. This is extremely problematic for much of the country,

as approximately 40% of Hondurans are employed in agriculture (USAID, 2017) and dwindling crop yields place many Honduran farmers in precarious financial positions.

Nearly all participants described increases in temperature as well as a decrease in rain in recent years, those who did not focused on the yearly fluctuations in these levels. A participant also described how she believes one reason why temperatures are increasing are due to deforestation and a resulting lack of shade. This point also underscores the fact that Honduras has a high amount of deforestation due to land development and lost approximately 15% of tree cover from 2000 to 2020 (Global Forest Watch, 2020). Though none of my questions specifically mentioned climate change as a concept, nor global warming or similar terms, a few participants did explicitly use these terms to discuss the phenomena in their communities. Some discussed how many people in their community are not concerned with climate change, but these same individuals complain about rising temperatures and the lack of rain. A participant mentioned how these individuals are complaining despite the fact that their actions, including burning plastic and cutting down trees, can be directly associated with climate change. Many participants described how they would like their community to be more knowledgeable about climate change and more respectful of the environment around them.

All participants worked in agriculture themselves, or had a close relative working in this field. Each one described how harvests (specifically corn and coffee) have become less plentiful throughout the years, and many attributed it to the lack of rain. Some described how the lower amounts of rainfall are insufficient for their crops to grow, others have mentioned that it has made the soil less fertile and that there are some pests that grow on corn only when there is not enough water. Many participants described how insufficient harvests have directly impacted their financial well-being. Some participants described that many individuals are leaving their communities in search of job prospects in other departments and the United States, and that many people cannot purchase food for their families due to low yields. One participant described how his community no longer grows corn because the crop was so risky. He mentioned that his community now grows okra, which is not commonly consumed in Honduras, primarily for export, which is now more lucrative than other crops. Other participants were grateful that they or their relatives found jobs in other industries, such as construction and masonry, so they are

less reliant on agriculture for income. It is clear that the agricultural industry within Honduras is facing significant hardships due to climate change.

Moving Forward

Each participant expressed hope for his or her community, and they all believed that the community could achieve its goals. I concluded the documentary by looping back to my original research question: *How can relevant actors more adequately address common and/or pervasive environmental factors impacting community health in rural Honduras?*

Participation, Capacity-Building

All participants expressed their joy in serving their community and taking on leadership roles. As mentioned previously, five participants were CHWs, four participants were involved with their local *Cajas rurales*, community-run banks, and three participants were on a Basic Sanitation Committee. Many participants were also involved in local leadership and initiatives unaffiliated with GB. All three participants from San Pedro Calero were volunteers at their local health centre, one of these women also was involved with the community's schoolboard. A couple participants were also involved in local advocacy groups, with one involved with local agriculture cooperatives, and another involved with a *campesino* group that joined together multiple rural communities to campaign for government support.

Many of the participants expressed gratitude to GB for their capacity-building and training. Not only did they themselves feel empowered in growing their skillsets and learning more, but they also felt a sense of pride in their ability to help their community. CHWs discussed how their neighbours would visit them if they were feeling unwell, they also described the pleasure they had in helping their family and community elders. Those who worked with the *Cajas rurales* described how happy they were to help their fellow community residents pay off loans and create their own micro-enterprises. Participants who volunteered on Basic Sanitation Committees enjoyed the process of taking surveys and consulting their fellow residents on how best to develop WASH infrastructure in the community.

All participants described their desire for GB to scale-up its capacity-building initiatives. Some participants, specifically CHWs, discussed how they want to receive further training on how to handle difficult health situations. They described residents in their communities with a

variety of special needs and would like to learn how best to assist them. Others also wanted to learn more about the role of nutrition and how local plants and herbs could be used to improve some sicknesses. One CHW expressed frustration in that her request for more training in certain areas was denied, which is something I believe GB should investigate and amend if her request was reasonable. Many participants also discussed how they would like GB to train more individuals in their communities. They recognize how worthwhile these capacity-building programmes are and see that they have the potential to greatly improve the conditions in their communities.

Much of the literature echoes the sentiments of these participants. Studies have shown that active community engagement and participation in public health and development initiatives can create more sustainable impacts (Chavez et al., 2004, Minkler et al., 2008). Similarly, the healthy communities approach mentioned earlier also demonstrates the importance of consulting communities to learn what goals they have for their health and well-being and understand how they would like to achieve these goals (Hancock & Minkler, 2012). In Gerardo's interview, he expressed how much he learned from interviewing participants, and mentioned how he felt that he learned "*su interior*", their inner thoughts and desires, which he believes is extremely important in helping him improve how he serves and interacts with community members. Actively including communities in the development process, through surveys, interviews, capacity-building, and implementation is so integral in achieving the results that communities themselves want to see.

