Chris Layne

Entrepreneurship

CRJS/CYSE/SOC 494

Academic Paper

Millions of American people go hungry on a daily basis. “Food insecure” is the new term for the problem. There are families of all sizes, races, income thresholds that find it difficult to feed themselves adequately throughout the days or weeks or months. Some struggle with paying the bills vs. eating. Some that go hungry have no choice, children don’t ask to be hungry and they certainly cannot work or create ways for themselves to not be hungry. There are areas of different towns and cities that offer meals, soup kitchens, food pantries, food stamps, churches, and in one case, there is a restaurant that rocker Jon Bon Jovi opened, where patrons can eat for whatever they can pay- and of the cant pay, they can volunteer to work there for their meal. America is a place where dreams come true, the entrepreneurial spirt was born and raised. Why there is one person who does not have food is just unthinkable! With so much capital, so many people who have that capital, why is hunger an issue? Some people may call on the laziness of others as to why they can’t find a job; some may use mental illness as the reason. Whatever the case may be, I think as Americans, we should be leading the way for the world to see how to feed the hungry. This is not just an American problem, but it seems that the world power of the USA lags way behind the rest of the world in being human to those in need of food. There are examples of lesser developed and lesser funded that have begun to put a solution in place to end this easily solvable issue. One of the ways our country can do to solve this issue is stop wasting food. Every single day, there are fast food restaurants, as well as high end restaurants, as well as grocery stores that throw out food. Most of the food is still good, but for company policies or some FDA regulation, the food cannot be saved or even given away- it has to be tossed in the garbage.

One in seven U.S. households (14.5%) is currently food insecure at least some time during the year, including 5.7% with very low food security. Very low food security means the food intake of one or more household members was reduced and their eating patterns were disrupted at times during the year because the household lacked money and other resources for food. Over half of all food insecure U.S. households participated in one or more of the three largest federal food and nutrition assistance programs during the month prior to a 2012 survey. National food insecurity data revealed that 41% of households with incomes below the official poverty line were food insecure, while about 7% of those struggling with hunger have incomes that are above 185% of the federal poverty level. These data indicate that being hungry is strongly associated with income, yet those at almost double the federal poverty level are still vulnerable to food insecurity. restaurants could make many changes to reduce discarding of food, some of these changes may be perceived as unacceptable to patrons. Accordingly, respondents were queried about which of a list of changes they would consider acceptable. The leading items were donating excess food, serving smaller portions, taking time to make items to order rather than serving only ready-made items, and providing smaller salad bar plates. Respondents were less accepting of reduced menu variety and eliminating salad bar trays in favor of plates. Knowledge and concern are commonly found to be important but insufficient precursors to pro-environmental behaviors. The relationship may be even more complex in the case of behaviors that can alternatively be motivated by non-environmental concerns. These findings suggest support for all of these possibilities, and a likely need both for education about environmental impacts of wasted food, and for more sophisticated strategies aimed at addressing this discordance.

Based on findings, there are several critical areas for further work. First, concern about foodborne illness was the most common reason given for discarding food, yet, for most foods, contamination and spending too long at the wrong temperature are key to risk, rather than primarily food age—although certainly those factors intertwine. There is thus a great need for clearer food safety guidance, for different foods, presented in the joint context of waste prevention and food safety. There is also a need for improved understanding of how Americans make decisions about when to discard foods, including their level of knowledge and their rational thought processes, as well as their implicit, unconscious and habitual attitudes and behaviors. Additionally, there is a need for a nationally harmonized and well-communicated expiration date label system to reduce consumer confusion and resultant unnecessary wastage.

Second, a majority of respondents reported that they only wanted to eat the freshest food. While humans may have a natural preference for freshness, this concept has also been heavily promoted by health advocates, cooking shows, local food supporters and others as a strategy for making produce more palatable, to add economic value to fresh and local foods, and to enhance both enjoyment and status. Food waste prevention must incorporate efforts to expand the acceptability of still-good produce and other foods that are older and/or less aesthetically pleasing, and those nearing their expiration dates. Such items can be sold at a discount. There is a substantial space where food may appear less attractive but remains healthy, and when well-prepared, equally palatable.

