

**This document is a working draft and subject to change. The partner organizations mentioned here have, in some cases, not given final approval of their participation as described here. Further, local organizations are invited to join this partnership and may do so in the future.**

**Interested parties may wish to check this site periodically for updated drafts.**

## **Executive Summary**

This business plan articulates a shared vision and the steps to its attainment through the creation of a student run agricultural enterprise. The goal of this enterprise is to alleviate hunger in the Greater Des Moines area by soliciting, collecting, growing, and packaging food for distribution through a network of service agencies, and programs that serve local poor and hungry people. After five years we further envision the control and operation of this enterprise will be placed in the hands of the poor people it serves.

According to the most recent data, in 2009, 12% of the people living in Polk County were food insecure and among our children living in the county the rate of food insecurity was 19.4%. The additional money needed to eliminate local hunger in Polk County was an estimated \$19.2 million<sup>1</sup>.

## **Overview of the Partners**

**(Introductory description of each new partner added here)**

The Entrepreneurial Studies class at Dowling Catholic High School has been managing, operating and raising funds for two non-profits in the Greater Des Moines area for the past 8 years. The class and students have witnessed many, many successes over that time span. Students are eager to enter into new partnerships and would welcome the opportunity to undertake the challenges that arise with trying to provide food through organic means to various groups in need. The Environmental Science class at Dowling Catholic High School educates students in the application of biological science to creation care; and seeks real-world opportunities to apply classroom learning to environmental problems.

Food pantry gardens donate all vegetables that they grow to feed hungry people. Each garden is a community ministry that provides garden space, some resources and volunteers; and then works with like-minded partners in the mission field.

The Faith and Grace Garden is a food pantry garden located just west of St. Timothy's Episcopal Church on the corner of 24<sup>th</sup> and Ashworth Road in West Des Moines. In 2011, approximately 8,500 pounds of fresh, organic vegetables were donated to local food pantries

---

<sup>1</sup>FeedingAmerica.org, "Food Insecurity & Food Cost in the US"

thanks to the efforts of over 150 volunteers and generous financial support. Approximately 60% of the volunteer labor was service hours performed by Dowling Catholic High School students. Additional volunteers came from 14 local churches, Oxfam America, Boy Scout Troop 202, Fairmeadows Elementary School and people living in the neighborhoods surrounding the garden.

The Cathedral Church of St. Paul is located at 815 High Street in downtown Des Moines. (Add description)

## **Mission**

The mission of this agricultural enterprise is to respond to the gospel call to feed the hungry, to care for the poor, and to care for creation. This plan shifts urban land into productive garden space and creates employment and volunteer opportunities. A significant portion of all sales generated through retail activities will be donated to feed hungry local people.

## **Objectives**

This plan will strive to provide:

- Poor and hungry local people with fresh vegetables and the opportunity to earn income.
- Gardens with a source of volunteer labor, organization and some funds for projects
- Dowling students with educational and service opportunities
- Faith Communities with new opportunities for ministry

## **Legal Entities**

(Legal description of each new partner added here)

The Cathedral Church of St. Paul is a cathedral of the Protestant Episcopal Church in the United States. The national church holds an IRS 501(c)3 designation and a group exemption that applies to parishes.

Dowling Catholic High School is a 501(c)3 educational institution located in West Des Moines Iowa. It is affiliated with the Des Moines, Iowa Diocese. Dowling Catholic High School is committed to serving the Greater Des Moines Catholic community and embracing learners of all faiths.

The Faith & Grace Garden is a ministry of St. Timothy's Episcopal Church which is a parish of the Protestant Episcopal Church in the United States. The national church holds an IRS 501(c)3 designation and a group exemption that applies to parishes.

In partnership, we will develop over five years a business model that can be transitioned to operation by the poor people it serves.

## **Strategies**

1. Key business activities:

Food production for donation/sale – Some vegetables are raised for immediate donation while others can be sold with proceeds donated to feed hungry people in the winter months.

Related products for development/distribution/sale – Worm castings, an organic soil amendment, are produced through recycling green waste for application on the gardens and sale through retail outlets.

2. Key educational activities:

Research - The Environmental Science class has started research into the benefits of worm castings as a soil amendment; other important directions include organic gardening methods, composting, and pest control. Please see Appendix A for a sample research report. The Entrepreneurial Studies class will have opportunities for market research in the establishment of distribution channels.

Organization/Strategies – The students will participate in volunteer management through the use of internet tools.

Marketing/Communication – Students will develop point-of-sale marketing materials, product brochures, logos, and signage. Students will assist in the maintenance of website and Facebook properties of the enterprise.

