SONEL

Farm and Data

Vision *

To bolster security in rural small-farmer communities with the use of existing surveillance technology while capturing data on land resources for relevant interest bodies.

Problem Statement *

Praedial larceny is a constant issue in small farmer enterprise and agricultural data availabilty and accesibility from these communities is limited due to the lack of formality of these enterprises and insufficient infrastructural access.

This lack of data limits the guidance of these farming communities in sustainable practices and resource management.

Customer *

Agricultural losses from climate change and praedial larceny in Jamaica, were recorded at $14.4 B 1994-2010 (UNCC) and $6B (jis.gov.jm) per year, respectively.

Rural small farming communities represented as farming co-ops are primarily targets as they face the brunt of praedial larceny and least likely to individually afford formal protection services .

The information gained from the surveillance of these farms is then sold to interest bodies such as: research, government and multilateral institutions and agencies for data management, reference and application.

Solution *

Sonel, as a government funded programme, will provide a two pronged approach to transform the collection of agricultural data as well as rural farm management and protection by:

1. Supplying surveillance tools to small farming communities and

1. Collecting data on resource use and state from the community using specialized drones.

Collaboration *

Coorperation is critical to Sonel's success.

As the most immediate beneciary due to prevention of praedial larceny, small farmers may need assistance to cover the cost of community surveillance. Strong financial support via subsidies for farming coorperatives will be required to afford the significant cost of surveillance setup.

A consortium of agencies such as the Jamaica Social Investment Fund and the Ministry of Agriculture is are targeted to cover the initial cost set-up of surveillance systems in these communities.

Also critical to the success of this program are field and extension officers from RADA and the Forestry Department to sensitize and educate residents in the community of the benefits.

Passion (empathy) *

Limited employment opportunities and capital drive many rural residence towards subsistence agriculture. As critical partners in protecting Jamaica's food security, they are also without adequate protection due to the geography of their enterprise.

Sonel will provide security solutions to these members of our economy most in need.

Proof of Concept *

To minimize cost, references from similar programs internationally will be taken into consideration to determine best fit for domestic application.

This research and development stage will last for six months, whereafter, a small community will be chosen for a pilot project.

Pivotal to this will be the consultation of community members sensitize them of the program and gauge their support.

Costs*

Business Registration: USD$200.00

Drone Software: USD$1000.00

Drones and station set up: USD$15000.00

Maintenance and Insurance: USD$1000.00/Yr

Opportunities and Risks

Opportunities:

- Capture information from small farms often overlooked due to poor feasibility.

- Increase small-farmer confidence in agriculture by reducing praedial larceny.

Risks

- Drone damage due to terrain and natural features

- Theft of drone equipment.

Plan B

Replace this text with how you plan to adjust your solution if the proof of concept is not successful, based on possible outcomes and lessons learned. This is not a mandatory slide, however it would provide extra points for judging, remove if you do no complete.

SDG Goals Aligned To *

1. No Poverty

2. Zero Hunger

5. Gender Equailty

8. Decent Work and Economic Growth

9. Industry, Innovation and Infrastructure

10 Reducing Inequality

17. Partnerships to Achieve the Goal