Unity

Many participants discussed the role of unity in helping their communities achieve their goals. Some participants described their joy that their community became more united when GB commenced operations in their community. They mentioned how many residents who before did not participate in local initiatives are now becoming leaders who enjoy serving their community. Other participants discussed how their community is now united towards a common goal and this has improved coordination, communication, and overall community morale.

Many participants also discussed other points concerning unity. A participant discussed how she believes her community can achieve their goals, but only if the community itself "wants to", meaning she sees a need for greater unity in her community. She also recognized the power

her community has, in that change will not come just because of GB or local governments, the community itself must play an active role in creating change. A few other participants also discussed the need for unity between the community itself, local leaders, local government, and non-profits, including GB. They discussed that without this unity and collaboration, there will be no change in their communities. The theme of frustration over a lack of unity between rural communities and local governments appeared in many interviews. Most participants felt as if their communities have been forgotten, as there are minimal-to-no government-level interventions assisting them. Others mentioned how the national Honduran government announced multiple public health interventions that would take place in rural communities, but mentioned how that was just a public relations statement, rather than a true commitment to action. Throughout these interviews, it is clear that all participants want greater collaboration and commitment from their local and national governments to help them achieve their health and wellness goals but are also grateful for the support provided by organizations like GB.

Conclusions

This project opened my eyes to the power of community engagement within research and the development field. This was an incredible experience that illuminated the needs of GB's partner communities, and I hope that my final documentary, *UNIDOS: A Path to Healthy Honduran Communities*, adequately represents some of the challenges faced by these communities, as well as their optimism towards achieving their health and wellness goals.

Next Steps

After completing this project, I see that there are many gaps that relevant actors can fill to better serve these communities.

Firstly, I recommend that local Honduran governments make a greater effort to identify and address the environmental and structural factors impacting health and well-being in rural communities. The lack of WASH infrastructure and waste removal services are two factors in particular that are under governmental jurisdiction and must be addressed in order to improve health outcomes in these communities. That said, I also recommend that GB continues scaling-

up its Public Health programmes, including constructing WASH-related infrastructure and eco-stoves, as community members clearly appreciate and benefit from these projects.

In terms of garbage and waste removal and climate change, I recommend that GB incorporates some aspects of these topics into their *charlas* (public health information sessions) with community residents. As *charlas* often discuss disease prevention tactics (Medical Brigades, 2021), it may be useful to add additional sections discussing the dangers of breathing in burnt garbage or how litter contaminates the local environment. Though this is a small change, it may have positive impacts, such as decreasing the amount of litter in the community or encouraging residents to be more cautious in how they remove their waste. Local governments and municipalities establishing waste removal programmes will be the most beneficial tactic in preventing disease from environmental contamination.

As mentioned, many of the preceding environmental factors impacting health are due to governmental inaction. Because of my own positive experiences with certain NGOs, including GB, I do believe that they can play important roles in international development – when conducted with sufficient commitment and accountability. There was one interview, mentioned previously, which discussed how Plan International, a well-known development organization, constructed multiple latrines in his community, which ultimately collapsed due to lack of maintenance and accountability on the part of the organization. A few other participants also noted that no other NGO other than GB had ever served their community, or that some NGOs visited once and never returned. Though I have come across similar testimonials in my studies, these stories were extremely disappointing and frustrating to hear. However, they also provided an important message: NGOs cannot be fully relied on for development. Honduran governments, both local and central, must take greater responsibility for ensuring the health and well-being of its citizens. Though there are undoubtedly bureaucratic inefficiencies, governments have much more accountability to their citizens than international NGOs, which then may lead to higher levels of commitment. It is possible that governments may not have the resources, programming, or trained staff available to begin full-scale development operations in rural communities. Therefore, as an open question to NGOs operating in Honduras, including GB Honduras: is there a way of combining forces with local and national governments to accomplish your development projects on a grander scale, and with greater accountability?

Also addressed in these interviews was the issue of climate change. Climate change is a challenge the entire world is facing which requires unity on an international scale. A local level, it may be beneficial for GB to use its *Cajas rurales*, Business programmes, and capacity-building programmes to help community residents become less reliant on agriculture. Through these programmes, GB has helped many residents of rural communities create businesses spanning from textiles to coffee-growing (Business Brigades, 2021). Due to changing climates and the high possibility that harvests will become less fruitful each year, I think it is wise for GB to encourage community members to start micro-enterprises that do not depend on agriculture.

