Mass Juicer Business Plan

Waste-Less Team

United States Team: Montgomery Community College

Jordan Team: Al Balqa Applied University

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The Problem

In Jordan

Agriculture is one of the most important economic resources in Jordan due to the temperate climate and fertile soil. Many Jordanian households depend on agriculture as a source of income, but in recent years, during the season of tomatoes, the market was affected by the crisis of low prices, which led to the throwing of tomatoes in the streets to reduce losses.

This behavior led to the wastage of large quantities of vegetables and not just tomatoes. Last year, farmers also wasted citrus and fruits due to the low prices in terms of cost. This not only leads to the waste of food, but also the waste of water and energy used for production, this problem affects many people including farmers, vendors or consumers, as it hurts the environment and the surrounding community.
In the United States

There is mass waste of viable and still nutritious fruits and vegetables from large supermarkets and grocery store chains. This is a confirmed issue in Washington, D.C. and Maryland but the United States is likely responsible for even larger amounts of wasted produce. Not only is more waste created and energy consumed to dispose of the surplus but those less fortunate and the community at large are denied healthy, supplemental nutrition. There are large amounts of viable, fruits and vegetables being wasted by supermarkets and grocery store chains that could be utilized.

The Solution

To create a functional product to juice and preserve surplus fruit and vegetable waste. Utilizing all products of the juicer for compost, breads, jams, sauces as well as nutritious juice for the community.

The surplus produce to be utilized will primarily come from farmers in Jordan and from supermarkets and grocery stores in the U.S. The juicer functions to assist communities in offering free nutrition to schools, senior and community centers and to those in need. Products will also be sold for profit to local restaurants and used by farmers to turn loss into profit by processing and storing goods instead of wasting. The successful prototype could also be sold to farmers, large restaurants and grocery store chains. Any excess profits would be for the continuing support of sustainability through community engagement and free juice.

This juicer is meant to target multiple aspects of sustainability because it creates an efficient way of using surplus fruit and vegetables from farms and grocery stores, but it also is distributed in an equitable and sustainable manner. The juices produced will be accessible or free to those in need or who lack access to it. In addition, this juicer runs primarily on solar energy with electric optional for the refrigeration component.
Sustainability

By taking fruits and vegetables that are slightly damaged or just past expiration and juicing, preserving, or creating other goods; we not only provide a service to the community but, we also reduce the energy and emissions typically used to dispose of food waste. How does it impact: people, profit, and planet? (If it only impacts one or two, please mention.)

It affects people because as per our research, our communities do not enjoy wasting perfectly good produce. They simply do not know what to do with it. Hence, we are aiding our community in being more environmentally conscious and by providing this service to those that need it most. Juicing slightly damaged fruit means that we can make it cheaper and more accessible to those in need. This is because produce we acquire will either be free or cheaper than regular.

We understand the importance of sustainability for the project, our sustainability plan contains several points. For example, only agricultural raw materials will be used. A long-term partnership will be applied with farmers, charities, and suppliers. Adherence to laws and legislations related to trade and agriculture as well. Lastly, supporting the local farmers and work with them to get the most benefit from the project is also part of our sustainability plan.

Market

The industry of organic and natural food has become increasingly more popular in Jordan. Many local juice shops have been established in the recent years; the juicer would be helpful to such shops so they would be the target market in Jordan as well as farmers. Additionally, any excess can be given to the needy or sold to local restaurants and cafes to help pay for any workers needed.

In the U.S. we have interviewed several businesses, farmers markets, restaurants, and grocery stores to try and understand current sustainability issues. The main idea of the juicer is a combined effort
of research and data from both the U.S. and Jordan. Benefiting the poor, schools, residential areas, and community institutions. We plan to reach out to local farmers and grocery stores with a finished product hoping to have them on board to juicing with us.

As we know, mega stores like; Whole foods, Tropical smoothie and Smoothie king also offer juices and smoothies. However, our mission is to provide local schools and residents with fresh, affordable juice from fresh produce that would most likely end up in the waste bin. We have thought about expanding with restaurants covering much of the inventory in produce as they see on the high-end a lot of unnecessary waste first-hand. The concept is unique for its size and capability, we have developed a prototype 50 inches in length and height, allotting room for a large blade that can puree pounds of produce at a time while also storing the pulp for compost- which will be used for: soil and snacks. The market need here will be promoting and licensure in order to work with small businesses and build rapport with one another.

**Marketing Strategy**

Our most important customers or target audience are farmers, restaurant owners, and big food corporations. Our product is made to help reduce wastefulness in the food industry, specifically fruit produce, so this includes consumers from all aspects of the food industry. Our product is also made accessible to anyone who want to reduce food waste. By using our product, they can convert fruit produce to make a variety of reusable products like jams, jellies, and bread.

All our customers depend on our product to assist them with sustainability in their affairs. Sustainability is a growing concern that is starting to be recognized around the world. With the growing issue of food waste, it is important that we try our best to ensure a happier and more sustainable life. Because sustainability affects so many people, our customers will know that
they are helping their communities and in turn making a difference in the world. Change happens with the small steps we take, and our product assists to ease the path to a sustainable world.

Customers can find us through our app, word of mouth, advertisements and on our social media. We would build a social media platform to help our customers stay connected and informed. We would also go out into the public and advertise our product. Once the establishment of our product is successful, we would organize all our information in our interactive app; customers will have access to wide scope of features like chat rooms to connect with other customers, future plans posted by our team members, and a suggestions area to voice concerns and help us to constantly improve our services.

Finances and Resources

Several resources will be utilized to make the juicer a reality. Firstly, we will need to purchase a multi-purpose juicer that can produce juice, jams, and sauces. Additionally, the juicer will need a refrigerator incorporated within. We will need solar panels to supply power to the juicer and ensure its mobility. We will need to invest in developing a mobile app as a tool to connect with the farmers and the community.

Our juicer does a great job when it comes to financial sustainability, because the income is self-generating. The money required to keep the juicer running comes from selling our juice, jam, and sauce to schools, groceries, and community centers. Additionally, donations from the community and volunteer organizations will support us in achieving our goal. The income collected by charging farmers to juice and bottle all their surplus is another source of revenue. Additional income can be generated from the mobile app we intend to develop.
The maximum initial investment of $5,000 allocated to startup our juicer is more than enough. To begin with Monocrystalline solar panels producing 300-Watt can be purchased less than $1,000 at electronic stores. The cost to develop the mobile app will be determined on the second phase of the business plan. The size and cost of the juicer to be used will be determined by market prices and possible use of refurbished equipment.