

CHCI Policy Brief



DEVELOPING THE NEXT GENERATION OF LATINO LEADERS[®]

March 2019

Food Insecurity and Food Waste: We are Feeding Landfills Instead of Hungry People

By **María Cecilia Pfund**, *CHCI-PepsiCo Foundation Nutritional Health Graduate Fellow*

Executive Summary

The United States, being one of the richest nations, still has 40 million people struggling with food insecurity and depending on food assistance programs to have food on their tables. The budget for the 15 federal domestic food and nutrition assistance programs to help reduce hunger was \$98.6 billion in FY 2017.¹ On the other hand, the dollar value of wasted food in the United States has reached an annual cost of nearly \$218 billion.² To feed the growing population, we will need more food and less waste. Beyond hunger and cost, food waste also has a negative impact on the environment. Food production uses up resources including water, soil, land, nutrients, petrol. Food waste contributes to air pollution because decomposing food produces methane, which is 20 times more powerful at trapping atmospheric heat than carbon dioxide (CO₂).

Fortunately, progress in food rescue has been increasing, albeit slowly; yet barriers remain. Policy choices could reduce those barriers. A first step towards food rescue is to make people aware of the effect each food waste decision has on the environment and to hold everyone accountable for their actions.

Based on the analysis described in this paper, the best policy to promote at the moment would be to extend the

liability on the Bill Emerson Good Samaritan Act. This is the policy that ranked high on all criteria items reviewed: efficacy, cost effectiveness and sustainability. Even though a thorough approach to hunger and wasted food is needed to solve these issues, we need to start somewhere, and we need to do it soon. If we start rescuing food to feed the hungry, we can set up a model of win-win for everyone. As a leader nation, we are obliged to anticipate the future and proactively create a better one in a sustainable way.

Introduction

We are at a historic time that is calling for action to feed people and reduce food waste. Some examples of officially declared goals related to these issues include the United Nations' Sustainable Development Goals 2 and 12 (to end world hunger³ and to halve food waste at the retail and consumer levels by 2030⁴); the U.S. Food Loss and Waste 2030 Champions Initiative, which aims to reduce food waste by 50% by 2030;⁵ and the formal agreement signed on October 2018 "*Winning on Reducing Food Waste Initiative*", between the United States Department of Agriculture, Environmental Protection Agency (EPA), and Food & Drug Administration.⁶

Millions of people are food insecure while millions of pounds of food fill the

landfill. Recovering food could be a solution to help alleviate hunger while improving the environment. Tax credits, encouraging food recovery, and banning organic waste in landfills are effective ways legislators address food waste. Reducing food waste and feeding hungry Americans is a timely social, economic and environmental issue. These two issues, food waste and food insecurity, that deeply affect our society and environment could be an opportunity for doing good while solving the problems.

Description of the Problem

Food Insecurity and Hunger

Food insecurity is the lack of reliable access to enough food for a healthful life.⁷ Hunger is a symptom of food insecurity, but it is not limitedly experienced by those who struggle with food insecurity. Anyone may experience hunger. Feeding America, a major hunger-relief organization operating nationwide, defines hunger as "the personal, physical sensation of discomfort for need of food."⁸ In the United States, approximately 1 in 8 Americans are food insecure, including more than 12 million children.⁹ Working families in a variety of circumstances that result in food insecurity and hunger, may not qualify for federal assistance.¹⁰

Food Insecurity in the Latino Community

Latinos experience higher rates of food-insecurity than the general population (see Figure 1). While 12% of white, non-Hispanic children face food insecurity, 25% Latino children are at risk of hunger. Moreover, Latinos are more prone to suffer diet-related health conditions, making food security a crucial priority to improve their health status and reduce healthcare costs.¹¹ Additionally, Latinos are less likely to receive SNAP (formerly Food Stamps) or other federal nutrition programs. The Latino population is expected to continue growing, making food-insecurity a growing problem for the U.S.¹²

Wasted Food is Harming the Environment

Food waste harms the environment, creating negative externalities (transaction costs resulting from an action such as food production or disposal) throughout the food supply chain.¹³ Negative externalities use up valuable resources including water, soil, land, nutrients, petrol, and create air pollution. Nevertheless, the burden on the natural resources consumed are not fully internalized in the price of food. If food waste was a country, it would be the third, right after USA and China, in largest greenhouse emissions.¹⁴ This occurs because food waste produces methane, which is 20 times more powerful heat-trapping gas than carbon dioxide (CO₂). Greenhouse gases such as

methane and CO₂ absorb solar radiation and contribute to global warming.

