

Family Gardens/Urban Agriculture

Steps to Create a Community Garden or Expand Urban Agriculture

<https://www.epa.gov/brownfields/steps-creating-community-garden-or-expand-urban-agriculture-brownfields-site>

- Survey the property and identify potential risks and contaminants for testing.
- Test your soil. Consider likely environmental contaminants, pH, organic content, and soil nutrients needed for healthy plant growth.
- Clean contaminants and add soil amendments to create a safe growing environment.
- Consider garden design including location, crops, water, sunlight, lighting, and accessibility.
- Construct the garden to accommodate children, the elderly, and people all abilities. Raised beds, wider paths, and benches can all be used to create a more usable space.
- Plant a safe and healthy garden and enjoy your growing community.

Community Garden Start-Up Guide: University of California Cooperative extension, Los Angeles County

<http://celosangeles.ucdavis.edu/files/97080.pdf>

This guide is perfect because it addresses the region were hoping to begin a community garden through the food pantry. "This community Garden startup guide is intended to help neighborhood groups and organizations along the path to starting and sustaining a community garden."

Farm Gleaning and Surplus Food Donation

Greater Pittsburg Urban Agriculture Program

<https://www.pittsburghfoodbank.org/for-our-partners/food-donors/farm/>

Farmers often find themselves with surplus or unmarketable produce. Food Bank staff recruits, trains, and supervises volunteers who glean, or harvest, that surplus produce. Vegetable gardeners can donate excess vegetables to local food assistance providers. Farmers' markets: At the end of the market day, farmers can donate their unsold produce directly to an agency that will then distribute it to the hungry.

Arizona Statewide Gleaning Project

<https://www.azfoodbanks.org/images/uploads/AAFB%20June08%20Food%20Lines3.pdf>

Since 1980, food banks have individually been participating in "gleaning" - the rescuing and distribution of food that would otherwise go to waste. The Arizona Statewide Gleaning Project was established in 1993 when food banks joined forces to create a coordinated effort throughout Arizona. Through the collaborative efforts of these programs, the Gleaning Project has now rescued, transported and distributed more than 888 million pounds of food.

The success of the Gleaning Project is directly related to the collaboration and cooperation of a multitude of dedicated partners - beginning with State Department of Agriculture Inspectors identifying potential donors of surplus product, to State and County inmates providing free labor to harvest the product, to the food banks working together to solicit and distribute massive quantities of food to hungry Arizonans.

Restaurant and Grocery Store Surplus Food Donation Program

Restaurant Chains Donate Unserved Food to Families in Need

<https://earth911.com/food/darden-restaurants-harvest-program/>

Through partnerships with regional distributors like Waste Not, along with national organizations like Food Donation Connection, Second Harvest and Feeding America, Darden Restaurants (Red Lobster, Olive Garden, LongHorn Steakhouse and Bahama Breeze) now donates 10 to 12 million pounds of food per year from its 2,000 restaurants. The program also brings Darden closer to its ambitious goal of zero-waste.

Supermarket Gleaning

<https://www.cfbnj.org/supermarket-gleaning/>

Our staff will come to your store to meet with the Store Manager, Department Heads, and Receiver to discuss procedures for donating. This will also be an opportunity to answer any questions the staff has. At the meeting a weekly pick-up schedule will be determined (the number of pick-ups per week will be based on the store's volume). Our refrigerated trucks will then come to your store on its scheduled day(s).

From reading through these sources and from ideas uncovered in my meetings, I chose what I thought were the 4 best intervention/activities to address the problems and their underlying causes, and then placed them within the problem list.

Individual Food Box Selection: I looked through the Internet starting with the phrase "selecting food to go in individual food boxes at food banks." I discovered that this is called "client choice" and so refined my search using terms like "client choice at food pantries" and came up with quite a few resources. The first on the list just below was the most thorough and gave the clearest directions on how to set this program up.

Client Choice Pantry Handbook:

https://www.akroncantonfoodbank.org/sites/default/files/Choice-Pantry-Handbook_May2012.pdf

Setting up a Client Choice Pantry is a bit like putting together a puzzle: all the pieces fit together, but you have to find the right way! Take some time to review the client choice models. Talk it over with your workers. Point out that they won't have to pre-pack food bags, which is one advantage for every client choice model. Decide together which model might be best for your pantry, you can also choose to use a combination of the models. Any space can be made to work as client choice! The models described in this handbook can be modified to fit your pantry, or you can come up with a different way to bring client choice into your pantry.

A Food Pantry Strategy: Client Choice

<https://www.yumpu.com/en/document/view/25596799/june-2013-a-food-pantry-strategy-client-choice-purdue-university>

<https://www.purdue.edu/indianasefnetwork/Home/MediaCategory/cc>

What is client choice?

