



Final Project Proposal - Fall 2022

Port Au Prosper

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Submitted to:

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Introduction

Our project focuses on Haiti, an extremely underdeveloped country in the Caribbean region. Haiti currently has a population of approximately 11.7 million people. Nearly two-thirds of the country is rural land, with just over half of the land being cultivated despite the frequent rugged terrain. With that said, agriculture is the largest sector of Haiti's economy. Some of the major exported crops include cassava, plantains, bananas, corn, yams, sweet potatoes, and rice. Interestingly, sugarcane and coffee have historically been Haiti's primary cash crops; however, today they import more of these crops than they export. Moreover, this leaves about one-third of the nation in urban areas, including the country's capital city, Port Au Prince.

Overall, Haiti experiences more than 80% of moderate or severe food insecurity which greatly exceeds the data shown for the Caribbean and other regions of the world. Many factors contribute to the nation's considerable food insecurity. Current conditions including political instability, natural disasters, civil injustice, health access, and water quality have become greatly exacerbated by the COVID-19 pandemic and climate change. Coupling these current conditions with Haiti's historically deep-rooted economic concerns, the country experiences food insecurity that is perpetuated through a multitude of considerations.

The one problem our group found to be the most inherent to the development of the nation is the recurring natural disasters. Because the nation lacks sustainable social and economic aspects, these magnitude droughts, earthquakes, and hurricanes simply destroy any progress the nation has made since the one prior. For example, when a hurricane hits, the agriculture (crops) segment is often wiped out which in turn impacts jobs and more. Natural disaster damage increases the need for housing, education, health services, access to food and clean water, etc. It creates a vicious cycle that Port Au Prosper wants to help end.

Proposal

Project Name: Port-au-Prosper

Team Members Names: Caroline Briscoe, Morgan Hanley, Jack Shultz

Team Members' Disciplines: Strategic Communications, Biological Engineering, Chemical Engineering

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Describe your solution in a tweet (140 characters):

Port-au-Prosper is dedicated to partnering with local initiatives to ensure transparency of fund allocation through an accessible database!

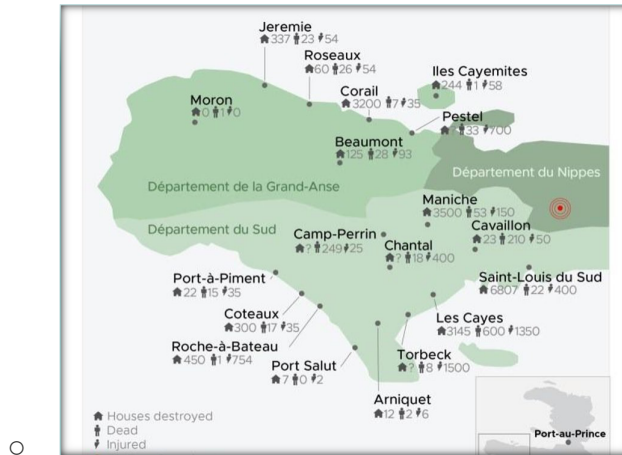
1. What specific problem are you trying to solve for this particular project? *

Please provide evidence of the size of the problem(s). E.g. number of people affected, etc.

For this particular project, we are trying to help Haitians allocate their funding/aid most effectively and efficiently with the hopes of making progress toward zero hunger. Our focus is on Port Au Prince, Haiti's capital city and commercial center. Port Au Prince has a population of approximately 2,915,000 people. Haiti's main problem in its journey to development as a country is the consistent natural disasters. Since 2010, Haiti has endured two destructive earthquakes with magnitudes over 7.0 and four major hurricanes. No matter how much money is donated in aid, the people of Haiti do not have the time or the efforts to continuously counter Mother Nature; it is a vicious cycle that halts any possible development. However, with the right allocation (i.e. on health, employment, climate change, etc.), we can work to subside some of these natural disasters and their impacts.

Examples of impact (*natural disasters*):

- Hurricane in 2016
 - 90 percent of crops and livestock were lost in some areas, thousands of structures were damaged and key roads and bridges were washed away
- 2021 Earthquake
 - Towns were destroyed, people were injured, and some families/individuals were left sleeping in the street.