Reducing food waste and distributing excess food to the needy before it deteriorates seems like a “no-brainer” concept, and yet it does not happen at the level that it should. What factors currently hold it back? Interviews with local business people affirmed that the largest single factor in preventing significant donations of food is the fear of liability – managers and owners are clearly fearful of a potential lawsuit. A farmer with whom I spoke related the story of a caring local restaurant owner who for years had donated all of his leftover homemade pies at the end of each day. He stopped donating when he was sued by someone claiming to have become sick after eating one of the pies. One franchise operator told me that donating more edible food would require clearance from the corporate office, and he felt certain that he would face resistance on liability grounds. Liability fears extend beyond the stores and restaurants to the fields as well. While some farmers allow food banks to conduct “gleaning” (additional harvesting) operations, others are reluctant to do so for fear of a lawsuit should one of the laborers be injured on their land. Supermarkets have the same fear – too often meats, fruits, vegetables, and bread products that hit their “sell-by” dates are immediately discarded, despite the fact that in most cases this food is still perfectly fine for consumption. Such disposal has resulted in “freegans” – also known as “dumpster divers” – individuals who seek out and consume the discarded, yet perfectly edible, food products from stores and restaurants. Another reason for the lack of donations is lack of available storage space. One storeowner stated that even if he wanted to donate more of his leftover food, he didn’t have the space to store the products until they could be picked up. A local farmer concurred, noting that his efforts to donate in the past have been stymied by an inability to get prompt pick-ups. He noted that in the summer he has a varying amount of fresh food to donate every day, but he would need an organization to pick it up in a timely manner. Large quantities of fruits and vegetables ripen simultaneously, and if not picked promptly, much of it spoils without ever leaving the farm. Negative weather and market conditions play a critical role in the lives of farmers and impact the amount of food waste. Extreme weather can ruin crops in the field and eliminate the potential for harvest. Market conditions can reduce a farmer’s incentive to harvest at all. If market prices are so low that a farmer cannot harvest his crop and make a profit, or if the crop is not perfect enough for a prospective buyer, the crop may simply go to waste despite the fact that it is perfectly edible. Another problem is that throwing edible food in the trash is just too easy, while donating requires the work of contacting a food bank, arranging for a pick-up, storing the food, and monitoring the loading when the pick-up truck arrives later. Many companies operating with a limited number of employees and seeking to clear space quickly simply opt to throw out the food, thinking it is more efficient to do so. One blogger related a story in which a high-end food store discarded entire boxes of organic apples simply because they had been stored next to regular apples, which violates a standard. Rather than removing the “organic” sticker from the organic apples and selling them as regular apples, the store simply discarded them to save the labor time. Some supermarkets avoid donating for fear that doing so will negatively impact their sales revenue, thinking that individuals will seek out food at food banks more aggressively in order to avoid the cash outlay at the store. There are places on the globe that are tackling this issue straight on. There is a group in Pakistan, called the Robin Hood Army, that has taken on this exact task.