Client choice is a method of food distribution at food pantries. Clients are encouraged to select the foods they want, similar to shopping at a grocery store.

Benefits of client choice for the client

Client choice acknowledges that no two families or individuals have the same needs or preferences. Here are a few ways client choice can benefit the client:

- Enables selection of desired products
- Encourages client dignity, self-esteem and builds trust and satisfaction
- Accommodates needs (ie. certain type of diet or limited cooking equipment)
- Promotes critical thinking and allows for exercise and practice of budgeting and nutrition knowledge

Benefits of client choice for the pantry

Offering client choice can benefit the pantry in several ways. Listed below are a few:

Reduces waste and monetary losses; clients choose products they will use and want

- Allows pantry staff to control their inventory and finances by seeing which products are most popular and which are not
- Volunteer and staff time is not spent pre-bagging, but instead, engaging and aiding clients.

From reading through these sources and from ideas uncovered in my meetings, I chose what I thought were the best intervention/activities to address the problems and underlying causes, and then placed them within the problem list.

Activity 1: Family Gardens/Urban Agriculture

I used Google and Google Scholar.

Keywords: can urban gardens help the poor; can urban gardens help food banks
community gardens for nutrition

1. Growing the Community of Community Gardens Research Contributions; Cameron, Jenny; Manhood, Craig & Pomfrett, Jamie

http://www.communityeconomies.org/sites/default/files/paper_attachment/Cameron-Manhood-Pomfrett-Version-2-For-Distribution-2.pdf

2. Culturing community development, neighborhood open space, and civic agriculture: The case of Latino community gardens in New York City; Laura Saldivar-tanaka, Marianne E. Krasny

<http://link.springer.com/article/10.1007/s10460-003-1248-9>

In addition to being sites for production of conventional and ethnic vegetables and herbs, the gardens host numerous social, educational, and cultural events. The gardens can also be viewed as unique "participatory landscapes" that combine aspects of all three movements, as well as provide a connection between immigrants and their cultural heritage.

3. Urban agriculture for sustainable cities: using wastes and idle land and water bodies as resources; Jac Smit, Joe Nasr

<https://journals.sagepub.com/doi/pdf/10.1177/095624789200400214>

Urban agriculture for sustainable cities: using wastes and idle land and water bodies as resources describes how cities can be transformed from being only consumers of food and other agricultural products into important resource-conserving, health-improving, sustainable generators of these products.

4. Food Insecurity and Participation in Community Food Programs among Low-income Toronto Families; Sharon I. Kirkpatrick, PhD, RD, Valerie Tarasuk, PhD

<https://www.semanticscholar.org/paper/Food-insecurity-and-participation-in-community-food-Kirkpatrick-Tarasuk/ea4de0c137196cee49f13116e176480f029ef52a>

Only one in five families used food banks in the past 12 months and the odds of use were higher among food-insecure families. One third of families participated in children's food programs but participation was not associated with household food security. One in 20 families used a community kitchen, and participation in community gardens was even lower. It was relatively common for families to delay p

5. Accessing food resources: Rural and urban patterns of giving and getting food; Lois Wright Morton, Ella Annette Bitto, Mary Jane Oakland, Mary Sand

<https://link.springer.com/article/10.1007/s10460-007-9095-8>

Reciprocity and redistribution economies are often used by low-income households to increase access to food, adequate diets, and food security. A United States study of two high poverty rural counties and two low-income urban neighborhoods reveal poor urban households are more likely to access food through the redistribution economy than poor rural households. Reciprocal nonmarket food exchanges occur more frequently in low-income rural households studied compared to low-income urban ones. The rural low-income purposeful sample was significantly more likely to give food to family, friends, and neighbors and obtain food such as fish, meat, and garden produce from friends and family compared to the urban low-income group. Further, 58% of the low-income rural group had access to garden produce while only 23% of the low-income urban group reported access. In a rural random sample of the whole population in the two high poverty counties access to garden produce increased chances of attaining recommended vegetable and fruit servings controlling for income, education, and age. Access to a garden also significantly increased the variety of fruits and vegetables in diets.

6. Accessing Growing food to grow cities? The potential of agriculture for economic and community development in the urban United States; Domenic Vitiello* and Laura Wolf-Powers,

<https://academic.oup.com/cdj/article-abstract/49/4/508/348294/>

Our findings suggest that despite expectations that urban agriculture will attract capital, create jobs and tax ratables and increase property values in preparation for 'higher-value' development, its greatest potential is in social enterprise, supplementing incomes, developing human and social capital and promoting food security.

