

Executive Summary

Assessing Opportunities for Agricultural Food Recovery and Conservation of Resources in California

Voices from the Field Project, Phase 2

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Executive summary

Studies indicate that significant quantities of edible food are lost at the farm level. Our research investigates existing and potential opportunities for recovering more of this food for human uses. Building on earlier research that investigated on-farm food loss from the perspective of California produce growers, we conducted 24 semi-structured interviews with individuals working within three recovery-related arenas—non-profit organizations within the emergency food system (referred to as “food banks”), private companies committed to reducing food loss and waste (“food loss companies”), and government institutions. The research is exploratory in nature, and interviews covered the following key topics: economic and market structures that shape recovery dynamics, logistical systems required, building and maintaining relationships with growers, and the opportunities and constraints faced in crafting food loss policies. Interviews were content coded to identify themes, challenges, and opportunities of interest to researchers, policy makers, and practitioners.

Economic structure of recovery

- Food is lost on farms because it exceeds current demand or falls outside buyer quality specifications, thus recovery markets are defined by their ability to accept both surplus and cosmetically “imperfect” produce. Recovery outlets have quality specifications unique to each institution, but all respondents emphasized having high food safety standards.
- Recovery outlets serve, and help to cultivate, alternative consumer bases with flexible expectations of product availability and wider acceptance of product variation. Shorter supply chains also allow them to accept food that is overripe for other markets.
- Some food is purely donated, but many outlets compensate growers for recovered food, ranging from covering additional harvesting and packing costs to offering 75% of market price. While all respondents agreed there is more produce to be recovered, some noted that there can be de facto competition among seconds markets and recovery outlets. An additional potential pitfall in structuring recovery markets is stimulating additional supply.
- In assessing the economic viability of market-based food recovery strategies, some respondents stressed the difficulty of “making the numbers work out,” while others saw expanding opportunities for “win-win” scenarios with positive environmental, social, and economic outcomes.

Logistics of recovery

- Logistical systems for recovery vary widely—by food product, by farm, and by recovery outlet—making it difficult to generalize. As more than one respondent stated: “If you’ve seen one food bank, you’ve seen one food bank.” For food loss companies, the specificity of recovery systems can be a business opportunity, as there can be value-added in identifying logistical innovations.
- Respondents distinguished between recovering field- and shed-packed produce, with the former presenting greater logistical challenges. Overall, commonly mentioned challenges include retraining labor to identify specific standards for a particular recovery market, configuring equipment to separate out recovered produce, and maintaining separate processes and schedules for recovered produce.
- Scale shapes both how and whether recovery works. Some recovery models function at a smaller scale, such as a rural food bank whose coordinator gleans produce from local farms. Others depend on economies of scale to make investments in logistical innovation and operation pay off, such as food loss companies that work with truckloads of produce. Fluctuating volumes can present an additional challenge for supply-driven recovery efforts.

- Most recovery outlets do some on-site sorting. Many respondents reported losing only 3-5% of produce received, though some food banks accept donations with 20-40% of unusable product. Respondents mentioned composting or animal feed as prevalent disposal options. Some food loss companies donate edible food that falls beyond their specs to food banks.

Building and maintaining recovery relationships

- Respondents had varying experiences with establishing collaborative relationships with growers around recovery. Most agreed that the best way to reach farmers is through personal connections, conducting outreach through networks of trusted partners. Some noted the need for persistence in reaching growers, and a couple of respondents experienced cultural barriers in gaining access to what they described as a “good ol’ boys” club.
- Strategies for “making the pitch” to farmers varied. Some emphasized the values dimension of the exchange, for example highlighting a food bank’s humanitarian mission. Others stressed business opportunities, such as more secure and consistent revenue flow throughout the season. Growers’ responses depended on whether they perceived the collaboration as logistically feasible and economically beneficial, but also on personal outlook.
- Once a partnership is established, effective communication with growers is required to ensure produce falls within quality specifications and respond to fluctuations in product availability. Some respondents found challenges around establishing efficient channels of communication, noting growers’ continued reliance on phone calls (instead of email or text).
- Respondents emphasized the need for mutual trust. While both sides value reliability and consistency, flexibility and accommodation are also needed to negotiate fluid situations.

The policy context of recovery

- The topic of food loss crosscuts various policy arenas and diverse constituencies, presenting both opportunities and challenges. Coalition building requires organizing groups that may have overlapping interest in reducing loss but with differing priorities. Within government, there is the challenge of coordinating across different programs and agencies.
- The government directly impacts recovery through tax incentives for donated produce, though (consistent with grower testimonies) respondents questioned the extent to which they influence grower behavior. Government programs that help growers develop and market new agricultural products—which, as one respondent noted, might just be seen as “business 101”—have been linked to food loss reduction goals. The government also indirectly impacts recovery through regulations, trade policies, and other actions that shift market dynamics.
- The government is a large purchaser of food, and some respondents have sought to promote recovery through government procurement, for example sourcing undersized produce for school meals. Inflexible purchasing processes present a challenge in expanding such efforts.
- Policymaking to reduce on-farm losses through expanded recovery aims to: improve farmer livelihood, reduce environmental impact, and feed hungry people. Yet there is no “silver bullet” solution to loss, and policymaking may involve tradeoffs among these goals.