Finances- The students will develop the sales recordkeeping system as well as manage project fundraising for three projects: a portable greenhouse (“hoop house”), tool shed, and rain water harvesting system.

3. Products

The garden occupies approximately 3/4 acre and grows organic vegetables to meet the dietary preferences of the diverse cultures of the people we serve. These fresh, organic vegetables are appealing to a growing number of local upscale dining establishments. Currently there are five varieties of gourmet garlic in the garden which will be ready for market in late summer. Straw berries, squash, and red potatoes might be sold, too.

Worm castings are produced by recycling the green waste from the school kitchen. The recycling/worm operation is an activity of the environmental science class. Worm castings are a soil amendment that both helps plants grow and acts as an insect repellent when applied to garden plants.

4. Markets

The following market segments are identified as attractive to this enterprise:

- Des Moines has a growing number of fine restaurants offering an ethnic flair. The garden grows vegetables to appeal to this group.

- The Tallgrass Grocery, located in West Des Moines, agreed to be one sales outlet for worm castings. Other garden centers and grocery stores will be approached as retail outlets.
- Area churches have also expressed interest in offering worm castings to their members which may provide an additional distribution channel.

## 5. Operating procedures

Over the next five years this enterprise will transition to be operated by the poor people we serve. For now, this enterprise is wholly operated by volunteers. In the interest of keeping our volunteers safe each organization partner will develop and adhere to a risk management policy. See Appendix B for a copy of the model garden risk management policy and related permission forms.

Volunteer hours in the garden from mid-April – October are Monday through Friday from 6:30 – 8:30, Saturday from 10:30 – Noon, and Sundays as arranged. Volunteers may be needed during other months depending on the growing season.

Vegetables are delivered to food pantries and food distribution sites 2 – 3 times each week throughout the summer and fall seasons. Vegetables are weighted and separated by food distribution location prior to delivery.

The worm castings are transported to participating local faith communities with sufficient space, supervisory staff, and policies and procedures to act as assembly sites for bagging the worm castings and packaging the bags for sale. Homeless people are employed in the assembly process and paid on a piece work basis for their labor.

The Cathedral Church of St. Paul, 815 High Street in Des Moines will store worm castings and the materials needed to create the retail bags for marketing. Space is available within the Cathedral for people to assemble the bags. The Cathedral will network with social need agencies to identify individuals for employment and the cathedral will supervise their work. The Cathedral will work to establish sales outlets for the worm castings and to build a network of other institutions or agencies that could participate in this project.

Assembled packages of worm castings will be delivered by Dowling students for distribution to sales outlets, local faith communities, and garden centers.

## 6. Personnel

Each partner organization named in this business plan will have at least one coordinator to function as the point of contact for that partner organization and generally be accountable for the role of the partner organization in the enterprise.

Volunteers in the gardens will be supervised by the garden coordinator or a designee in accordance with the risk management policy of the organization.

Homeless people employed at the assemble sites will be supervised by the site coordinator or a designee in accordance with the risk management policy of the organization.

## Financial Plan

(Consolidated financial information will appear below as more partners join in this enterprise.)

The garden operates on a modest budget and the figures below are estimates based on expenses of previous years:

### ooccurring items

Water (est.)	\$750
Garden Seed and Plant Sets	\$300
Flower Seeds and Supplies	\$150
Volunteer Appreciation/Picnic Supplies	\$250
Replacement (Tools)	<u>\$300</u>
Sub Total	\$1,750

### on-reoccurring items

Water Meter & Install	\$700
Fencing (3 ft., chicken wire, poles)	<u>\$450</u>
Sub Total	\$1,150

**otal Budget 2012** \$2,900

In addition, the following capital projects are planned to occur over the next five years:

