



Perfectly Imperfect

Food waste at the farm level is a massive problem in the U.S. One company figured out how to rescue ugly (yet edible!) produce and put dollars in growers' pockets. By Marissa Conrad

Researchers at Santa Clara University recently published some bleak data about farming and food waste in California, where much of our country's produce is grown. Across 34 farms in the central and northern part of the state, more than a third of perfectly good crops were left to rot, often due to cosmetic imperfections. In romaine-heart fields, where workers discard the outer leaves to get to the plants' more attractive centers, more lettuce was left than taken. On one farm, for every acre of land more than 60,000 pounds of romaine were abandoned.

For years, data about farm-level food waste have been based on the growers' estimates. Yet this study, among the first to send researchers into fields, found that the amount of tossed produce was more than 2.5 times greater than the farmers' best guesses. All of this, of course, has serious environmental impacts. For example, the amount of water used to grow food that's never eaten each year in the U.S. is equal to the total used in California, Texas and Ohio combined, according to estimates from the food-waste prevention group ReFED.

Christine Moseley witnessed a romaine harvest back in 2015 and was horrified. But she also saw opportunity. Moseley had recently left her job as head of strategic projects and business development for a juice bar chain. She thought: A company like that could be buying and juicing the unwanted leaves, instead of the more expensive, "prettier" hearts. The end product—green juice—would look and taste the same. "But one company can't really provide enough demand to change the whole system," says Moseley. A better solution, she realized, would connect lots of buyers with lots of farms. She got to work on a business plan.

That business became Full Harvest, a digital marketplace for imperfect and surplus produce. Farmers post their wares—say, cartons of bent cucumbers or misshapen tomatoes that retailers like grocery stores won't buy because

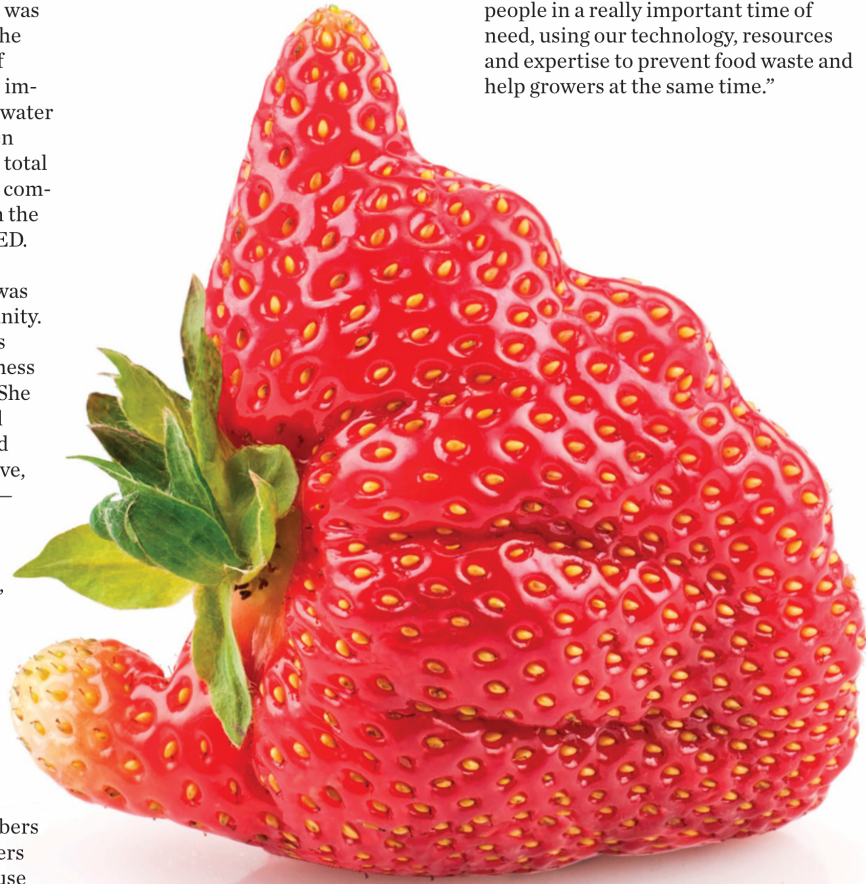
they don't meet cosmetic standards set by the USDA and industry leaders. High-volume purchasers, such as juice bars or packaged-snack producers, then browse and buy them at a discount, with Full Harvest getting a cut of the sales. Since it launched in 2016, the company has helped farms sell 28 million pounds of produce that likely would have been left to languish in fields, Moseley says.

Other consumer-facing companies, like Misfits Market, have since jumped on the ugly-produce bandwagon too. And while critics have questioned the motives of these businesses, arguing that "rescuing" produce is monetization masked as environmentalism, and in

some cases diverts fruits and vegetables from food banks, Dana Gunders, executive director of ReFED, has a more positive perspective. "There is so much imperfect produce out there at this point that it's not an either-or," she says of the flak about food-pantry donations. "In my opinion, these startups are all demonstrating that there is a higher tolerance in the marketplace for off-spec produce than the grocery stores have really given consumers credit for."

In 2019, the World Economic Forum named Full Harvest one of its annual Technology Pioneers, an honor given to tech companies poised to create lasting change. And in 2020, Moseley partnered with the Eat. Learn. Play. Foundation, Steph and Ayesha Curry's nonprofit, to help both farmers and food-insecure families impacted by the pandemic in Oakland, California, and New York City. At press time, they had purchased and distributed more than 100,000 boxes of produce.

"It's been a win-win-win," Moseley says. "We've been able to help out more people in a really important time of need, using our technology, resources and expertise to prevent food waste and help growers at the same time."



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