



Solving farm-level food waste
in developed countries

WBP

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01



Here's why farms are wasting **2 billion pounds** of food every year:



Market

It's difficult to predict **what the market will look like months in advance** when you plant, so farmers are heavily affected by unexpected market fluctuations. Farms also **overplant** every season to hedge against environmental risks. This leaves them with tonnes of unsold produce that they end up having to mow back down into the ground.



Labour

In US and Canada, farms face chronic labor shortages that prevent them from being able to even pick all of their harvest. This is especially a problem for fruit farms. In 2017, Canada's agriculture sector was short 16,500 workers, **which cost farmers \$2.9 billion in lost revenue**. This deficit is expected to reach 123,000 workers in 2029.



Weather

The environmental factors of open-field farming lead to heavy risks. In 2019, due to unconventional seasonal weather in Canada, farmers reported being **unable to harvest up to 50% of their crops** due to longer-than-expected wet or dry periods. However, the cost of switching to large-scale greenhouse agriculture is too high for many farms.



Market-related food loss and **COVID-19**

Due to the pandemic, farms have been dumping and plowing down up to 80% of their harvests, as compared to the usual 20%. **⅓ of small farmers saw a 51.3% average drop in revenue** over March and April compared to last year's figures.

The Counter

Who's getting hit the hardest?



Small, family-owned farms

Farms ranging anywhere from 50 to 300 acres and who primarily rely on farmers' markets for sales are taking a hit



Food-service industry farms

Due to the pandemic, farms that originally supplied wholesale to restaurants have nowhere to sell their food to anymore



Export-only farms

On a less pronounced level, farms that primarily grow for international exports are also suffering demand changes



D2C e-Commerce: The Opportunity for Farms

Due to the COVID-19 pandemic, stakeholders across the food supply chain are **turning back towards local ecosystems** due to international trade being disrupted. Farms are building relationships with regional packing houses, restaurants are ordering their ingredients directly from local farms, etc.

01

CSA (Community Support Agriculture) subscription boxes have seen jumps in **2x to even 4x** the amount of subscriptions in the past two months. Many farms had to hold waitlists. #stayathome is the perfect opportunity for farmers to **take more control** over the business channels they sell their produce through.

02

In March 2020, rideshare services have seen **a reduction of up to 20% in ride volume** in Southern California. By now, that number would have increased substantially - we can potentially provide these last-mile drivers with a new market opportunity by creating a delivery network for farmers.

03



Making FreshStop a reality

Some preliminary numbers to work with

01

6,000

Number of multi-culture commodity crop farms in California that already own CSAs

02

250

Average volume of subscriptions a CSA-owning farm is able to handle

03

3,500,000

Potential market size (in people) of households with over \$100K annual income in California

How the platform would work

Farms list their boxes

Farmers update the FreshStop platform with harvest estimates and picklists every couple of days and a stock of boxes is calculated, making them available for orders

User purchases a box

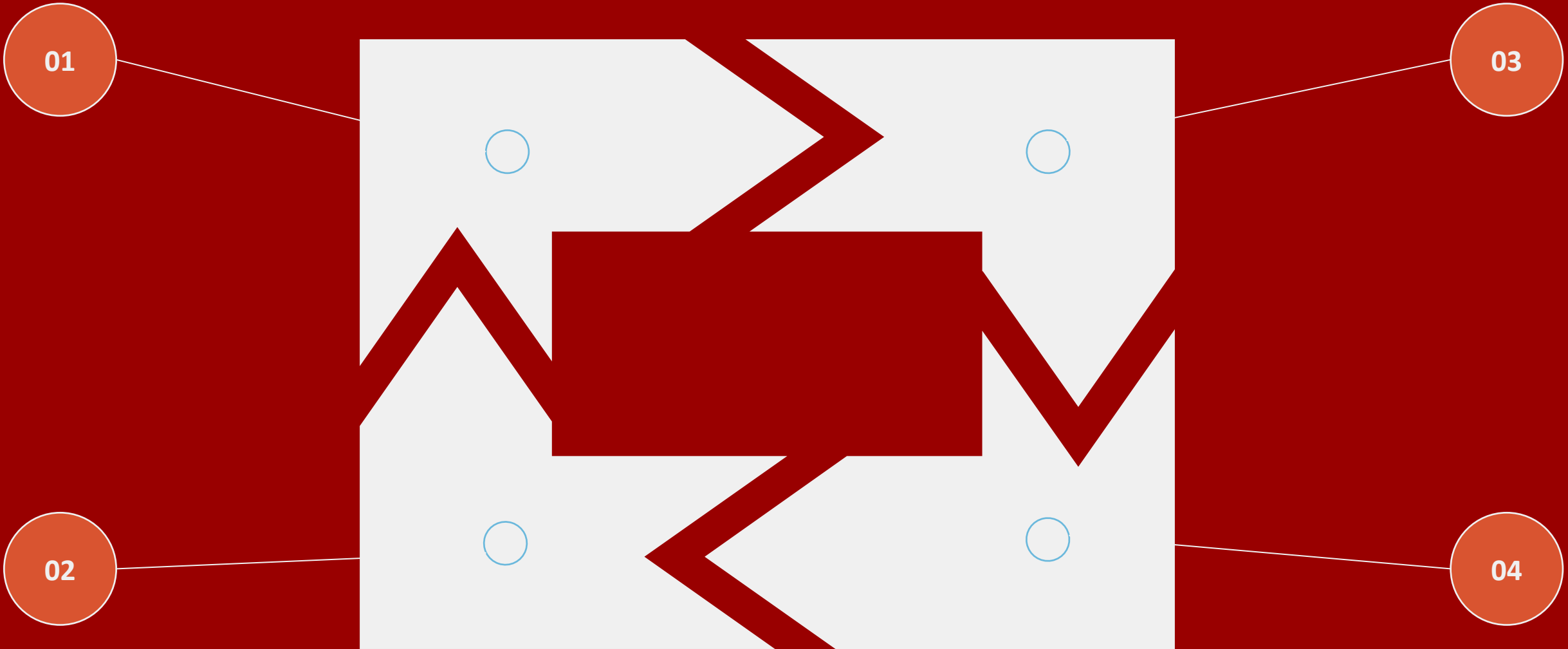
User chooses a box to purchase, inputs their address, and selects whether they'd like it to be a one-time purchase, a single-farm subscription, or a rotating subscription