Agriculture uses up 70% of all the water used throughout the world; therefore, food waste translates as wasting a scarce resource needed for daily living. When we throw out one kilogram of beef, we are also wasting 50,000 L of water used to produce that meat.¹⁵ In terms of land damage, approximately one-third of the world's total agricultural land area grows food that ends up being wasted.¹⁶ Moreover, monocropping and converting wild lands into agricultural areas are common agricultural practices that adversely affect biodiversity.¹⁷

Challenges to Rescue Food

Rescuing food is not an easy task, and currently it is easier and cheaper for businesses to throw out food rather than designing a plan to rescue it and incur on the costs of storage, packaging, transportation, and labor to successfully bring the food to those in need of it. Similarly, people are prone to waste food due to a variety of factors. Below is a list of the most common contributing factors that make rescuing food challenging, according to researcher Jessica Aschemann-Witzel, who carefully reviewed research studies on this topic and is an expert in this matter.¹⁸

- Technical factors (e.g., the perishable nature of most foods, food safety,

storage, and temperature considerations).

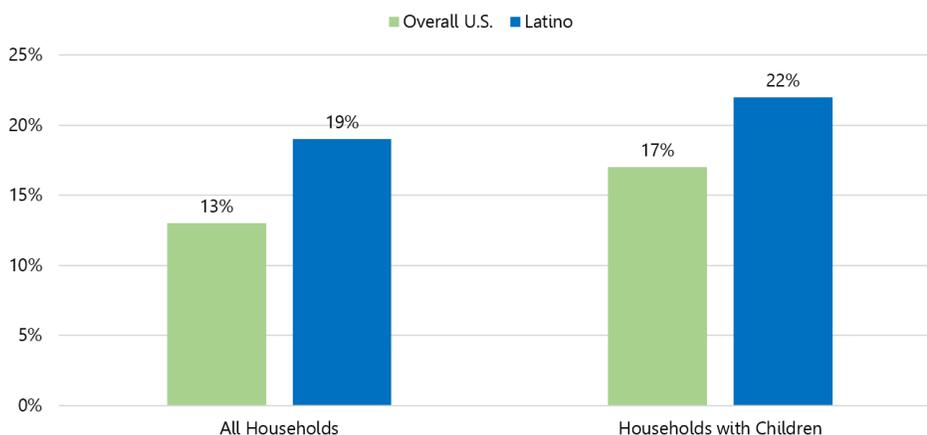
- Temporal and spatial factors (e.g., the time needed to deliver food to a new destination, and the dispersion of food loss among millions of households, food processing plants, and foodservice locations).
- Individual consumers' tastes, preferences, and food habits (e.g., throwing out milk left over in a bowl of cereal).
- Economic factors (e.g., costs to recover and redirect uneaten food to another use).

Additionally, consumers also face daily challenges to make food rescue the norm. Part of it is cultural and societal norms, but some of the obstacles are intrinsic, which could be greatly improved through more education to the public on how to efficiently use the food they buy. The current factors causing consumer-related food waste include:

- Macro-environmental context, such as food safety laws and subsidies
- Insufficient skills to manage food appropriately
- Reduced value to food for food itself, more value placed on the social aspects and references of food
- Large portion sizes
- Social norms, such as associating rescuing of food with stingy or cheap

Figure 1: Latino Households Have Higher Food Insecurity Than Nation as a Whole

Percentage of households that lacked access to adequate food at some point in the year, by ethnicity, in 2015