■ Map from Marie-Rose, ESPWA President

Examples of impact (*COVID*):

- Covid-19 cases were documented resulting in a total of 857 deaths so far.
- The effects of Covid-19 extend beyond health consequences as well and have been felt across many facets of life ranging from the economy to increased political unrest.
- Overwhelming demand and lack of health services

Examples of impact (*food supply chain*):

- Food supply chain losses (see below)

Food Type	Haiti	Caribbean	World
Cereal	1%	2%	3%
Fruit	18%	8%	7%
Pulse	5%	1%	4%
Vegetable	7%	5%	7%

- Lack of fruits, vegetables, whole grains, nuts, and legumes in the diet (Global Nutrition Report)
- 47.7% of women aged 15-49 suffer from anemia (Global Nutrition Report)
- 21.9% of children under 5 are still affected by stunting (Global Nutrition Report)
- 31.2% of women adults and 22.2% of male adults face obesity (Global Nutrition Report)
- 1.3 million people are highly food insecure (WFP)
- 4.5 million across the country do not have enough to eat (WFP)
- Supply chain issues have a large impact on the food wastage carbon footprint in the Caribbean through the greenhouse gasses in the production, processing, transport, storage, and disposal of non-consumed foods.
 - According to the FAO, these cumulative environmental impacts produce a food wastage carbon footprint of 540kg of CO2 per capita in the Latin America and Caribbean (LAC) region. This is the 4 highest carbon footprint associated with food wastage in the world.
 - According to a 2015 FAO report, Fruits and Vegetables consist of 40% of the food waste in the region. Physical damage, high temps, deterioration, and drying are the main causes of these high waste percentages.

2. Who is most affected by this problem? Please include numbers *

- The 2016 hurricane affected over 2 million people, about 20 percent of Haiti's population, primarily in the poorest regions of the country. In all, 546 people were killed, more than 175,500 people sought refuge in shelters, and about 1.4 million people required immediate humanitarian assistance. It's estimated that over 450,000 children were out of school. (The World Bank)
- There were large impacts of the 2021 Earthquake throughout Haiti. At least 2,248 people were confirmed killed as of August 14 2021 and more than 12,763 were injured, mostly in the Sud Department. An estimated 650,000 people needed assistance. At least 137,500 buildings were damaged or destroyed. (Relief Web)

3. How do you know people need your solution? * We want to make sure that your solution addresses a need.

- World Food Program has provided emergency food service to more than 150,000 people affected by drought and food insecurity since 2018 (WFP)
- “...between 2010 and 2020, the United Nations allocated more than \$13 billion in international aid for Haiti, most of which has funded disaster-relief missions and development programs.” (CFR)

BUT

- $\frac{1}{3}$ population struggles with access to clean water
- $\frac{2}{3}$ of the population lacks sanitation services
- “2021 earthquake destroyed or heavily damaged 308 schools, affecting 100,000 children” (World Report 2022)
- Haiti is “off course” to meet a variety of nutrition goals
 - They are only on course for two targets: childhood overweight and waste.
 - Haiti is not on course to meet the targets for exclusive breastfeeding among infants aged 0 to 5 months, anemia in women of reproductive age (aged 15 to 49 years), low birth weight, diabetes among men, diabetes among women, obesity among men, and obesity among women. The low birth rate has insufficient data to comprehensively assess its progress toward its global target.

***Funding is not going to the right places or is ineffective so far. Showing the distribution and modifying the allocation of funds is essential to continuing any progress in the developing country.

4. What is new with your product or service or policy or program proposed? What substitutes do people resort to because it doesn’t exist yet (or they don’t know about it)? *

- Transparency is key.
 - With our product, we plan to produce a database that helps companies and people see where funding is being distributed across Haiti and in particular Port Au Prince.
 - Much of foreign assistance goes into a “black box” where it becomes nearly impossible to tell what happens afterward. We plan on organizing a product that will be able to tell not only where the organization's funding is being distributed but also where it's being distributed within each organization.
- Accessibility matters.
 - Most people resort to funding or giving charitable donations to big organizations because they may have the most credibility or popularity in a specific country.

However, the majority of funding to these organizations is not reaching the local people/communities.