**Next Steps**

Interviews with employees of local businesses confirmed that there is interest in donating food products that would otherwise go bad (and be discarded), yet there are also barriers that prevent donation as a daily option. Clearly communities need an organized push to overcome these barriers and reduce food waste through donation and redistribution, and if one local community can get this right, the process will surely spread to other regions. It is an opportune time for several reasons. In the midst of our current economic downturn, state and local budgets are strapped, and legislators are looking at creative ways to keep people working and to keep commerce flowing. Last year, for example, more than 2,200 New York employers participated in that state’s Shared Work program – an idea which began in Europe – in which employers trim back the number of hours employees work rather than laying them off permanently, while the state makes up the wage differential for them. The program allows employers to adjust to sharply reduced demand and avoid layoffs. In the same vein, any program designed to “stretch” tight budgets by diverting food resources to the needy that would otherwise be wasted should have appeal to legislators, because it could offset the cost of other programs to feed them. In addition, with so many people in need today, there is increased desire on the part of many to help others if they can. Further, there is growing interest in the “buy local” movement, in sustainability initiatives, and in corporate social responsibility (CSR) efforts – all of which come into play in a plan to reduce food waste at the local level. Such a public-private partnership could be extended to the idea of reducing food waste at the local level. What has to be done to make this happen? I considered the strengths and opportunities of a public-private initiative to reduce food waste, along with the weaknesses and the possible threats to it. To start, the community must address the organizational aspects of bringing multiple stakeholders together in this effort. A passionate individual is needed, one who can assemble and lead a small team of concerned community members in a public-private initiative steering committee, or team. This person is critical; he or she will be a key link to the larger community base and will focus on moving the process forward, displaying and generating personal passion for the project. The team should be big enough to include representatives from key stakeholder groups to have legitimacy, yet small enough to avoid excessive bureaucracy. It would be comprised of roughly twelve individuals from the community, and might ideally include: A passionate volunteer lead advocate with experience in social mission, a volunteer assistant with an interest in environmental and/or social causes, the community’s Mayor as well as a town executive representatives from local businesses (shops, markets, restaurants), a representative from the non-profit sector with ties to food banks/shelters, a representative of the farming community, a concerned citizen volunteer with ties to churches and seniors, a school executive to help organize student volunteers. The lead advocate, the assistant, the school executive and the additional citizen would focus on spreading the message of the project throughout the community and recruiting volunteers for communication efforts, gleaning, and food preparation. The school executive would play a key role in recruiting students from community colleges or high schools for website development and maintenance, logistical support, and other volunteer labor. The mayor, town executive, and Public Works official would focus on infrastructure issues to get the operation running in a sustainable manner. The representatives from local businesses would focus on the potential for food donations, while members of the farming community would do the same in their sector to ensure that food is redirected rather than wasted. These individuals would also communicate the message of savings through sustainability to their peers. The representative with links to the non-profit sector would help connect food banks and shelters to the community’s processing center and upstream donors. With proper organization and access to a dedicated website, local food shelters could be matched directly with donors and even arrange their own pick-up of selected highly perishable food donations on occasion; thus, allowing for more efficient capture of smaller quantities of nutritious produce.

The education process involves promoting public awareness, getting individuals past the fear of liability, and reaching out to farmers and other growers of food. First, potential donors need to be made aware of the severity of the hunger problem – even in and around affluent communities where it is less visible. In addition to the human toll, they should be educated to the environmental impact of food waste, which includes the waste of water and other resources consumed in the production of food that is never eaten, the increase in greenhouse gases from decaying food, and the resources used in the disposal process. A report by The Stockholm International Water Institute estimates that while the amount of food the world produces is more than enough to ensure a healthy life for the global population, as much as fifty percent of food produced is lost or wasted “between field and fork.” Individuals need to know how many ways “just one person” can help. To make it personal, individuals should be advised that food waste also involves overeating’ as those excess food resources could have been better utilized as calories for those in need. Individuals who garden can be advised of local food distribution centers that could make use of extra garden produce and canned goods. Educational efforts would also involve the posting information on the “best foods” to donate to food banks. Supermarkets could provide bread and meat products at their sell-by dates, and growers could focus on providing important fruits and vegetables. A critical second step involves overcoming the fear of liability associated with donations. Potential donors need to be aware that they are protected from liability by the Bill Emerson Good Samaritan Food Donation Act of 1996. The Act is designed to encourage donations to non-profit organizations such as food banks and shelters by limiting the potential liability of donors to acts of “gross negligence or intentional misconduct.” In other words, as long as donors are acting in good faith, they have little to worry about. To further allay liability fears, the team (with help from the community’s legal counsel if deemed necessary) should take the extra step of indemnifying donors, especially farms that allow gleaners to work their property for excess crops. Volunteers would sign a “hold-harmless” document stating that they are working at their own risk and indemnifying farmers and the community from legal action in the event of injury. Recipients of food donations should sign a similar document, acknowledging that they are receiving donations in good faith and indemnifying donors and the community from legal action. These documents should be very simple and provide an added level of protection for those involved in the program. Once donors know they are protected from liability, they should be encouraged to feel good about donating – it’s not only safe, it’s the right thing to do. A third important aspect of the educational process involves reaching out to farmers and growers. Local growers should be instructed on ways to maximize both their donation and their personal reward. In the same way that eBay lines up buyers and sellers, the team must match up food banks and shelters with potential donors (supermarkets, farms, local growers, restaurants, etc.) to maximize donations and minimize food waste. A logistical system should be established so that donors can post information electronically about what they have to donate (and when), and the community’s operational team can plan when to get the material (or hours to receive donations on site), whether to process it into meals, distribute it directly to needy families, or compost it. Establishing such a system could be turned over to local high school or college students seeking service credits or volunteer projects for resume development. Pick-up schedules must be established. Pick-ups should be frequent to overcome the lack of storage problem at donor facilities, and pick-up times should also be convenient for the donor (one farmer informed me that he had difficulty in getting a food bank to come to his location). Non-profits seeking food donations must do all they can to make it easy for the donors to donate. Just as consumers shun repairs and find it easy to discard old units and buy new ones in our throwaway economy, it is too easy for potential donors to throw the food in the trash. The system could also promote direct pick-ups from donors by food pantries. Along with arranging pick-ups, non-profits should also have organized teams of volunteers available for gleaning operations in fields and orchards. When farmers or local growers call and indicate that produce is available to be harvested, the organization should immediately send the volunteer team out to gather the food. Timeliness is essential to avoid waste due to spoilage.