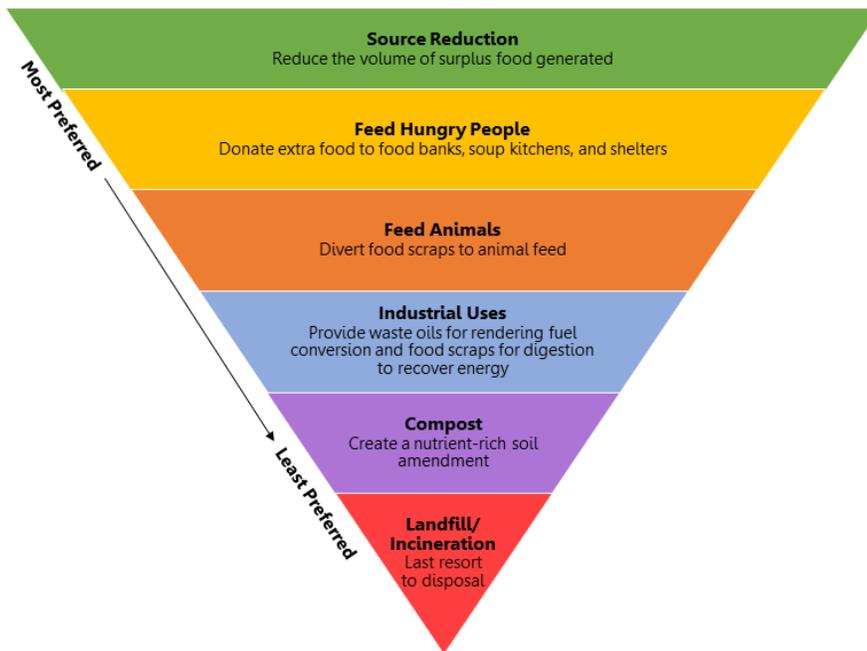


Source: Alisa Coleman-Jensen et al., "Household Food Security in the United States in 2015, Statistical Supplement," USDA, September 2016 as cited in Center on Budget and Policy Priorities. (n.d.). Latino households have higher food insecurity than nation as a whole [Figure].

Potential Solution: Rescue Food to Feed Hungry People

Feeding hungry people with food that would have otherwise been wasted is also called reusing food. As depicted on the following page in Figure 3, reusing/rescuing food to feed hungry people is only second to source reduction—avoiding generating the waste in the first place. This means that if we have generated surplus food, according to EPA's Food Recovery Hierarchy, the top most priority is to use it to feed people. Acting in this manner not only helps to reduce food waste, but decreases food production needs.¹⁹

Figure 2: Food Recovery Hierarchy



Source: United States Environmental Protection Agency

Currently the United States spends approximately \$100 billion annually on food assistance programs. If 15% of the wasted food in USA was instead rescued, 25 million people would be fed, and if 30% of our food was rescued, the amount of food would be enough to feed all people struggling with food insecurity.²⁰

Implementation of Strategies to Rescue Food

Reducing barriers to food rescue could increase the amount of food that is actually rescued. For instance, policy could require every food service establishment to declare how much wasted food it generated, and how much food it rescued. Another option is to require food labels to report the greenhouse emissions, water and land effects on each food label.

Potential Policies

Require food rescue training and food insecurity awareness certification to work or start food service operations, and an optional recognition certificate for those who complete at least 40 hours annually of community service with direct experience in these issues.

Currently, to start and keep food service operations in business, owners and employees need to complete certain requirements including certificates and licenses in food handling. The requirements are regulated at a state and local level, so they vary from place to place. Additionally, there is a uniform training required for employees nationwide: ServSafe Certification for Food Handling and Safety.²¹

The ServSafe Certification entails food safety training by the food service industry for itself. ServSafe® is the most recognized food safety training program in the United States by federal, state, and local health jurisdictions. The training provides information about food hazards and proper food handling practices, which is essential to keep food safe and this plays a key role in food rescue.²²

The new food rescue training and food insecurity awareness certification would take advantage of technology and already available resources. It would be provided by passing an online or written exam which would test the content of the “Comprehensive Resource for Food Recovery Programs” and the latest report on “USDA’s Household Food Security in the United

States”. Additionally, one hour of food rescue efforts and one hour of directly serving those who are food insecure at facilities that receive food donations would be required to receive the certificate suggested on this policy to be required for everyone who needs to take ServSafe across USA.

Extend liability of the Bill Emerson Good Samaritan Act to protect donors who wish to donate or sell food at a reduced price directly to individuals in need.

The Bill Emerson Good Samaritan Act is the main federal law that protects food donors from being sued. Currently the Bill Emerson Good Samaritan Act protects food donors to non-profit organizations serving people in need, and all food donated must be provided for free.²³ The benefit of this law is that fear of being sued is one of the top reasons given by food service operations to avoid donating food.

Offering food directly to individuals in need could help lessen the cost of processing the food, while also offering opportunities for new and creative business models within or outside the food service establishment. Additionally, food donor establishments may want to offer the food to people they already know in the community or individuals who come to ask for food for themselves. If we want to promote food donations by reducing apprehension of being sued, it is critical that we make this law as strong as possible to establish a stronger support and expansion of food rescue efforts.