- Our database will be accessible to all Haitians with a focus on helping Port Au Prince first, hoping that starting with the nation's capital may have a positive ripple effect throughout the nation.
- Allocation
 - “Of the \$16 million in grants to the U.S.-based organizations, they had subcontracted just \$604,000, or about 3.6 percent of this funding, to local organizations.” (Center for Economic and Political Research)

5. Please provide team members, their roles, and their background. Explain why your team is uniquely qualified to solve this problem. *

Caroline Briscoe (Strategic Communications major with a minor in business) will fulfill the role of project manager & branding director.

- One of my strengths lies in storytelling, and I will work to build a brand for our database which provides an authentic, Haitian approach to development. We will work alongside Haitians rather than above them to ensure this database fits their desires and needs to progress toward a healthier and happier city/country!

Morgan Hanley (Biological Engineering major with minors in political science and engineering sustainability) will fulfill the role of technical coordinator and local policy collaborator.

- My strengths that lend themselves specifically to this project lie within the overlap between policy and technical concerns which is specifically prominent in this problem and developed solution. With my background and degree, the path is biological engineering and political science, I have been able to better grasp the balance of policy and compliance with technical endeavors. This will allow for greater collaboration with Haitians and their local government’s policies to carve a better, more integrated, and comprehensive path forward in a platform that meshes adequate policy-based distribution of funds with technical allocations and efforts of said funds.

Jack Shultz (Chemical Engineering major) will fulfill the role of customer support representative and marketing specialist.

- My strengths lie in connecting with people and problem-solving. As I am pursuing a Chemical Engineering degree, I have developed the skills to identify problems, find data, and put in the work to solve the issue at hand. We are qualified to solve this problem because we know the problem at hand. Funding is not reaching the local communities and people for the long haul, and we are committed to helping reach places like Port Au Prince.

6. How do or will you sustainably finance your solution? *

e.g. Subscription-based revenue model, commission, government subsidies, NGO funding etc.

Our funding will potentially come from NGOs and donations. Below are a few of the potential NGOs we have researched.

- [KayTita](#)
 - Emphasis on Port Au Prince
 - Mission: Connecting communities to resources for a better Haiti and ending the cycle of aid dependency in Haiti by serving as a community catalyst.
- [Pan American Development Foundation](#)
 - Mission: Work to address the needs of vulnerable populations across Latin America and the Caribbean, promote sustainable livelihoods, and advance rights and justice
- [Fondation Connaissance et Liberté \(Open Society Institute\)](#)
 - Provides programs to improve conditions for young people and rural communities
 - Emphasis on education programs and providing youth from historically marginalized communities with access to information and new technologies
 - Developed a national network of women's organizations through provided computers, Internet connectivity, and joint advocacy activities
 - Satellite is located in Port-au-Prince

Hear from our stakeholders:

- **Do you believe that the international funds, specifically for disaster relief and food security, are being allocated adequately? Why or why not? In what ways could this process be systematically improved?*
 - Marie-Rose from ESPWA proposes that in order to schematically improve communities, funders need to think long-term. Short-term projects do not build a nation. As stated, “aid should be about ending the need for aid”. Think “community first”.
- **How would you describe Haiti's progress in relation to improving food security?*
 - Marie-Rose spoke much about how political issues, climate change, and natural disasters have been detrimental factors to improving food security in Haiti. Haiti has been in a recession for quite some time. One of her biggest concerns was that places like the United States have created a sort of “revolving door”, and are not treating Haiti as a regional crisis, which marginalizes Haiti and its people.

- **What are the most relevant or pressing repercussions of food insecurity that Haitians are experiencing in their everyday life?*
 - As Jean Wiener of FoProBim stated, “Continued political and social instability will never allow us to engage in critically needed sustainable environmental protection. Poverty will continue to put immense pressures on all natural resources, contributing to their continued degradation and destruction.”
 - Marie-Rose talked about how families there are living off little to no food, and there has been little progress over the years. There is help that is provided for the short-term but has not yet been a long-term solution.

Appendix

Challenge 5: Food Systems Dashboard

- The effects of Covid-19 extend beyond health consequences as well and have been felt across many facets of life ranging from the economy to increased political unrest.
- Nearly $\frac{2}{3}$ of Haiti is rural
- Major exported crops: cassava, plantains, bananas, corn, yams, sweet potatoes, and rice
- Tropical climate; temperatures vary more on the daily than throughout the year
- Haiti experiences over 80% moderate or severe food insecurity which greatly exceeds the data shown of the Caribbean and the rest of the world

Challenge 6: Food Waste & Loss

- As of 2017, the Caribbean & Latin America wasted 78 million tons of food annually.
- The Caribbean has the highest carbon footprint in the developing world

Challenge 7: World Food Day

- Agricultural technology development is not growing at the rate it should in countries because of the low education rates in Latin America and the Caribbean.
- Workshops with programs in local locations could be very beneficial to help technological growth in countries.
- The full use of many agricultural technologies is not being used.

