
FOCUS FOODS

Julia Kurnik
Geoff Becker
Harvard NVC-SE
2015 Finals
Julia_kurnik@hks15.harvard.edu
Executive Summary

Agriculture today is irreparably harming our environment. Through greenhouse gas emissions, soil erosion, chemical runoff, and inefficient water use, current farming methods harm nearly every aspect of the environment. Further, the global population will exceed 9 billion people by 2040 and the UN’s World Food Program projects that worldwide food production will need to increase by 60% to meet this growing food demand. This will further strain our natural resources and move us closer, or over, environmental tipping points. Put simply, we need a revolution in how we produce our food and FOCUS Foods is positioned well to lead this movement.

FOCUS Foods will harness the power of an innovative method of farming called aquaponics. Aquaponics combines the best aspects of both aquaculture and hydroponics to create a completely closed-loop system for growing 100% organic fruits and vegetables. Waste from the fish provides organic fertilizer to the plants and the plants clean the fish waste from the water. Aquaponics uses just 5-10% of the water, and none of the soil, needed for traditional farming. FOCUS Foods will also grow its own fish food from waste products so that there are no extraneous inputs other than sunlight, some water, and heat in the winter. The resulting vegetables, fruits, herbs, and fish will then be sold as the healthiest, most sustainable products on the market.

FOCUS Foods will target two markets: grocery stores and area restaurants. To start, FOCUS Foods will sell directly to its partner, Brown’s Super Stores, a chain of Shop Rites located in food deserts in greater Philadelphia. This not only guarantees a steady stream of income, but will also eliminate any transportation costs and emissions since the food will come from a 60,000 square foot farm built in a greenhouse directly on top of the grocery store. At full capacity, this farm will produce 27% of the fish and 42% of the produce sold by the store. With 296 stores across 6 states and average sales of nearly $7B in just the Philadelphia region alone, ShopRite provides many expansion opportunities.
In year two, FOCUS Foods will add an additional roof-top system and build its first stand-alone facility to begin to sell to farm-to-table restaurants and to grocery stores without rooftop access. In later years, we’ll expand to additional cities and explore additional partnerships. By 2020, we will have 17 farms.

FOCUS Foods holds many advantages over its more conventional competitors. First, FOCUS Foods will remove five of the eight major steps in a conventional farm’s value chain, providing a simplified business model and extensive cost savings. We will not need to till soil, fertilize, irrigate, sort and store produce, or distribute our final goods. Our farm will go from seed to harvest and already be in the store.

Second, FOCUS Foods will grow more food for less. Compared to conventional farms, aquaponics has a higher yield (faster growth, year-round), reduced weather variability, and decreased spoilage. All of this combines to provide FOCUS Foods with a 25% operating margin compared to just 10% on average at traditional farms today. Finally, FOCUS Foods will also be hyper-local, sustainable, and naturally organic – the type of food that many consumers already want.

FOCUS Foods will also provide benefits to its customers, the community, and the environment. To our customers we offer lower costs, year-round, hyper-local, organic produce, and fresher, and therefore tastier, food. To our community we offer greater nutrient quality and quantity, tastier produce, local jobs and paid internships, and an improvement of neighborhood blight. To the environment we offer few inputs, no transportation, hyper-local food year-round, and no pesticides.

The more food we sell, the greater our profit and social impact. Unlike many social enterprises, our perfect financial
and social mission alignment will allow us to concentrate solely on scaling the company without worrying about balancing competing interests. This ideal set-up will allow us to achieve positive cash flow in year three. By year five, FOCUS Foods will have saved nearly 3,000 metric tons of greenhouse gases, more than 5,000 pounds of pesticides, more than 10,000 tons of topsoil from erosion, and 264 million gallons of water compared with a traditional farm. The faster we grow, the more impact we will have and the more profit we will make.

Our impact will not stop there. FOCUS Foods’ growth, and therefore its impact, is realistic. This is growth we can actually achieve. In the future, urban aquaponics farms will be ubiquitous as the company continues to expand through self-funded growth, partnerships with major grocery store chains, and investment. Our first full-scale system will allow us to perfect the process. We will use our engineering backgrounds to optimize the aquaponics process and to build patentable monitoring technology that will allow us to seamlessly run farms across the country. We will automate the testing of water chemistry, feeding of fish, and more, so that we can monitor our farms from a smartphone. We can then expand at a much faster rate, spreading across the country and beyond. Our environmental and health impact will multiply and millions more people will have access to affordable, healthy, fresh, local food. The opportunities are boundless.

FOCUS Foods is led by its two co-founders who met as undergraduates at MIT. The CEO, Julia Kurnik, is in her final year as a graduate student pursuing a dual degree with an MBA in entrepreneurial management from Wharton and a Masters in policy from Harvard Kennedy School. She has a long and successful history in the start-up world in both the public and private sectors. She also brings invaluable management and outreach skills. The other co-founder, Geoff Becker, is the CFO and brings significant financial experience to the team. For the past nine years, he has worked as a Senior Trader at Susquehanna, a global financial firm. He, too, has past experience with start-ups, having co-founded a
company that developed a unique cold backpack technology to transport vaccines in developing countries.

In addition to the core team, FOCUS Foods has a team of subject matter experts (SMEs) who are excited about the project and willing to donate their time. These include aquaculture and horticulture technicians and professors who will be available to answer questions and help us optimize our system until we are able to bring on additional team members.