Require all facilities that receive food remuneration from USDA Including Child and Adult Care Food Program (CACFP) and National School Lunch Program (NSLP) to plan food rescue programs and report data on food donated and wasted.

The USDA provides grants to states to manage programs for facilities that meet certain requirements. Therefore, to receive reimbursement for food in federally funded programs criteria including nutritionally balanced and safe food must be met. Below, is a brief description of the two major

programs that feed students across the United States.

- CACFP—Daily, 3.3 million children receive nutritious meals and snacks through CACFP. The program also provides meals and snacks to 120,000 adults who receive care in nonresidential adult day care centers. CACFP also offers meals to children residing in emergency shelters, and snacks and suppers to youths participating in eligible afterschool care programs.²⁴
- NSLP—NSLP is an assisted meal program operating in public and nonprofit private schools and residential child care institutions.²⁵ It provides nutritionally balanced, low-cost or no-cost lunches to over 30 million children each school day.²⁶

Any requirement established by the USDA for participation is met with full compliance because otherwise they do not receive reimbursement. Therefore, if there was a requirement for each state to submit to the USDA a food rescue plan as well as reports on wasted and rescued food, the agency would have access to a baseline data nationwide on what is currently done. Moreover, it could be a trigger for schools to be more conscious on how much food they are currently wasting and consequently be moved to act and implement food rescue interventions.

Policy Evaluations

All the policies discussed above could increase food recovery efforts. Each one has its own strengths and weaknesses, in terms of overall efficiency, cost effectiveness and sustainability.

Policy 1: Extend the liability on the Bill Emerson Good Samaritan Act.

This is the best policy recommendation while taking into consideration efficiency, cost effectiveness and sustainability, ranking high on all of them. It would be the easiest to carry out because it builds on a law already established with a long record of success. This policy would provide opportunities for more financial and social win-win cases.

Extending the liability on Bill Emerson Good Samaritan Food Donation Act is the best option despite lacking monetary incentives for making food rescue the preferred choice for businesses. Nevertheless, without imposing a requirement on establishments, it provides a way to develop new food rescue models through food donations. Overall, this policy would greatly benefit society and the environment, reducing burdens on food production and hunger.

Policy 2: Provide Food Rescue Training and Food Insecurity Awareness Certificates.

This policy has some promise because it is moderately effective, it has potential to save businesses money, and is sustainable. The main benefit is increased awareness and sensitivity about food insecurity and food waste issues, which stimulates implementation of food rescue initiatives.

On the other hand, this policy would not be as efficient on achieving its goal because of adding new certifications, which requires coordination and planning and may hinder execution. Additionally, these certifications require an investment in education and testing materials, as well as personnel to oversee the process.

Policy 3: Require facilities receiving USDA food reimbursement to plan food recovery programs.

Considering the factors described above, this policy is highest in cost effectiveness and sustainability. The main advantage of this policy is the focus on evaluation and monitoring through data collection that it promotes—all of which could be used to create new and more efficient food rescue programs.

Nevertheless, the efficiency of this policy is lower because there is no certainty that food programs will follow their planned food rescue programs. Also, many institutions already struggle to keep up with all the regulations and reports required of them to; therefore, this policy may impose too much burden on the food service staff.

Recommendation

Even though a thorough approach to hunger and wasted food is needed to solve these issues, we need to start somewhere, and we need to do it soon. All policies suggested would greatly benefit our society and increase food rescue efforts. Promoting food rescue demands a combination of supporting awareness, providing education on the topics, and providing liability protection and incentives to take action.

Extending the liability on the Bill Emerson Good Samaritan Food Donation Act by providing liability protection to donors who wish to donate or sell food at a reduced price directly to individuals in need

offers the best combination among the options presented. This amendment scores high on all considered factors; efficacy, cost effectiveness and sustainability. It is highly effective because it would help increase opportunities for food donations by decreasing obstacles, particularly liability-related. It is cost effective because it could increase profit for food that otherwise would be wasted, while saving valuable resources. Finally, it is also highly sustainable because it promotes ways to save food and reduce waste, promoting responsible stewardship of resources already available.