7. Community Gardens: Lessons Learned From California Healthy Cities and Communities. Joan Twiss, MA, Joy Dickinson, BS, CHES, Shirley Duma, MA, Tanya Kleinman, BA, Heather Paulsen, MS, and Liz Rilveria, MPA.

Community gardens enhance nutrition and physical activity and promote the role of public health in improving quality of life. Opportunities to organize around other issues and build social capital also emerge through community gardens.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447988/>

8. Collective efficacy in Denver, Colorado: Strengthening neighborhoods and health through community gardens. Ellen Teig, Joy Amulya, Lisa Bardwell, Michael Buchenau, Julie A. Marshall, Jill S. Litt

Community gardens are viewed as a potentially useful environmental change strategy to promote active and healthy lifestyles but the scientific evidence base for gardens is limited. As a step towards understanding whether gardens are a viable health promotion strategy for local communities, we set out to examine the social processes that might explain the connection between gardens, garden participation and health. We analyzed data from semi-structured interviews with community gardeners in Denver. The analysis examined social processes described by community gardeners and how those social processes were cultivated by or supportive of activities in community gardens. After presenting results describing these social processes and the activities supporting them, we discuss the potential for the place-based social processes found in community gardens to support collective efficacy, a powerful mechanism for enhancing the role of gardens in promoting health.

https://nccommunitygardens.ces.ncsu.edu/wp-content/uploads/2014/02/researchTeigetel_neighborhoods-health-Gardens.pdf?fwd=no

9. Impact of Garden-Based Youth Nutrition Intervention Programs: A Review. Ramona Robinson-O'Brien, PhD, RD, Mary Story, PhD, RD, Stephanie Heim, MPH

Findings from this review suggest that garden-based nutrition intervention programs may have the potential to promote increased fruit and vegetable intake among youth and increased willingness to taste fruits and vegetables among younger children; however, empirical evidence in this area is relatively scant. Therefore, there is a need for well-designed, evidenced-based, peer-reviewed studies to determine program effectiveness and impact.

<http://www.smmusd.org/foodservices/gardens/ResearchImpactofGBN.pdf>

10. Review of the Nutritional Implications of Farmers' Markets and Community Gardens: A Call for Evaluation and Research Efforts. Lacey Arneson McCormack, MPH, RD, Melissa Nelson Laska, PhD, RD, Nicole I. Larson, PhD, MPH, RD, Mary Story, PhD, RD

Seven studies focused on the impact of farmers' market nutrition programs for Special Supplemental Nutrition Program for Women, Infants, and Children participants, five focused on the influence of farmers' market programs for seniors, and four focused on community gardens. Findings from this review reveal that few well-designed research studies (eg, those incorporating control groups) utilizing valid and reliable dietary assessment methods to evaluate the influence of farmers' markets and community gardens on nutrition-related

outcomes have been completed. Recommendations for future research on the dietary influences of farmers' markets and community gardens are provided.

<https://experts.umn.edu/en/publications/review-of-the-nutritional-implications-of-farmers-markets-and-com>

11. Growing Vegetables and Values: Benefits of Neighborhood-Based Community Gardens for Youth Development and Nutrition. Julie Ober Allen MPH, Katherine Alaimo PhD, Doris Elamc & Elizabeth Perry.

Results suggest

that the garden programs provided opportunities for constructive activities, contributions to the community, relationship and interpersonal skill development, informal social control, exploring cognitive and behavioral competence, and improved nutrition. Community gardens promoted developmental assets for involved youth while improving their access to and consumption of healthy foods

<https://nccommunitygardens.ces.ncsu.edu/wp-content/uploads/2014/02/researchOberAllenAlaimoElamPerry.pdf?fwd=no>

12. Fruit and Vegetable Intake among Urban Community Gardeners. Katherine Alaimo, PhD, Elizabeth Packnett, MPH, Richard A. Miles, BS, Daniel J. Kruger, PhD

Fruit and vegetable intake was measured using questionnaire items from the Behavioral Risk Factor Surveillance System. Household participation in a community garden was assessed by asking the respondent if he or she, or any member of the household, had participated in a community garden project in the last year.