Challenge 8: Challenge Exploration

- Lack of fruits, vegetables, whole grains, nuts, and legumes in the diet
- 47.7% of women aged 15-49 suffer from anemia
- 21.9% of children under 5 are still affected by stunting
- 31.2% of women adults and 22.2% of male adults face obesity
- Main problems
 - Pandemic
 - Violence
 - Good nutrition
 - Clean water
 - Natural disasters
- “The country’s most vulnerable communities face dramatic floods and soil erosion caused by deforestation... leading to reduced agricultural productivity.”
 - Climate change accelerating

Challenge 8: Project Report

- SDG 4: Quality Education
 - Teaching the next generation to inform them of Haitian practices to follow and Haitian practices to change (i.e. violence, nutrition, and work habits)
- SDG 6: Clean Water and Sanitation & SDG 2: Zero Hunger
 - Overlap regarding malnutrition and food insecurity
- SDG 13: Climate Action
 - Natural disasters are an extreme issue in Haiti, and focusing on climate action can help in that problem area
- SDG 2: Zero Hunger
 - Malnutrition and food insecurity are present in Haiti and are exacerbated by economic hardship and continued natural disasters

Challenge 9: Seek Connections

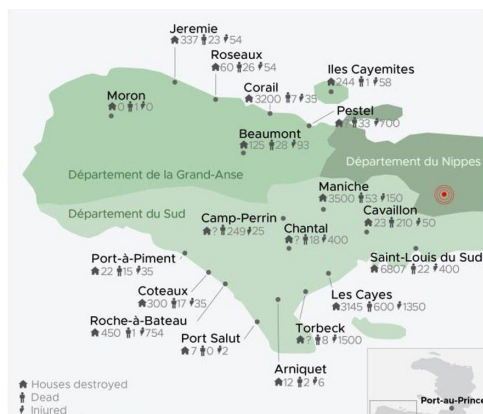
- Stakeholders
 - ESPWA-Haiti
 - World Food Programme-Haiti
 - USAID-Ranfose
 - Martin Boute, CEO at RANGO Broadband, Chairman Digicel Haiti
 - Fondation pour la Protection de la Biodiversité Marine- Haiti
- Similar prior efforts that were unsuccessful:

Standard or Resource	Date	Weblink	Function	Summary
Aid Management Platform (AMP)	2009	https://reliefweb.int/report/haiti/new-online-portal-promote-efficient-use-aid-haiti	Created by AidData institutional partner Development Gateway in collaboration with the Ministry of Planning and External Cooperation and supported by the United Nations Development Programme (UNDP)	Haiti's foreign aid information in a comprehensive, user-friendly format. The platform is one important step towards achieving the government's "Build Back Better" initiatives

Haitian Platform for Public Investment	2010	https://reliefweb.int/report/haiti/new-online-portal-promote-efficient-use-aid-haiti	"The success of this project will be measured in degree of transparency it presents and ultimately through ensuring every dollar given is leveraged to the maximum extent possible in helping us overcome this terrible tragedy."	A new online portal will promote the efficient use of more than \$9 billion in aid pledged to Haiti's reconstruction, while holding donors to their promises and ensuring transparency and accountability of the use of their funds.
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Challenge 10: Design Mapping Strategy

- Population of Port-Au-Prince: ~2,915,000 people
- 90 percent of crops and livestock were lost in some areas, thousands of structures were damaged and key roads and bridges were washed away by a Hurricane in 2016.
- Overwhelming demand causes a lack of access to health services for many.



- - Map from Marie-Rose, ESPWA President
 - Causes of Impact:
 - Natural Disasters (i.e. hurricanes, earthquakes, floods)
 - Lack of access to health services
- Project opportunities
 - Funding is not reaching local ecosystems and is not bringing long-term effects. That knowledge can help strengthen our argument on a database to help distribute the funding coming into Haiti.



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[ESPWA-Haiti Leadership](#)

[USAID-Ranfose](#)

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