**Success**

While the donation program is at the core of the effort to reduce food waste, all kinds of creative offshoots are possible with a motivated community. Those leading the program should encourage citizens to launch other programs, or simply to get involved in any way possible. Many residents will look for the opportunity to give back to the community once they see other efforts taking hold. For example, in Detroit – a city reeling from budget cuts and a battered economy – many citizens are now taking matters into their own hands and using their own time and funds to mow lawns, maintain parks, and board up vacant buildings/ Once a successful food waste reduction program is in process, creative efforts by caring individuals to do even more could kick in. For example, the community could sponsor a contest for local growers, awarding prizes (and recognition) to the individuals or farms that donated the largest amount of a particular crop, and similar rewards could be given to those gleaners who harvested the largest amount of food. Rewards could be given in the cooking area as well, perhaps to those with the most creative use of donated food. One could even envision contacting an organization such as the Food Network for a contest which would yield positive publicity for a good cause. Other creative efforts could be used to improve social relationships within the community. Individuals could use the community’s website to promote tips for reducing food waste, including the best ways to use leftovers. Children could be encouraged to volunteer at the public-private facility, helping to harvest crops, pick up donations, cook meals, or distribute meals to the needy, efforts that would make them better future corporate citizens. Young and old individuals could be brought together creating meals with donated food at the community’s facility. In the same way that adults travel to Italy to take cooking classes from elderly Tuscan women, younger members of the community, particularly those who might be interested in cooking careers, could get cooking tips from older members. Schools could make food waste reduction an educational experience, getting students to manage food donations, food recycling, and composting efforts. Local restaurants could be encouraged to promote “value portions” to address the issue of nightly waste in that sector. This in turn could be tied to a general healthy lifestyle campaign, with various events such as 5K races or similar fundraising events defraying expenses associated with running the cooking facility or the food scrap recycling effort. A community composting program could be initiated to reduce waste and create organic fertilizers. Local business organizations could donate equipment and employee labor to help run the food waste reduction program. They could enlist their cafeteria operations in the food scrap recycling effort. Local restaurants could take a higher-profile role in preparing meals for the needy periodically, which would generate goodwill in the community and good public relations for the restaurants. In Irvine California, rather than disposing of a significant number of leftovers, a restaurant recently began providing a meal every Thursday night for those in need. The restaurant combines its expertise – cooking high quality meals – with a desire to put food to good use that would otherwise go to waste. A holistic attempt by a local community to successfully eliminate food waste would truly be a noble effort. Donors can achieve many benefits by overcoming barriers and reducing food waste by getting involved in a food donation program. As noted above, companies that donate get the satisfaction of helping the hungry, and they help their bottom line by reducing their garbage hauling costs, obtaining tax deductions, and by moving excess inventory at little cost. They also benefit by demonstrating good social responsibility, building community goodwill, and generating increased employee pride. Individuals in need of food receive vital nourishment. Local communities and state governments benefit as increased donations through reduced food waste yield some reduction in the costs needed to fund food programs for the poor. Communities benefit in terms of reduced costs associated with disposal of food waste in landfills and from the positive community spirit that results when organizations and individuals get together to make a difference in the lives of others. Environmental benefits occur in the form of reduced carbon emissions from decaying food in landfills, and in reduced waste of key resources, especially water, utilized in the production of food. The environmental benefits are increased if the program also recycles food scraps (which would otherwise go to landfills) into feed for livestock and/or utilizes composting to create organic matter for fertilizer. Achieving these benefits involves putting together a comprehensive program to reduce food waste through increased donations. This can be done at the local community level, and would be most effective through a well-run public-private partnership. Using advertising in exchange for donations and for assistance in running the program from private firms, the local government can offset the costs of the program. Some savings can be expected from reduced trash disposal and landfill operating costs over time, and those savings can be redirected to benefit the public in other areas. As in Pakistan, the local government would be seen as being on the cutting edge of a meaningful sustainability initiative – which would result in the area’s being seen by others as a more desirable place to live. Establishing a successful program in which community members reduce food waste and redirect it to benefit the needy and the environment can generate similar feelings of excitement and personal reward as well as a positive connection to social and environmental causes. This chart I found to be particularly helpful, especially in the design of getting things rolled out.

