

WHITE PAPER

CREATING A SUSTAINABLE FUTURE THROUGH SOLVING THE ABANDONDED HOME CRISIS IN GARY, INDIANA

: using Omega Garden.

Prepared by

Caroline M. Moseti

Executive summary

This research is prepared for Ms. Karen Freeman-Wilson, Mayor of Gary, Indiana. To solve the issue of abandoned homes and at the same time establish a sustainable future I suggest that indoor Omega Gardens be established in Gary, Indiana. To establish indoor Omega Gardens in abandoned homes in Gary, Indiana I recommend new guidelines to be implemented in the Mayor's Dollar Home Program initiative. This will reduce the amount of vacant and abandoned homes in Gary, Indiana. In addition to this indoor Omega Gardens will create a sustainable future by fostering local economic development, initiate job creation boosting regional economy, and produce local healthy organic foods that will be sold to local stores within Gary, Indiana.

This new proposal for establishing indoor Omega Gardens will sustain the environment, maintain health and benefit regional economy for the people of Gary, Indiana. To ensure this is addressed properly in Gary, I recommend the following:

1. I recommend implementing new guidelines in to the Mayor's Dollar Home Program for persons specifically buying homes to establish indoor Omega Gardens.
2. I also recommend a selection of rehabilitated homes that are up to city building codes exclusively for indoor Omega Gardens.
 - These gardens will produce organic produce without the interruption of weather or seasonal changes.
 - This may also provide jobs and help boost the local agricultural economy.

Introduction

This research is prepared for Ms. Karen Freeman-Wilson, Mayor of Gary, Indiana. I am providing important information on a plan of action to address the vacant and abandoned homes dilemma facing your city. I propose the establishment of indoor Omega Gardens in abandoned homes around Gary, Indiana. Indoor Omega Garden is the use of Volksgarden which are rotating gardens, to grow crop produce and it can be done in our own homes. Your city has thousands of abandoned homes and I believe as Mayor Karen Freeman-Wilson you have already initiated a planned solution to combat this issue. To reduce the amount of vacant and abandoned homes in Gary, Indiana I recommend the rehabilitation of some homes so they may be used for indoor Omega Gardens establishments. These gardens will produce organic crop produce without the interruption of weather or seasonal changes. This will also be a sustainable move in that it may also provide jobs benefiting regional economy and help boost the local agricultural economy while combating the problem of abandoned homes.

Problem of abandoned homes

Gary, Indiana has had a long standing problem of abandoned homes. To combat this issue numerous programs have been established such as the Dollar Home Program initiative by the Mayor of Gary Indiana Karen Freeman-Wilson. The Dollar Home Program is “known for its wide appeal in the 1980s and 90s” (“Dollar Home Project”, 2013) in Gary, Indiana. “The Dollar Home Program was developed by HUD (housing and urban development) to combat home abandonment in communities, assist new home-buyers and elevates the property value of neighboring homes” (“Dollar Home Project”, 2013). The current mayor of Gary, Indiana, Karen Freeman-Wilson decided to update the Dollar Home Program to combat the problem of home abandonment. According to a city of Gary blog post about the Dollar Home Program (2013), Mayor Karen Freeman-Wilson and Community Development Director Arlene Colvin updated a new version of the Dollar Home Program that was launched in June 2013.

Proposal for a new Dollar Home Program

To establish indoor Omega Gardens in abandoned homes in Gary, Indiana I propose new guidelines that can be added to the Mayors’ Dollar Home Program initiative. The new proposal recommends that there be a selection of homes that are up to city building codes which can be sold for \$1 to individuals who will use the homes specifically for indoor Omega Gardens.

Establishing indoor Omega Gardens

In order for the new Dollar Home Program to run well new requirements will be implemented into the already existing Dollar Home Program guidelines.

New Requirements

The Mayors’ Dollar Home Program has a set of guidelines that has to be followed by people who are applying to the program. My new proposal will make minor changes to the Mayor’s

guidelines and add a few requirements for persons who want to buy homes specifically to practice indoor Omega Gardening. The new set of guidelines would be as follows:

To be eligible a person should:

1. Be at least 18 years of age.
2. Be a Gary resident for at least 3 months.
3. Establish a contract to give 5% of the wholesale cost of plant produce sold monthly, to the Department of Community Development in Gary, IN.
4. Sell the plants produced including, but not limited to, local food stores, restaurants, and local farmers markets within the city of Gary.
5. Buy a Volksgarden from Omega Garden International before or while applying for the new Dollar Home Program.
6. Be able to demonstrate that they have the financial ability to maintain a home.
7. Use the purchased homes only for Indoor Omega Gardens.