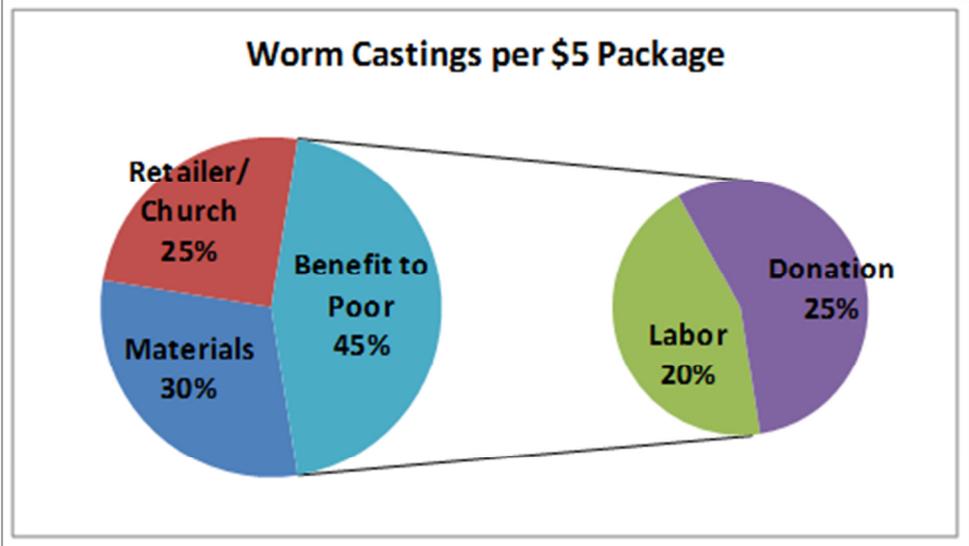
Greenhouse (hoop house)	\$5,500
Tool Shed	\$1,000
Rainwater Harvesting System	To be determined

Beyond donating vegetables to feed the poor during the gardening season, the objective of this business plan is to donate \$7,500 after the first year of operation with this donation increasing conservatively each of the next four years to help feed poor and hungry people during the winter for each of the next five years.

Income will be derived from donations, fundraising projects, and sales. Donations and fundraising will be applied to the garden budget or a designated project above. Sales will be designated for donation to food pantries and food distribution centers to feed hungry people during the winter months.

The sales proceeds for donation will vary by product and are yet to be determined for vegetables such as gourmet garlic sold to restaurants.

Product pricing for worm castings is \$5.00 per package as sold through some local churches and proposed to the Tallgrass Grocery. The \$5.00 cost per package covers \$1.00 earned by a homeless person, \$1.25 paid to the retailer or church, \$1.25 donated to the hungry and \$1.50 for materials. How much of the cost is of direct benefit to the poor is shown below.



## WORM CASTING RESEARCH RESULTS

**Abstract**

Worm castings have long been used as a natural fertilizer but results can vary greatly by plant type. Our classes researched the effects of using organic worm castings on three different varieties of basil plants: sweet, thai, and lemon. Two groups of germinated seeds (n=50) were used with one group getting watered with tap water and the other watered with compost tea collected from the class vermicomposter. On average, worm casting treatments produced plants that were **25% taller** than the control group and had a peak biomass that was **43.3% larger** than the control. Our findings indicate that using worm casting tea as a fertilizer for all basil varieties is an effective and sustainable method.

**Data**

Basil Type	Mean Height (cm)			Peak Biomass (g)		
	Sweet	Thai	Lemon	Sweet	Thai	Lemon
Control: No fertilizer added	11.6	17.5	12.0	1.1	1.2	0.8
Treatment: Compost tea from worm castings added	16.0	21.0	15.2	2.6	2.2	1.1

**Appendix B**  
**Volunteer Risk Management Policy**  
**For [Name] Garden**  
**[Address]**

The aim of the [Name] Garden is to provide and to maintain a safe working environment with the goal being an accident-free workplace. We recognize and accept our duty to protect the safety of all individuals. While we work to maintain a safe environment for our volunteers, it is recognized that safety in the garden is the responsibility of each and every individual person who chooses to work there. If a volunteer feels unsafe performing any task then it is their duty to report this to the person in charge.

- Children under 16 years of age **MUST** be accompanied and supervised by an adult. That adult is responsible for the child's safety. Adult supervisors will have completed a course in child abuse prevention. Such training is not required of those adults who are supervising only their own children.
  - Children 0 - 4 years of age – supervised by one adult per two children.
  - Children 5 – 7 years of age supervised by one adult per four children
  - Children 8 - 12 years of age - supervised by one adult per eight children
  - Children 13 - 16 years of age - supervised by one adult per ten children
- Volunteers may use sharp and/or pointed tools. Be aware of your range of motion with such tools and stay a safe distance away from others. Be aware of the tools others are using and remain a safe distance away.
- The [Name of Garden] is an alcohol-free, smoke-free, drug-free, and weapon-free environment.
- It is [Name of Garden] policy to maintain an environment free of harassment and discrimination, which includes actions as well as words.
- We support a safety policy that includes preventing injuries by providing periodic safety training.
- Everyone must wash and sanitize their hands after using the restroom, with the soap, water and/or sanitizer provided. Everyone should also wash and sanitize their hands after blowing their nose or coughing.
- A first aid kit for treating minor wounds is on hand and is located in the [location].
- Volunteers are asked to bring their own drinking water, snacks and sunscreen.
- Volunteers are encouraged to make sure they stay hydrated and are responsible for protecting themselves from exposure to summer heat and sun and bug bites.
- Volunteers may use an array of sharp tools. Please use caution when selecting and using tools, when working next to others and when returning tools to their proper place.
- No one will work in the garden if it is lightning.
- Goggles are provided for use with power equipment.
- While we use only products that are in accordance with organic principles, the storage area does contain other products such as chlorine bleach, which are used to disinfect tools. We ask that you seek assistance before handling any product at the garden.
- Volunteers under 18 years of age are not to use power tools. Those adults using such tools must wear enclosed shoes and eye protection.
- Volunteers need to wear clothing suitable for gardening and appropriate for the weather. Sturdy footwear is required. Flip-flops are not suitable garden footwear.

