

Williams College
Tafara Makaza, class of 2019
Project Title: Farmarvest
Zimbabwe (June 04 - August, 18 2019)

Objective:

To foster peace by curbing unemployment in Zimbabwe, through job creation in agriculture and youth employment.

Background:

On January 14 2019, President Mnangagwa announced an over 150% fuel price hike at a spontaneous press conference. The announcement sparked outcries and civil unrests. Next, trade unions and civil rights groups organized a 3-day protest, dubbed “#shutdownZimbabwe”, to protect citizens’ real incomes against the inordinate price hikes. What followed was an internet shutdown and a lethal military crackdown which saw gross human rights violations: deaths, sexual assaults, beatings and injuries. Soldiers have been raping women and firing live ammunition. Police have been arresting people, including kids, without regard to constitutional procedures. Courts have been denying bail to all those arrested. People are still dying and the military is still deployed on the streets. The root causes of these incidents are economic deprivation and lack of meaningful employment opportunities for the young.

Target Problem:

The formal unemployment rate in Zimbabwe is above 90% and according to a report by the African Development Bank (AFDB), unemployment is the leading cause of crime and violence. Zimbabwe’s colleges annually inject more than 50,000 graduates into a collapsed economy culminating in the majority (+95%) of college graduates remaining unemployed. They will resort to informal trading and street vending. Unemployed youth, including those with college degrees, are now the most vulnerable group in Zimbabwe because they lack financial security and purpose while suffering abuse at the hands of the state security agents. During the recent protest, more 60% of the casualties were unemployed graduates from the leading opposition party.

The Solution:

Farmarvest will create employment opportunities for the youth whilst supporting 20 smallholder farmers who are landowners in the outskirts of Bulawayo, Zimbabwe. Farmarvest will supply the inputs: \$300 funding, and skilled labor (5 project managers). The farmers’ funds will go towards purchasing poultry feeds, and paying for heating and lighting expenses. Project managers will be unemployed graduates who have experience and knowledge in agriculture. They will apply through our website. Along with supplying funds and labor to assist farmers, Farmarvest will be looking for supermarkets and restaurants that will buy slaughtered chickens in bulk from our partner farmers. There is a high demand for chicken in Bulawayo both formally in stores and informally in communities. Production of these chickens has been dominated by big producers and cheaper imports from South Africa; however people claim they are unhealthy. Thus healthy, locally produced chickens and small-scale producers have a huge potential if they can establish viable markets for their food.

My Experience:

I have two years of experience in startups and nonprofits. In my freshman year I participated in the Williams Business Plan Challenge and the McGill University Dobson Cup -- Innovation Driven Enterprise Track. My team won the second prizes at both competitions. After that, we spent the summer of 2017 at the Lever Incubator in North Adams, MA building a fintech startup- [FamKeepa](#). FamKeepa got acquired by a major telecommunications company. Following the success of FamKeepa, I worked at the Williams College Career Center as assistant to Tonio Palmer -- the current entrepreneur in residence at Williams College. After my sophomore year, I decided to take a gap year from Williams so that I could fully participate in Zimbabwe's entrepreneurial scene. Since May of 2018, I have successfully built and scaled three startups in Zimbabwe: [Fixa](#) -- an app that connects professional home service providers with customers, [FreshForward](#) -- an online shopping platform for fresh farm produce and groceries, and [ZimTaxi](#) -- a ridesharing app that now has a network of over 100 taxi drivers. I'm also a graduate of the Clinton Global Initiative University 2018 (CGIU) at Northeastern University, MA and the 2018 CGI U Campus Representative at Williams College. CGIU helped me to build my nonprofit called [Startup Zimbabwe](#) -- a virtual business incubator that is currently supporting 10 early stage startups in Zimbabwe.

Our philosophy:

Through Farmarvest, this summer I will work with two volunteers. We will directly employ 5 college graduates as project managers at each farm. Farmarvest will make agriculture attractive to college graduates by incorporating data science in our projects. Project managers will record project data using survey forms (or google sheets) which include feeding schedule, per feed sizes, batch sizes per project, number of chickens that contract diseases or die, monthly electricity bill, optimal batch size per square metre, amount of water used per day, amount of feed used in a day per batch size, amount of manure produced per day per batch size and more. All this data, will be used to teach project managers how to prepare standard datasets that they can use to build machine learning models which forecast optimal project budget and input ratios. This will help our farmers know how much money they are most likely to make from a batch based on its characteristics. Our goal is to enable the 20 teams of 5 to produce and sell beyond August. Capital and expertise are the largest challenges that these farmers face. We hope by allowing farmers to participate in this Davis Project for Peace project, Farmarvest will build a strong foundation for them to achieve self-sustenance and increase the scale of their enterprises.

Current progress:

We currently have 20 chicken poultry farmers that have applied to join Farmarvest in our 2019 summer program. Applications for project managers and smallholder farmers are currently being accepted through the Farmarvest website at (www.farmarvest.com). By supplying 20 farmers each with \$300 for their chicken projects, we can create 105 jobs. \$6000 will create 105 jobs for the youth in Zimbabwe, today. Just imagine 105 people gaining access to better living conditions because of the Davis Project for Peace.