The sustainability of indoor Omega Gardens

Individuals willing to participate in this new Dollar Home Program will be able to purchase a home for 1\$ after buying their own Volksgarden from Omega Gardens website and start producing crops. Omega Garden technology has invented a cylindrical rotating garden that can be bought and used in homes and/or in abandoned warehouses. The cylindrical rotating garden is a machine named Volksgarden. It was reported on Stargate Universe that:

Volksgarden, is a futuristic/ancient/timeless, rotary garden, comprised of a 4 foot diameter, horizontal rotating cylinder housing rows of plants growing towards a central light source. The cylinder slowly rotates the plants around the light while watering the roots at the base in a tray with liquid plant foods (“HydroLab on Stargate Universe”, n.d.).

Indoor gardening is very beneficial and is an upcoming practice in our society today. Technology has allowed the practice of gardening in our homes by developing rotating gardens that are advantageous to our environment. According to Owen Fletcher (2012)

Farming indoors could reduce the use of pesticides and herbicides, which pollute the environment in agricultural runoff. Preserving or reclaiming more natural ecosystems like forests could help slow climate change. And the more food we produce indoors, the less susceptible we are to environmental crises that disrupt crops and send prices skyrocketing, like the drought that devastated this year's U.S. corn crop.

Green Spirit Farms was featured in edible Michiana in 2013. Green spirit farm has established a business concept in an abandoned warehouse using the Omega Gardens in New Buffalo, Michigan. According to the owners a father and son Milan and Dan Kluko (2013),

The Volksgarden uses one-tenth the water of a traditional hydroponic system to begin with, and additional water savings result because the farm uses distilled water. Their distillation process allows multiple reuses of water. Rather than discarding the nutrient-dense liquid that remains after produce has been harvested it can be re-distilled and reused. And because they will also use rainwater, they will minimize the water required from the municipal system. The lights used at Green Spirit mimic sunlight in terms of their color spectrum to encourage flowering and fruiting (2700 Kelvin with high levels of infrared light) or leafing (6500 Kelvin with high levels of UV light). When asked about the cost of running the system Milan said, we had four stations operating in our office and we saw no change in the electric bill. And the lights are sturdier, with no filament to break as we move and stack the pallets with the gardens.

This shows that the Omega Gardens are sustainable in that the use of water and energy is reduced and there is no added cost but rather more opportunities for savings. Milan (2013) also adds that

This technology will enable us to feed more people quicker and better than any other way. It's better for the environment—virtually all food miles are eliminated and there are no chemical fertilizers or pest control. Plus we believe the taste is equal to 'in the ground'—grown produce.

The images below are pictures of the Volksgarden with plants already growing in it:



Figure 5. Omega Garden side profile.

Figure 6. Omega Garden front profile.

According to Salton, (2009):

The Complete Unit Model 10001 is 48in. in diameter x 76in. tall x 30in. wide and occupies approx. 20 sq. ft. of floor space. It draws around 1,300W and is rated at 11.5A

at startup. The Omega Garden is safety certified and has built-in thermal limit switches to protect the unit and crop in the unlikely event of a cooling malfunction.

Therefore, the rotating garden can fit into any average sized homes. Milan and Dan Kluko have established a business using the indoor Omega gardens in New Buffalo, Michigan. They established their business in 2011 and still operate today. As stated in their website:

Our business concept is to use the Volksgarden Rotary Garden units in a multi-level system (referred to as a Rotary Vertical Growing Station or RVGS) as well as a multi-level tray system (referred to as a Vertical Growing Station or VGS) growing (non-GMO and organically seeded) produce near large urban markets reusing older vacant or under-utilized industrial or commercial buildings. This approach using this technology will provide several harvests per year of sustainable vegetables grown "extremely local". This approach will significantly reduce transportation and supply chain management costs and offset large quantities of carbon by locating the farm near the markets where people consume the food, versus in remote growing locations. This approach using the Omega Garden technology uses significantly less water than conventional farming and typical hydroponic growing systems. The Green Spirit Farms Sustainable Vertical Farm will eliminate agricultural run-off and associated soil erosion impacts improving water quality by eliminating these primary sources of water pollution ("Green Spirit Farms", 2012).

As noted establishing indoor Omega Garden is quite possible, successful and sustains the environment. The food produce is organic healthy vegetables and fruits with no pesticides or any harmful chemicals. A variety of crop produce can be grown using Omega Gardens, these include "herbs such as basil, savory, mint, Italian parsley, feverfew, oregano, marjoram, and thyme", ("What can I grow", 2013). "Lettuce, fruit bearing plants, and flowers" ("What can I grow", 2013), can also be grown using the Omega Garden. Vegetables and fruits are a healthy source of nutrition therefore indoor Omega Gardens will produce local healthy organic foods for the society as a whole.

According to Shannon (2010) she states in her blog that there are steps that a person can take to become mindful eaters because sustainability of food is important. One of Shannon (2010) steps stresses the fact that we should "Grow Something... Anything". Shannon (2010) explains we can start with herbs or lettuce, which are really fast and fairly simple. Food sustainability practices are very important because it creates a sustainable future for our society at large and Omega Gardens is a great tool for sustainability. Establishing indoor Omega Gardens is an example of what Shannon stresses in that taking a step of growing something will help people be mindful eaters. In the Omega Garden website it was stated that the Volksgarden unit allows you to grow up to 80 plants at once ("The Volksgarden", 2013). Below are pictures of vegetables growing in an Omega Garden,

This is Basil growing in an Omega Garden.