Finally, it is clear that community members feel a sense of great pride in serving their communities, as well as in growing their skillsets, therefore, capacity-building programmes, community participation and community engagement initiatives should be scaled-up in order to achieve meaningful change in communities, as well as within the lives of residents themselves.

Declaration of Possible Conflicts of Interest

I, Danielle de Silva, have served as Director-at-Large on the Board of Directors for Global Brigades Health and Development Canada since January 2019. Though I maintained my leadership role with the organization throughout the duration of this research project, I made certain that my data analysis was objective, unbiased and fair. My position on the Board requires me to critically analyse the organization's actions and programming, and thus, any negative findings are equally valuable to the organization’s mission and vision as positive ones.

Interview Questions for Participants

Demographic Information, Información Demográfica

1. What is your name?
   ¿Cuál es su nombre?

2. In what year were you born/how old are you?
   ¿En qué año nació? ¿Cuántos años tiene?

3. What do you currently do for work?
   ¿Cuál es su trabajo actual?
   a. Do you currently hold any other roles in the community?
      ¿Tiene otro rol en su comunidad actualmente?

Introductory Question, Pregunta introductoria

1. What is one word or phrase you would use to describe your community?
   ¿Cuál es una palabra o frase que usaría para describir su comunidad?
   AND/OR
   Do you have a photo or video with you that you believe represents your community?
   y/o ¿Tiene un video o foto con usted que crea que representa su comunidad?

Community Strengths, Fortalezas de la comunidad

1. Tell me about a time your community supported you in times of hardship.
   Cuénteme sobre alguna vez en la que su comunidad lo ayudo en tiempos difíciles

Determinants of Health, Determinantes de salud

1. How many total people live in your household?
   ¿Cuántas personas en total viven en su casa?
   a. How many children live in your household?
      ¿Cuántos niños viven en su casa?

2. Does your home have a *pila*? *¿Tiene una pila en su casa?*
   a. If yes: How has this improved your family's ability to access clean water?
      Si la respuesta es sí: ¿Como la pila ha mejorado el acceso al agua de su familia?
   b. If yes: Have you experienced any problems with it?
      Si la respuesta es sí: ¿Ha experimentado algún problema con eso?

3. Do you have an eco-stove?
   ¿Tiene un eco fogón?

a. If yes: How has this improved the conditions in your home?
Si la respuesta es sí: ¿Como ha mejorado el tener un eco fogón las condiciones en su casa?

4. How do you dispose of garbage?
¿Como se deshace de la basura?
   a. Prompt: where do you put waste/trash to remove it from your home?
   Aclaratoria: ¿Dónde tira la basura para sacarla de su casa?

5. How do you think your environment affects your health?
¿Como cree que su ambiente afecta su salud?
   a. Prompt: Are there things in your home or community that you think can make you sick?
   Aclaratoria: ¿Cree usted que hay cosas en su casa o en su comunidad que pueden enfermarlo?
   AND/OR
   Are there things in your environment that make you worried about your health?
   y/o ¿Hay cosas en su ambiente que lo hacen preocuparse de su salud?

6. Imagine the environment that you would like your child/grandchild to grow up in, an environment that would make them very healthy.
Imagínese un ambiente en el cual le gustaría que sus hijos/nietos crecieran, un ambiente que los hiciera sentir saludables.
   a. What would this look like?
   ¿Como se vería este ambiente?
   b. How does your idea compare to the environment right now?
   ¿Como se compara esa idea de ambiente a su ambiente actual?

7. Have you noticed any changes in the weather or environment in recent years?
¿Ha notado algún cambio en el clima o en el ambiente durante los últimos años?
   a. Has there been more rain or less rain in recent years?
   ¿Ha habido más o menos lluvia en los últimos años?
      i. If more: Have there been very strong storms?
      Si la respuesta, es más: ¿Han habido fuertes tormentas?

8. *(If participant works in agriculture)* Has your crop yield changed in recent years?
Si el participante trabaja en agricultura: ¿Su cosecha ha cambiado en los últimos años?
   a. Is there enough rain for your crops?
   ¿Hay suficiente lluvia para su cosecha?
   b. Have your crops been healthy or have they been sick?
   ¿Su cosecha ha estado saludable o no?
   AND/OR

If participant grows coffee: Have you seen any coffee leaf rust?
y/o Si el participante siembra café: ¿Ha visto algún tipo de oxido en las hojas del café?

i. If sick: How has this impacted your ability to earn money?
Si la respuesta es que no ha estado saludable: ¿Como ha impactado esto en su habilidad para obtener dinero?

