

Garden of Eden Urban Farming

Inside/Outside

Hydroponic gardening for correctional institutions

GOE Farming's *Inside-Outside* program seeks to break down stereotypes while enabling incarcerated persons to acquire productive skills translating to employment and entrepreneurial opportunities after release.

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Purpose

Common problems and challenges in inner-city communities nationwide include the following:

- Access to fresh fruits and vegetables
- Food quality
- Food insecurity
- Business development
- Financial planning
- Labor training
- and many more, similar to urban food deserts

These urban economic issues are mirrored in correctional institutions, where dietary diversity is a perpetual problem. Indoor agriculture, using hydroponics, is one answer to a complex set of problems. It is an important part of a sustainable long-term solution. The goal of *Inside-Outside* is to break down stereotypes while enabling incarcerated persons to acquire productive skills inside that translate to a variety of employment and entrepreneurial opportunities outside.

Promote

Download the sales pitch.

Share!

Tell friends about Inside-Outside.

Let's talk!

...about starting a farm.

Benefits

The Inside-Outside program has benefits in both arenas.

Inside: Improved diet: Consuming a one-ounce serving of mixed microgreens daily can provide a substantial nutritional boost, delivering concentrated vitamins, minerals, and antioxidants that may help support heart health, blood sugar regulation, cognitive function, cancer prevention, gut health, and immune defense. While more human studies are needed for definitive claims, current evidence strongly supports their inclusion as part of a healthy, balanced diet. ([MORE](#))

Outside: Improved prospects: The acquired skills can be used directly to find employment in gardening as well as related economic activities like manufacturing, distribution and sales of equipment. The most adept trainees may be able to start small businesses of their own

Inside

Inside/Outside is a transition program that begins inside the institution with training and education in indoor farming and related technologies. Participants learn skills needed to grow nutritious fruits and vegetables inside the institution all year round. The design of this program is rooted in the reality that the transition from Inside the institution to Outside is fraught with pitfalls. These obstacles contribute to higher levels of poverty, crime and recidivism.

Structured learning experiences teach the science, technologies, engineering and math (STEM) required to plant, nurture, grow and harvest fresh leafy greens, herbs and microgreens from Seed to Table. Upon their release, former inmates are employable by the outside component of the program with benefits and market wages for green jobs. Successful completion of the training program inside qualifies participants for entry level jobs outside.

In each instance, the program is taught cooperatively by local instructors with support from GOE experts and advisors. Core curriculum is licensed by GOE and may be supplemented by local instructors for best effect.

Former inmates become employable to grow fruits and vegetables in the same manner on the Outside. The overriding goal is to create green jobs for skilled workers using what was learned inside the institution.

Access to jobs, housing and other social and economic opportunities can really make a difference. We make it so.

Outside

The responsibility to rehabilitate and provide access to employment opportunities needed for successful transition back into society sets *Inside/Outside* apart from many other programs. Both inside and outside components are parts of the same program. They are one; two sides of the same coin; funded by the correctional institution at startup.

Upon release, employment is the second phase of the program Outside using the same skills and abilities learned Inside but with salary and benefits as well. Learning and adaptation continue outside, and the development of follow-up training and consultation is essential for the future.

The third phase of the learning experience—advanced employment or independent enterprise—is also within reach for many of the inmates that participate in the program. Small business funding for entrepreneurs may be available for program participants with knowledge and experience in indoor agriculture through programs of SBA, USDA, and other agencies and private sources.

Why hydroponics?

NO SUN. NO SOIL. NO PROBLEM: Inmates Inside the facility learn to grow fruits and vegetables indoors that are consumed locally, either within the institution or in the surrounding community, depending on local circumstances. Seasonality is not a concern, and the program complements other local efforts to grow fresh, local, nutritious produce.

Scale and Sustainability

Projects can be home based and just beyond the hobby level, or they can grow to supply a significant share of fresh vegetables for on-base and community consumption as a concession within the commissary. This will vary by installation.

Each of the plans is highly scalable. "Family farms" can become part of a collaborative in which different growers specialize in a few crops. All are part of an information system that takes orders and grows to specification, not on speculation. This a variety of seasonal and year round vegetables can be available.

Income is retained and spent locally which benefits local retail and service businesses, which is a likely benefit to the public opinion of the military installation.

Budgeting and Finance

Budgets and financing are important considerations. In this case, initial cost can be quite low.

Equipment can be purchased or leased with option to buy.

Gardening projects can make a minimal initial investment and grow by reinvestment of proceeds.

Labor can be at nominal rates plus participation in surplus or food sharing.

Space may be available on site, especially where downsizing has resulted in unused floorspace.

GOE has developed a a comprehensive startup budget planning procedure with many options. [Ask us](#) for details or schedule a consultation about your specific needs and options.

Conclusions

This program is unique for the intentional development of both inside and outside components.

- During incarceration the program provides training for participants and nutrition for all.

- After release the probability of sustained employment is enhanced.
- Program development includes planning, budgeting, training and consultation.
- Cost is low, lead time is brief; results come promptly.

Done correctly it pays for itself. There are also significant potential benefits for the receiving community in the form of better nutrition, local investment and retained income.

Origins

An alternative model for transition and renewal

When I returned to college in 2011, my perspective was very different from my classmates. As a seasoned IT professional with over 40 years experience, I was more concerned about the problems I wanted to solve than what I wanted to be or do for a living upon graduation.

In 2013, I graduated with a BA in Environmental Studies. The interdisciplinary learning experience included related Sciences, Technologies, Engineering, Agriculture and Mathematics (STE@M).

This led to the creation of Garden of Eden Urban Farming, first as a community development course and later as a consulting firm.

— Michael Twiggs founder



References

Hydroponic Cropping Systems (examples only; the program emphasizes functionality and productivity, not specific technologies)

How to Grow Microgreens - Start to Finish <https://youtu.be/dtvuMNVLISO>

Grow Fodder in Seven Days - <https://youtu.be/b2XYLEliMhQ>