Adults with a household member who participated in a community garden consumed fruits and vegetables 1.4 more times per day than those who did not participate, and they were 3.5 times more likely to consume fruits and vegetables at least 5 times daily. Conclusions and Implications: Household participation in a community garden may improve fruit and vegetable intake among urban adults.

https://www.academia.edu/14470964/Fruit_and_Vegetable_Intake_among_Urban_Community_Gardeners

Summary Paragraph:

These studies show that home gardens can provide 60% of leafy vegetables, and between 20% and 50% of all fruits and vegetables consumed by households. Home gardening families as a rule spend less on food than non-gardening families. Improved nutrition boosts the body's immune system protecting children against disease and can reduce diarrheal infections from 18% of the children to 5% of the children. One study showed that after six months of a vegetable garden project, the number of malnourished children decreased from 23% in the communities to 16% and the number of severely malnourished children decreased from 9.5% to 2%. The studies all emphasized that the vegetable gardens needed to be combined with nutrition education so that mothers could make sure that they were growing a variety of vegetables and fruit rich in vitamins and minerals, especially vitamin A. The gardens were also a good source of protein through eggs and small animal production. The studies also concluded that even a small garden (25 sq. meters) can have a positive impact on nutrition, health and increased incomes.

Activity 2:

Farm Gleaning Program

Key words: "Food Banks" and Farm Gleaning

In Google Scholar I found:

1. Estimating and Addressing America's Food Losses. Linda Scott Kantor, Kathryn Lipton, Alden Manchester, and Victor Oliveira

Once surplus food has been "recovered" or prevented from going to waste, volunteers pick up and deliver the food to groups that serve the needy, either directly through neighborhood charitable organizations, such as food pantries and soup kitchens, or indirectly through food banks. In addition to providing additional quantities of food to hungry people, food recovery efforts can also provide food banks with the ability to offer clients more variety and nutrients in their diets by adding fiber-rich fresh fruits and vegetables and grain products to the typical offerings of non-perishable canned and boxed goods.

<http://gleaningusa.com/PDFs/USDA-Jan97a.pdf>

2. Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill. Dana Gunders

California recently passed a bill allowing growers to receive a tax credit for donations of excess produce to state food banks, joining Arizona, Oregon, and Colorado.

The Farm to Family program in California recovers more than 120 million pounds of produce per year from farms and packers for distribution to food banks.³⁴ In 2010 this program recovered more than 17 million pounds of potatoes alone. Instead of relying on volunteers, the California Association of Food Banks Farm to Family program has pioneered an approach it calls concurrent picking, whereby workers harvest unmarketable produce alongside the marketable grades. The program covers the costs of additional labor, handling, packaging, refrigeration, and transport. In the end, food banks receive fresh produce at a greatly reduced rate and growers are able to deduct the charitable donation of the produce from their taxes. Workers and growers have been thrilled with the program; the challenge to date has been that even at only \$.10 to \$.15 per pound, only 6 of the 41 member food banks have been able to afford the produce.³⁵ This model also has the potential to serve secondary markets such as discount stores, after-school snack programs, or other low-budget outlets.

Many food banks have had to significantly invest in transportation infrastructure to successfully transition to handling greater quantities of perishable food donations. Unfortunately, some food recovery organizations are often staffed by volunteers and do not have the resources necessary to provide this consistency.

<https://www.nrdc.org/resources/wasted-how-america-losing-40-percent-its-food-farm-fork-landfill>

3. Field Gleaning as a Tool for Addressing Food Security at the Local Level: Case Study. Anne Hoisington, Sue N. Butkus, Steven Garrett, Kathy Beerman

During the 1997 season, ~50 gleaners participated in the Pierce County Expanded Food and Nutrition Education Program Gleaning Project; 29 participated in an intensive 4-week study to track use of produce by gleaners. Onsite weighing of gleaned produce revealed that of the 110,000 pounds gleaned by these 50 gleaners from Pierce County farms and orchards during 1997, 85,000 pounds (77%) were donated to local emergency food programs.

[https://www.jneb.org/article/S1499-4046\(06\)60009-2/abstract](https://www.jneb.org/article/S1499-4046(06)60009-2/abstract)

Summary Paragraph:

Activity 3: Restaurant and Grocery Store Surplus Food Donation Program

Key Words: "Food Banks" and Restaurant and Grocery Store Donations

1. Waste not, want not: Feeding the Hungry and Reducing Solid Waste Through Food Recovery. USDA.

<https://nepis.epa.gov/Exe/ZyNET.exe/1000170R.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1995+Thru+1999&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C95thru99%5Ctxt%5C0000014%5C1000170R.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>

Case Studies of Food Recovery Programs

Solving the Problems of Iowa Food Deserts: Food Insecurity and Civic Structure. Lois Wright Morton, Ella Annette Bitto, Mary Jane Oakland and Mary Sand

2. Characteristics of Mid-Atlantic Food Banks and Food Rescue Organizations. Andrew Youn, Michael Ollinger and Linda Scott Kantor

<https://ideas.repec.org/a/ags/uersfr/266207.html>

Most Food Donated to Mid-Atlantic Food Recovery Organizations Came From the Food Industry. 1: Farm gleaning 7% food drives, 14% manufacturing, 18% Wholesale, 18% Second Harvest, 18% Retail.