**Donor Chain:**

Food Stores Local Farms & Growers, Local Restaurants, Local Schools, Local Co. Cafeterias

**Gather and pick-up:**

Pickup trucks or best volunteer vehicles

**Reprocessing, Storing, Cooking, and Packing**

Public Facility – Refrigeration and Freezer Storage, Kitchen Facilities for Cooking, Packing and Distribution

**Delivery to End Users**

Food banks, Needy families, Homeless Individuals

In taking on this project, in this class, as well as possibly taking it on in real time; it is a learning experience, not only in the classroom, but I have a feeling I will learn more than I can fathom about people. In the world of 24/7 news reels, online stories and just inundation of human atrocities, it can be easy to just give up on humanity. It feels, sometimes, that all we ever hear is bad news. I believe that in all my travels, I get the feeling that people are truly good; we all wasn’t the same things- freedom, fun, love, and for our kids to have it better than we did. In the words of Maya Angelou,” We are more alike than unalike.” This project bridges together a few of the aspects of other classes outside of my Cybersecurity major. Creative writing comes to mind in that there are going to be times where a professional mode is needed when talking to higher ups at corporate levels, and then a grass roots mode would be more proficient when talking to the community at large. The entrepreneurship ideology plays a part in all of this project, from the idea of helping others and in getting all of the ideas together to get the idea into a real event. This kind of work will include people from different countries, so it may be helpful to be fluent or at least conversational in another language. I have taken 3 years of Spanish, a class in Hindi and Russian, I still find it valuable to learn as much as you can. Most of the rest of the world can and does speak English, knowing another language just makes for a better relationship; especially if you are asking for help.

**Bibliography**

<https://joe.org/joe/2014december/a2.php>

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0127881>

Buzby JC, Wells HF, Hyman J. The estimated amount, value, and calories of postharvest food losses at the retail and consumer levels in the united states. Economic Information Bulletin, United States Department of Agriculture, ii-33. 2014.

Hall KD, Guo J, Dore M, Chow CC. The progressive increase of food waste in America and its environmental impact. PLoS One. 2009;4.

Quested T, Marsh E, Stunell D, Parry A. Spaghetti soup: The complex world of food waste behaviors. Resour Conserv Recycling. 2013;79: 43–51.

<https://repository.upenn.edu/cgi/viewcontent.cgi?article=1002&context=gsjod>

<https://robinhoodarmy.com/academy/>

Donate now: who, what, why, how. 2010. Retrieved from http://www.firstfoodbank.org/donate.html Accessibility verified July 26, 2011.