9. How is the COVID-19 pandemic impacting your life?
¿Como ha impactado su vida la pandemia del COVID-19?
   a. What support have you received to help with these challenges?
   ¿Qué apoyo ha recibido para enfrentar estos desafíos?

Role of Global Brigades/Areas for Improvement, Rol de Brigadas Globales/Áreas de mejora

1. Have you participated in any Global Brigades initiatives? How was your experience?
¿Ha participado en alguna iniciativa de Brigadas Globales? ¿Cuál ha sido su experiencia?
   a. Prompt: Are you a trained CHW, Community bank personnel, Water Committee member, etc.?
   (Por ejemplo): ¿Es usted un guardián/a de salud entrenado, un miembro de la caja rural, miembro de la junta de agua, etc?
   b. Prompt: What do you like about these programmes? What can be improved?
   (Por ejemplo): ¿Que le gusta de estos programas? ¿Que podría mejorar?

2. How often do you visit/receive visits from a CHW?
¿Qué tan seguido recibe visitas o visita a un guardián/a de salud?

3. What are the three biggest impacts/changes you have seen in your community since its partnership with Global Brigades?
¿Cuáles son los tres principales impactos o cambios que ha visto en su comunidad desde su alianza con Brigadas Globales?

4. What would you like to see improved in your community?
¿Qué le gustaría que mejorase en su comunidad?

AND/OR

Do you think there are challenges your community faces that have not been addressed by Global Brigades?
y/o ¿Cree que su comunidad tiene desafíos que no han sido abordados por Brigadas Globales?

5. Has your community received any support from local government to address these or similar challenges?
   ¿Su comunidad ha recibido apoyo de los gobiernos locales para abordar estos u otros desafíos?

6. What ideas do you have on how to improve your community?
   ¿Qué ideas tiene para mejorar su comunidad?
   AND/OR
   How do you think these challenges can be addressed?
   y/o ¿Como cree que estos desafíos podrían ser resueltos?

7. How would you like to be involved in helping your community?
   ¿De qué forma le gustaría involucrarse para ayudar a su comunidad?

Closing, Cierre

1. Is there anything else you would like to discuss?
   ¿Hay algo más que le gustaría hablar?

Interview Questions for Gerardo Espinal

1. Introduce yourself: say your name, your role with Global Brigades (GB) and that you are the interviewer for this project.
   Preséntate: digas tu nombre, tu función en Brigadas Globales y que es el entrevistador de este proyecto.

2. What do you enjoy about working with GB?
   ¿Por qué te gustas trabajar con Brigadas Globales? ¿Qué otro trabajo hiciste en las comunidades los días de entrevistas?

3. How did you find community members who wanted to participate?
   ¿Cómo encontraste miembros de la comunidad que querían participar? ¿Tuviste algún problema con esto?

4. Did you learn anything from these interviews? Did anything surprise you?
   ¿Aprendiste algo de estas entrevistas? ¿Te sorprendió algo?

5. What would you like people to know about the communities GB works with?
   ¿Qué quieres que la gente sepa sobre las comunidades que trabajan con Brigadas Globales?

Interview Questions for Ben Erker

Please begin the video by stating your name and position with GB.

1. Describe GB, including:
    a. Its programme countries
    b. How it identifies community partners
    c. Brief overview of Holistic Model, GB operations and major projects
    d. Key GB values

2. Why do you enjoy working for GB?

3. What is monitoring and evaluation (M&E)? What can it teach us about sustainability, impact, etc.?
    a. What does M&E look like in the context of GB?
    b. Why is M&E so important?

4. What role do GB's partner communities play in M&E?
    a. How can community participation enhance M&E?
    b. How can community participation enhance GB's overall operations?

