An OrganIC remedy: Organizational Interface for Cultivation

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Many organizations and companies have set out to address food insecurity in remote and low-income areas across Canada but unfortunately, many fall short. Why is this? To solve this enduring issue, we developed the organic remedy for food insecurity.

Well, let's consider Michael. He is a 30-year-old Cree gas station worker with low-income & medical conditions including diabetes and obesity. When he gets home to his reserve after a late-night shift, he eats potato chips from work and jumps into bed so that he's on time for his next early morning shift. Frankly, it is not feasible for Michael to take a taxi into a city over an hour away to shop at their supermarket, and it's not economically possible to be buying nutritionally dense food at inflated pricing in the reserves. Michael is not alone - on average, Indigenous, low-income, and rural groups report 30-51% higher rates of obesity. This is linked to increased consumption of ultra-processed market foods.

Now, what are the problems people like Michael are facing? It's important that we see the forest for the trees. Firstly, we need to recognize that there is a lack of accessibility to affordable healthy food options. Second, a lack of resources on reserves & remote areas deters self-production. And third, a lack of education around how to even go about doing this.

So, what's the solution? Our team has conceived a grassroots approach using a communal garden and digital interface to connect members of the community with the tools, contacts, and resources needed to improve access to healthy produce. We will be using the 3 Rs as a foundational principle to conserve sustainable use of seeds, compost, soils, and other resources. Most importantly, we will establish long-term capacity-building using a commissioner-cultivator model. These types of community gardens have been successfully implemented in rural communities in Benin, Gambia, and Senegal, which have had high rates of food insecurity, and are maintained by the

community members themselves. This has led to an increase in the availability of vegetables for not just the cultivators, but the community itself in these areas.

Then, what does this look like? This is a mockup of our web interface where community members can sign up as a cultivator or a community member. They can be matched to each other and have access to OrganIC tools. It will also track and monitor the commissioning and cultivation of produce. Each user will have an OrganIC library card with a unique personal identifier.
Here, we have drafted a blueprint of the communal garden library including types of produce and tools needed for cultivation. This is an example layout of what a potential community garden will look like and how the community can plan gardens based on their preferences and needs.

The OrganIC model centers around providing a community-based resource to facilitate self-sufficient solutions to food insecurity. The goal is to build a repository that will provide contacts to experienced cultivators and access to tools and resources for cultivation. We both provide matching of community members to experienced cultivators for education purposes, as well as provide a shared collection of tools and supplies, much like a library. By connecting cultivators to tools, we reduce the barriers and make the initiation of cultivation more affordable. We further promote a community-based growth and the exchange of knowledge by connecting interested community members to community-based cultivators. This has the additional benefit of strengthening the community bond and increasing the generation of produce, for individual consumption or for the maintenance of the OrganIC repository through sale in local farmer's markets.

In conclusion, our project is aimed to work with Indigenous communities living on reserves that are experiencing food insecurity. There will be an online platform that allows for community members to seek out teachers for skills that deal with the cultivation of food, and a community library where people can borrow tools to begin their own home gardens.
Our limitations for implementation of this initiative are that it doesn't address access to power and running water and it heavily relies on community drive and effort for self-sustained cultivation. Additionally, access to gardens and tools is limited by access to transportation.
There has to be a strong relationship built with Elders, community, and with outsiders. This is vital for the project to be started, built, and sustained by all parties involved.
Our expected benefits from this project are a decrease in dependence on transported goods to isolated locations, an increase in community cooperation in the creation of sustainable food grown locally, an increase in member activity levels, and an increase in

community knowledge for sustainable food growth. Future goals of OrganIC include maintenance and growth of community cultivation, in both diversity and usage, as well as dissemination of knowledge and resources to neighboring communities.
We'd like to expand this project to other food groups like meat, in terms of hunting programs where community members can come off land, hunt, and teach the process to younger community members. This meat would curb the lack of protein noted in most diets on reserves.

Our mockup online platform: **https://organic-d685fa.webflow.io**

Citations:
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