Driver delivers the box

After the farm has harvested the produce and packed it for the user, a nearby rideshare driver will be recruited to pick up the box and deliver it

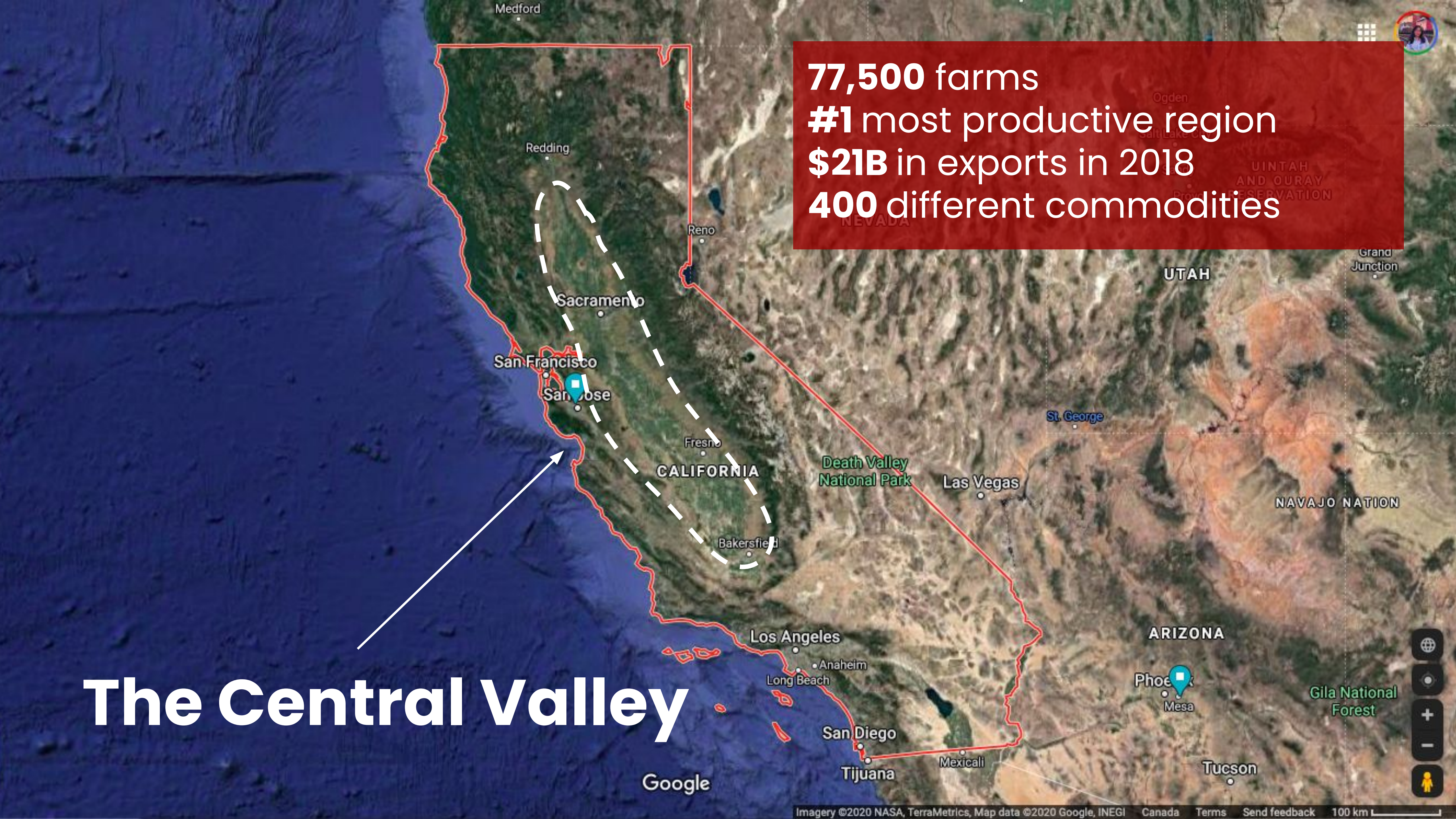
User receives the box

The user receives their box within the day or 2 days, gives the farmer a rating on the FreshStop platform



77,500 farms
#1 most productive region
\$21B in exports in 2018
400 different commodities

The Central Valley



IMPACT

1.25M

on average a farm can service 250 subscribers at any one time. that's a lowball estimate of **1.25M potential boxes delivered every week.**

450K

Uber has around 450K drivers in California. As of March 15th, Uber requests have declined by over 20% in California, and that number has likely increased as the months of social distancing have gone by.

3.9M

There's around 13M households in California, ~30% of which have ~100K household income, which means **~3.9M buyers of viable market to tap into in California**

1300

On average, farms have been up in subscriptions by at least 2x throughout COVID-19, most of them have quadrupled



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