Please sign to show you have read and understand the above safety policy document:

Signature:

Date:

# PARENTAL/GUARDIAN CONSENT FORM AND LIABILITY WAIVER

[Name of Garden, Name of Sponsoring Organization]

Participant's name: \_\_\_\_\_

Grade: \_\_\_\_\_ Sex: \_\_\_\_\_

Parent/Guardian's name: \_\_\_\_\_

Home address: \_\_\_\_\_

Home phone: \_\_\_\_\_ Business phone: \_\_\_\_\_

I, \_\_\_\_\_ grant permission for my child, \_\_\_\_\_  
Parent or guardian's name Child's name

to participate in this community project that requires transportation to a location away from the school site. This activity will take place under the guidance and direction of school employees and/or volunteers from [school name].

A brief description of the activity follows:

**Type of event:** Volunteering at [Name of Garden, Name of Sponsoring Organization], located at [address].

**Educational purpose of event:** Applicable learning project/lab with benefits to students in relation to leadership and service opportunities, to homeless and hungry people through areas of human service, economic and social improvements.

**Individual in charge:** TBA

**Estimated time of departure and return:** TBD

**Mode of transportation to and from event:** Provided by student

**Cost to be paid by the student:** Limited to individual transportation

As parent and/or legal guardian, I remain legally responsible for any personal actions taken by the above named minor ("participant").

I agree on behalf of myself, my child named herein, or our heirs, successors, and assigns, to hold harmless and defend [school], its officers, directors, employees, agents, chaperons, or representatives associated with the project, from any claim arising from or in connection with my child's involvement with the project or in connection with any illness or injury (including death) or cost of medical treatment in connection therewith, and I agree to compensate the parish, its officers, directors, agents and chaperones, or representatives associated with the project for reasonable attorney's fees and expenses which they may incur in any action brought against them as a result of such injury or damage, unless such claim arises from the negligence of the [school].

I further agree on behalf of myself, my child named herein, or our heirs, successors, and assigns, to hold harmless and defend [Name of Organization Sponsoring Garden], its officers, directors, employees and agents, its employees and agents, chaperons, or representatives associated with the project, from any claim arising from or in connection with my child's involvement with the project or in connection with any illness or injury (including death) or cost of medical treatment in connection therewith, and I agree to compensate the church, its officers, directors and agents, its employees and agents and chaperones, or representatives associated with the project for reasonable attorney's fees and expenses which they may incur in any action brought against them as a result of such injury or damage, unless such claim arises from the negligence of the church.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

<b>Medical Release</b>	
(In the event of a medical emergency reasonable efforts will be made to contact the parents or guardians of the children involved.) If I cannot be reached, I hereby give permission to the attending physician to secure proper treatment for my child, as named herein.	
<b>Signature of parent/guardian</b> _____	<b>Preferred Phone</b> _____
<b>Date</b> _____	
Health Care Provider _____	Policy # _____

## PERMISSION TO PHOTOGRAPH/VIDEO RECORD YOUR CHILD

Student Name (please print): \_\_\_\_\_

I, \_\_\_\_\_, (check one) GIVE \_\_\_ DO NOT GIVE \_\_\_  
Dowling Catholic High School and St. Timothy's Episcopal Church permission to photograph  
and video record my child, \_\_\_\_\_ while volunteering in the Faith & Grace  
Garden.

I further grant Dowling Catholic High School and St. Timothy's Episcopal Church permission to  
use my child's photograph or video to illustrate this service activity, including but not limited to  
promotions, presentations, and advertising purposes.

YES \_\_\_ NO \_\_\_

\_\_\_\_\_  
Signature of Parent/Guardian

\_\_\_\_\_  
Date