5. What would you like the audience to know about GB's community partners?

Works Cited

Baumann, S., Merante, M., Folb, B., Burke, J. (2020). Is Film as a Research Tool the Future of Public Health? A Review of Study Designs, Opportunities, and Challenges. *Qualitative Health Research*, 30(2), 250-257

Business Brigades. (2021). *Micro-enterprise clients*. Business Brigades. Retrieved from https://business.globalbrigades.org/clients/

Chavez, V., Israel, B., Allen, A., Decarlo, M., Lichtenstein, R., Schulz, A., Bayer, I., McGranaghan, R. (2004). A Bridge Between Communities: Video-Making Using Principles of Community-Based Participatory Research. *Health Promotion Practice*, 5(4), 395-403

Evans, W. (2020, Nov. 13). Public Education in Honduras: How the COVID-19 Pandemic Exacerbated an On-going Educational Crisis. *American Psychological Association: Trauma Psychology News.* Retrieved from https://traumapsychnews.com/2020/11/public-education-in-honduras-how-the-covid-19-pandemic-exacerbated-an-on-going-educational-crisis/

GLAAS. (2020). *Honduras: Highlights based on country reported GLAAS 2018/2019 data*. Retrieved from https://cdn.who.int/media/docs/default-source/wash-documents/glaas/glaas-2018-19/2019-country-highlights/honduras-glaas-2018-19-country-highlights-en.pdf?sfvrsn=64f3c1f4_15&download=true

Global Brigades. (2021). *Evaluation & Research*. Global Brigades. Retrieved from https://www.globalbrigades.org/impact/evaluation/

Global Brigades. (2021). *Holistic Model*. Global Brigades. Retrieved from https://www.globalbrigades.org/impact/holistic-model/

Global Brigades. (2021). *Honduras.* Global Brigades. Retrieved from https://www.globalbrigades.org/countries/honduras/

Global Brigades. (2021). *Responding to COVID-19*. Global Brigades. Retrieved from https://www.globalbrigades.org/responding-to-covid-19/

Global Brigades. (2021). *Vision & Mission*. Global Brigades. Retrieved from https://www.globalbrigades.org/about-us/vision-mission/

Global Forest Watch. (2021). *Honduras Deforestation Rates and Statistics*. Global Forest Watch. Retrieved from https://www.globalforestwatch.org/dashboards/country/HND/?category=summary&dashboardPrompts=eyJzaG93UHJvbXB0cyI6dHJ1ZSwicHJvbXB0c1ZpZXdlZCI6W10sInNldHRpbmdzIjp7Im9wZW4iOmZhbHNlLCJzdGVwSW5kZXgiOjAsInN0ZXBzS2V5IjoiIn0sIm9wZW4iOnRydWUsInN0ZXBzS2V5IjoiZG93bmxvYWREYXNoYm9hcmRTdGF0cyJ9&location=WyJjb3VudHJ5IiwiSE5EIl0%3D&map=eyJjZW50ZXIiOnsibGF0Ijox

NC43MTIyNjM5OTE2NDQ4OTYsImxuZyI6LTg2LjIzNzE0MDY1NDk5NjA0fSwiem9
vbSI6NS4zMjY4NDUyODI5NDU0NjEsImNhbkJvdW5kIjpmYWxzZSwiZGF0YXNldH
MiOlt7Im9wYWNpdHkiOjAuNywidmlzaWJpbGl0eSI6dHJ1ZSwiZGF0YXNldCI6InBy
aW1hcnktZm9yZXN0cyIsImxheWVycyI6WyJwcmltYXJ5LWZvcmVzdHMtMjAwMSJ
dfSx7ImRhdGFzZXQiOiJwb2xpdGljYWwtYm91bmRhcmllcyIsImxheWVycyI6WyJka
XNwdXRlZC1wb2xpdGljYWwtYm91bmRhcmllcyIsInBvbGl0aWNhC1ib3VuZGFya
WVzIl0sImJvdW5kYXJ5Ijp0cnVlLCJvcGFjaXR5IjoxLCJ2aXNpYmlsaXR5Ijp0cnVlfS
x7ImRhdGFzZXQiOiJ0cmVlLWNvdmVyLWxvc3MiLCJsYXllcnMiOlsidHJlZS1jb3Zlc
i1sb3NzIl0sIm9wYWNpdHkiOjEsInZpc2liaWxpdHkiOnRydWUsInRpbWVsaW5lUGF
yYW1zIjp7InN0YXJ0RGF0ZSI6IjIwMDItMDEtMDEiLCJlbmREYXRlIjoiMjAyMC0x
Mi0zMSIsInRyaW1FbmREYXRlIjoiMjAyMC0xMi0zMSJ9LCJwYXJhbXMiOnsidGhy
ZXNob2xkIjozMCwidmlzaWJpbGl0eSI6dHJ1ZX19XX0%3D