Conclusion

Wasted food and food insecurity is costing the United States too much money and suffering. It is time to act and feed the hungry from the large abundance we have. If we expand food rescue efforts to feed the hungry, we can all win. Considering the large impact our developed nation has on the world, it is our duty to lead with policies and behaviors that create a future through proactively addressing issues that threaten our basic needs.

Endnotes

¹ Farm Policy News. "As Farm Bill Stalls Over SNAP, USDA-ERS Report Captures Details of the Program." <https://farmpolicynews.illinois.edu>. Last modified March 18, 2018. <https://farmpolicynews.illinois.edu/2018/03/farm-bill-stalls-snap-usda-ers-report-captures-details-program/>.

² ReFED. "27 Solutions to food waste." ReFED. Accessed January 10, 2019. <https://www.refed.com/?sort=economic-value-per-ton>.

³ United Nations Statistics Division. "Goal 2: End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture — SDG Indicators." <https://unstats.un.org/sdgs/report/2016/goal-02/>. Accessed December 30, 2018. <https://unstats.un.org/sdgs/report/2016/goal-02/>.

⁴ United Nations. "Sustainable Consumption and Production." <https://www.un.org/sustainabledevelopment/>. Accessed January 22, 2019. <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>.

⁵ EPA. "United States Food Loss and Waste 2030 Champions." US EPA. Last modified November 9, 2018. <https://www.epa.gov/sustainable-management-food/united-states-food-loss-and-waste-2030-champions>.

⁶ FDA. "Trump Administration Launches "Winning on Reducing Food Waste" Initiative." U S Food and Drug Administration. Last modified October 18, 2018. <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm623790.htm>.

⁷ Feeding America. "What Is Food Insecurity in America?" <https://hungerandhealth.feedingamerica.org/>. Accessed January 10, 2019. <https://hungerandhealth.feedingamerica.org/understand-food-insecurity/>.

⁸ Feeding America. "What Is Food Insecurity in America?" (n.d.).

⁹ Ibid

¹⁰ Ibid

¹¹ Feeding America. "Hispanic and Latino Hunger in America" <https://www.feedingamerica.org>. Accessed January 10, 2019. <https://www.feedingamerica.org/hunger-in-america/latino-hunger-facts>.

¹² Feeding America. "Hispanic and Latino Hunger in America". (n.d.)

¹³ FAO. Food Wastage Footprint. Impacts on Natural Resources. [www.fao.org](http://www.fao.org/docrep/018/i3347e/i3347e.pdf), 2013. <http://www.fao.org/docrep/018/i3347e/i3347e.pdf>.

¹⁴ TOMRA. "It is Time to End Food Waste." Last modified 2017.

¹⁵ Move for Hunger. 2016

¹⁶ Ibid

¹⁷ Ibid

¹⁸ TOMRA. 2017

¹⁹ Becker, Anthony. "Introduction to Environmental Policy." WordPress. Last modified November 12, 2013. <https://enviropolicyintro.wordpress.com/2013/04/26/reduce-reuse-recycle/>.

²⁰ Mehnert, Jaime. "Food Rescue and The Law." Table to Table. Last modified March 28, 2016.

<https://tabletotable.org/food-rescue-and-the-law/>.

²¹ Taylor, Joe. "What Licenses Do I Need to Start a Restaurant Business?" Chron.com. Last modified October 12, 2010. <https://smallbusiness.chron.com/licenses-need-start-restaurant-business-3039.html>.

²² FoodHandler. "ServSafe Training." <https://foodhandler.com>. Accessed February 10, 2019. <https://foodhandler.com/servsafe-training/>.

²³ Harvard Food Law and Policy Clinic. "Legal Fact Sheet: The Bill Emerson Good Samaritan Food Donation Act." <https://www.refed.com>. Accessed January 22, 2019. <https://www.refed.com/downloads/Emerson-Act-Legal-Fact-Sheet.pdf>.

²⁴ USDA- FNS. "Why CACFP Is Important." Food and Nutrition Service. Last modified September 22, 2014. <https://www.fns.usda.gov/cacfp/why-cacfp-important>.

²⁵ USDA. "The National School Lunch Program." Food and Nutrition Service. Last modified November 2017. <https://fns-prod.azureedge.net/sites/default/files/cn/NSLPFactSheet.pdf>.

²⁶ School Nutrition Association. "School Meal Trends & Stats." <https://schoolnutrition.org>. Accessed February 10, 2019. <https://schoolnutrition.org/AboutSchoolMeals/SchoolMealTrendsStats/>.