This is Chard growing in an Omega Garden



Indoor Omega gardens benefits

A new Dollar Home Program proposal for establishing indoor Omega Gardens will not only help reduce the number of vacant homes in the community, but also foster local economic development, initiate job creation, and produce local healthy organic foods. The Omega Gardens supply a year round of crop produce as it is indoors and is not affected by severe weather or the changing of seasons. "Farmers have long known that indoor hydroponic gardens grown without soil or sunlight produce yields 10-30 times greater than traditional soil-based gardens" ("Indoor Farming Careers, 2013"), this will foster the local economic development as the high crop yields will be sold to local stores. More so, indoor Omega Gardens will be a source of income for Gary residents who will practice indoor farming through this proposal. Individuals will be able to grow their own organic fruits and vegetables promoting a healthy lifestyle and at the same time they will be able to develop business opportunities to sell the plants produced including, but not limited to, local food stores, restaurants, and local farmers markets within the city of Gary, Indiana.

Summary

This research is targeting to solve the problem of vacant abandoned homes in Gary, Indiana by proposing the establishment of indoor Omega Gardens. I suggest a new proposal that will make minor changes to the Mayor's Dollar Home Program guidelines and add a few requirements for persons who want to buy homes specifically to practice indoor Omega Gardening. The new proposal recommends that there be a selection of homes that are up to city building codes which can be sold for \$1 to individuals who will use the homes specifically for indoor Omega Gardens. This move is highly favorable in that it will also provide jobs benefiting regional economy and help boost the local agricultural economy while combating the problem of abandoned homes.

Indoor gardening is very beneficial and is an upcoming practice in our society today. The Omega Gardens are rotating gardens that grow healthy organic vegetables, fruits, herbs and even flowers which yield high produce. These rotating gardens can be bought and kept in regular sized homes where individuals can grow at the comforts of their own homes. The crop produce can be sold to local food stores, restaurants, and local farmers markets within the city of Gary, Indiana. The Omega Garden is sustainable because the use of water and energy is reduced. More so, as stated in the Green Spirit Farms website it will reduce transportation and supply chain management costs and offset large quantities of carbon solving the problem of the resources extracted from the earth crust sustaining the environment. The community of Gary, Indiana will flourish as the vacant homes will be well maintained when bought and it will develop a more interactive neighborhood community as people are able to buy fresh organic produce from the established indoor Omega Gardens that will be within their own community without having to travel far.

Call to action

To reduce the amount of vacant and abandoned homes in Gary, Indiana, I recommend that my new proposal requirements for the Mayor's Dollar Home Program be implemented for it will be highly favorable to solving the dilemma of vacant abandoned homes. By implementing the guidelines people will be able to apply for this new program establishing the indoor Omega Gardens. The indoor Omega Gardens will foster local economic development, initiate job creation, and produce local healthy organic foods for the people of Gary, Indiana leading to sustainability.

To create a sustainable future through solving the abandoned homes crisis in Gary, Indiana I recommend the following plan of action:

1. Mayor Karen Freeman-Wilson should implement the new proposed Dollar Home Program guidelines to the already existing Dollar Home Program.
 - o Enabling individuals to apply for the Dollar Home Program leading to establishing indoor Omega Gardens within the community.
2. Select rehabilitated homes that are up to city building codes specifically for indoor Omega Gardens.

Bibliography

Bartholome, Paula. (2013, Jan 27). Green Spirit Farms: A new kind of family farm. Edible Michiana. Retrieved from http://www.omegagarden.com/pdf/edible_michiana_winter_2012.pdf

City of Gary's Communications Department. (2013). [Web Log comment]. Retrieved from <http://www.teamgaryindiana.com/?p=1232>

Fletcher, Owen (2012, October 15). The Future of Agriculture May Be Up. The Wall Street Journal. Retrieved from <http://online.wsj.com/news/articles/SB10000872396390443855804577602960672985508>

Milan Kluko, and Dan Kluko. Green Spirit Farms, (2012). Retrieved from <http://www.greenspiritfarms.com/about.html>

Omega Garden, 2013. Retrieved from http://www.omegagarden.com/index.php?content_id=150

Salton, Jeff (2009, Sept 23). Volksgarden is a hi-tech hydroponics ferris wheel. gizmag. Retrieved from < <http://www.gizmag.com/volksgarden-hi-tech-hydroponics/12915/>>

Shannon (2010, May 19). Why Food Sustainability Matters and 10 Things You Can Do About It. [Weblog] Retrieved from <http://www.simplebites.net/10-tips-for-sustainable-eating/>