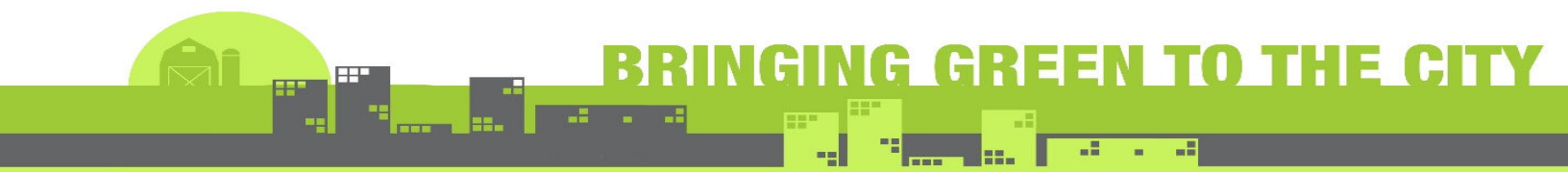


merchant'sgarden

Indisputably Fresh

TUSD

Co-Founder



Chaz Shelton
Merchant's Garden AgroTech
November 23, 2015

Dear Tucson Unified School District,

The Merchant's Garden is changing the way the world accesses healthy food. Bringing a computer controlled aquaponics greenhouse into the City will change the way the city eats. The Merchant's Garden **provides a consistent supply of locally farmed produce in urban areas.** This is made possible by leveraging the science of aquaponics and hydroponics in a computer controlled greenhouse environment. It houses the entire supply chain: *we build, grow, harvest, and deliver* locally produced food. This is a **local production for local consumption** model based in Southwest Arizona.

In June 2014, the Merchant's Garden was accepted as residents of the *Thryve* social impact business incubator in Tucson Arizona. *Thryve* is "a social impact incubator providing entrepreneurs the tools to take their innovations from idea to impact." Following private investment in the company, Merchant's Garden incorporated as a C-Corporation early March of 2015 and is now based in Tucson Arizona.

The Problem

Schools across the country realize the paramount task of providing their community's children with the healthiest food. This means sourcing food from local producers where the food contains the property nutritional content to achieve a child's dietary needs. Currently, schools are searching high and low to get affordable locally produce veggies. They have to spend enormous amounts of money for small, inconsistent quantities. Local producers are unable to meet procurement requirements set by schools. Local producers cannot provide a consistent, high-volume yield of food nor meet schools' procurement requirements.

The Solution

A computer controlled aquaponics greenhouse brings the farm right to the city. This model houses the entire food production supply-chain to provide four unique competitive advantages. **Firstly**, the Merchant's Garden is a farm right in the city. All production is in a computer controlled greenhouse providing the ability to grow food in previously unfarmable areas. **Secondly**, this central locations reduces logistics and distribution costs significantly. Where traditional farming loses up to 35% of its product just in efforts to bring it to market, the Merchant's Garden grows the product right where it's sold. This eliminates the logistical costs and increases the freshness and quality of the products. **Thirdly**, this model is an alternative food production system that uses **90% less water than traditional farming.** Traditional agriculture is the largest consumer of the world's supply of water. As water abundance continues to deplete, alternative food productions will be a necessity. **Fourthly**, the model is able to produce **10X greater** volume per square acre than that of traditional farming.

Among these competitive advantages, Merchant's Garden can assure a consistent crop year-round because this is all done in a computer controlled greenhouse environment. This allows Merchant's Garden to control the alkalinity, phosphorus, PH, humidity, temperature, and the fish's feed rate to ensure the perfect grow environment any time, in any location. More so, this can all be done remotely using wireless technology. This technology makes the local food market scalable.

Education

In addition to growing and delivery local veggies, Merchant's Garden's facilities allow for educational workshops and tours. The educational curriculum provides a hands-on experience for students to learn both nutritional and agricultural practices. Led by experienced agriculture and nutrition team members, K-12 classrooms will have the opportunity to tour our wheelchair-friendly facility on school field trips.

Howenstine Magnet High School

Merchant's Garden is seeking 10,000 SQFT of agricultural space at Howenstine Magnet High School for its commercial production of food. In addition, Merchant's Garden is seeking to provide field trips for TUSD students to learn nutritional and agricultural practices.

The Team

Chaz J. Shelton

Chaz is the founder and CEO of the Merchant's Garden. Chaz acted as the Program Manager for the Telluride Venture Accelerator (TVA) in Telluride Colorado. With the TVA Chaz helped raise capital for high venture companies in the outdoor, health/wellness, and education industries. In addition, he provided entrepreneurial consulting services to companies ranging from artisan bakeries to organic farmers. Chaz received a B.A. from Hope College in Economics and Management. He received

a graduate certificate in Economic Growth & Development for the University of Pennsylvania. He recently finished his MBA from the Indiana University, majoring in entrepreneurship and finance.

Bill Shriver

Bill Shriver is the COO and brings a tremendous amount of experience, specifically over 15 year of diverse chemical manufacturing experience. His experience in bulk pharmaceutical and specialty chemical started at DSM Pharma Chemicals as a Production Shift Supervisor. Bill has contributed to the successful launch of several products and processes. Has written several safety and manufacturing procedures in compliance with OSHA and FDA standards. Bill has over 6 years of sale and customer service experience.

Bill has a Bachelors in Science in Business Administration from Grand Valley State University.

Brunno Cerozi

Brunno Cerozi is a Ph.D. student in the Department of Soil, Water and Environmental Science from the University of Arizona and will be the VP of Agriculture. Brunno earned his B.S. degree in agronomic engineering and his master's degree in animal science, both from the University of São Paulo, Brazil. He has been working with aquaculture for almost a decade and believes that conventional aquaculture and agriculture can be improved to become more sustainable practices. His Ph.D. research is specifically describing the phosphorus dynamics, mass balance, and alternative ways of enhancing phosphorus solubilization in an aquaponics system. He is raising tilapia and growing lettuce and tracing inputs, partitioning, and outputs of phosphorus through the system.

Advisors

Michael McDonald - Chief Executive Officer, Community Food Bank of Southwest Arizona

- *Former CEO of Tucson Habitat for Humanity*

Dr. Kevin Fitzsimmons - Professor, University of Arizona Department of Agriculture

- *Former President of World Aquaculture Society*
- *Former President of the US Aquaculture Society*

Dr. James M. Ebeling – Greenhouse Structural Engineer

- *25 years of greenhouse technology experience*
- *Retired professor from Cornell University*

Kind Regards,

Chaz Shelton
Co-Founder, Merchant's Garden