Government of Canada. (2021). *Coronavirus disease (COVID-19): Outbreak update*. Government of Canada. Retrieved from https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html?utm_campaign=hc-sc-phm-21-22&utm_medium=sem&utm_source=ggl&utm_content=ad-text-en&utm_term=coronavirus%20health%20canada&adv=2122-0008&id_campaign=12663296824&id_source=125900518968&id_content=511624189093&gclid=Cj0KCQjwxdSHBhCdARIsAG6zhlWZU8kdAXeWk7koMHMuEEEW5hPiWy6ynqngU09Zhj-I1s8-WXJnq0waAhWTEALw_wcB&gclsrc=aw.ds

Government of Ontario. (2021). *COVID-19 self assessment*. Government of Ontario. Retrieved from https://covid-19.ontario.ca/self-assessment/

Hancock, T. & Minkler, M. (2012). Community Health Assessment or Healthy Community Assessment: Whose Community? Whose Health? Whose Assessment? In Minkler, M. (Ed.) *Community Organizing and Community Building for Health and Welfare* (3rd ed, pp. 153-170). Rutgers University Press

Lentfer, J. (2018, Jan. 12). Yes, charities want to make an impact. But poverty porn is not the way to do it. *The Guardian*. Retrieved from https://www.theguardian.com/voluntary-sector-network/2018/jan/12/charities-stop-poverty-porn-fundraising-ed-sheeran-comic-relief

Medical Brigades. (2021). *Medical Volunteer Abroad*. Medical Brigades. Retrieved from https://medical.globalbrigades.org/

Minkler, M., Wallerstein, N., Wilson, N. (2008). Improving Health through Community Organization and Community Building. In Glanz, K., Rimer, B., & Viswanath, K. (Eds). *Health Behavior and Health Education: Theory, Research and Practice* (4th ed, pp. 287-309). Jossey-Bass.

Mitchell, C., De Lange, N., Moletsane, R. (2018). *Participatory Visual Methodologies:*

Social Change, Community and Policy. DOI: https://dx-doi-org.ezproxy.library.yorku.ca/10.4135/9781526416117

Organisation for Economic Co-operation and Development. (2016). *Pisa for Development – Capacity Building Plan: Honduras*. Retrieved from https://www.oecd.org/pisa/pisa-for-development/Honduras%20CBP_Final.pdf

PAHO. (2020). *Health in the Americas: Honduras.* Pan American Health Organization. Retrieved from https://www.paho.org/salud-en-las-americas-2017/?p=4280

Public Health Brigades. (2021). *Projects – Public Health Brigades*. Public Health Brigades. Retrieved from https://publichealth.globalbrigades.org/projects/

UNICEF USA. (2014, Sept. 10). *UNICEF USA: "These Children are Facing Death Every Day" – Alysa Milano* [Video]. YouTube. Retrieved from https://www.youtube.com/watch?v=DjvslRtCA5I

United Nations. (2020). *The Sustainable Development Agenda.* United Nations Sustainable Development Goals. Retrieved from https://www.un.org/sustainabledevelopment/development-agenda/

USAID. (2017). *Climate Change Risk Profile: Honduras*. Retrieved from https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID%20ATLAS_Climate%20Change%20Risk%20Profile_Honduras.pdf

Water Brigades. (2021). *Sustainability – Water Brigades*. Water Brigades. Retrieved from https://water.globalbrigades.org/sustainability/

World Health Organization (2010). *WHO Global Code of Practice on the International Recruitment of Health Personnel.* Retrieved from http://www.who.int/hrh/migration/code/WHO_global_code_of_practice_EN.pdf

World Health Organization. (2021). *Water, sanitation and hygiene (WASH).* World Health Organization. Retrieved from https://www.who.int/health-topics/water-sanitation-and-hygiene-wash

World Bank. (2020, September). Literacy rate, adult total – Honduras. The World Bank. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=HN

World Bank. (2020). The World Bank in Honduras. *The World Bank*. Retrieved from https://www.worldbank.org/en/country/honduras/overview#1

York University. (2021). *Screening Checklist*. York University. Retrieved from https://www.yorku.ca/bettertogether/appendix-a/

Young, B., Peel, J., Benka-Coker, M., Rajkumar, S., Walker, E., Brook, R., Nelson, T., Volckens, J., L'Orange, C., Good, N., Quinn, C., Keller, J., Weller, Z., Africano, S., Osorto Pinel, A., Clark, M. (2019). Study Protocol for a Stepped-Wedge Randomized

Cookstove Intervention in Rural Honduras: Household Air Pollution and Cardiometabolic Health. *BMC Public Health*, 19(1), 903-915