insideGROWER

COVER STORY

10/30/2026

From Field to Controlled Environment

David Kuack

Nearly 60% of businesses that temporarily closed nationwide during the COVID-19 pandemic, which started in March 2020, never reopened, according to the Yelp Local Economic Impact Report. However, one Kentucky farming operation actually used the pandemic to take advantage of an increased demand for locally grown food crops. The Cornett family, which operates a 500-acre farm in London, Kentucky, saw an increase in demand from local consumers for its field-grown produce.

Brent Cornett began growing controlled environment vegetables when the COVID pandemic caused an increase in demand for local produce. Once he began producing controlled environment hydroponic lettuce, he stopped growing lettuce in the field because the crop is much cleaner and easier to grow in the greenhouse.

“Cornett Farm Fresh started because of COVID,” said Brent Cornett, who owns the farm with his wife Rhonda. “People were scared to go to the grocery store, so they started contacting us asking if we had produce for sale. We got with other local farmers who produced crops that we didn’t grow to supplement what we were producing. We set up a sales area in our barn to market the produce.

“Later that summer when things started to settle down, there was a building that came up for rent that was closer to town. We rented the building and began selling produce from that location and having good success.”

After three years they added a commercial kitchen along with adding some services. Since then, they remodeled a 15,000-sq. ft. building that has a full bakery and deli.

“It’s a full-line grocery store. We try to grow the majority of produce that is sold,” Brent said. “This is part of the reason we expanded into greenhouse production so that we could offer both earlier and later season crops to sell in the store.”

Adding controlled environment production

While the Cornett family produces a variety of outdoor and indoor food crops, tobacco was also a major crop until 2018. A greenhouse was used to produce tobacco transplants that were then grown on in the field. After tobacco was dropped, Brent grew hemp for a year, but said due to the large number of Kentucky growers who tried to get into the hemp market, he looked to expand production with indoor food crops.

“Our tobacco hoophouses measure 35-ft. wide by 100- or 150-ft. long,” he said. “These heated houses are covered with double layer plastic and equipped with side vents for ventilation. The houses had to be heated because tobacco transplants are seeded at the end of February or first of March.

“For tobacco transplants, it takes about eight weeks to go from seed to transplants that are ready to go into the field. We used these houses in the spring and the rest of the time they sat empty.”

When he decided to convert the tobacco houses to expand into indoor vegetable production, very little had to be done. The only addition that had to be made was to install an irrigation system.

Cornett Farm Fresh is a 15,000-sq. ft. retail store that markets both controlled environment and field-grown produce along with a variety of prepared foods, including fresh salads.

In addition to his own tobacco greenhouses, Brent obtained at no cost additional tobacco houses that other farmers were no longer using. He also purchased a used gutter-connected greenhouse from an ornamental plant grower.

“We dismantled the other tobacco houses and greenhouse and rebuilt them on our property,” he said. “We also rent several greenhouses from a nearby grower in which we produce all of our vegetable transplants that are planted in the field. Between the houses we rent and the ones we have on our farm, we have about 75,000 sq. ft. of greenhouse space.”

Choosing the crops to grow

Brent, who had experience growing in a greenhouse, said the transition from outdoor to indoor food crops was relatively easy. He chose to grow tomatoes, cucumbers and lettuce in the greenhouses because of customer demand.

The Cornett family operates about 75,000 sq. ft. of hoophouses and greenhouses to produce lettuce, cucumbers and tomatoes, which are the crops most in demand from local consumers.

“For the hydroponic lettuce, we produce in a 3,000-sq. ft. tobacco greenhouse. We literally didn’t have to do anything to the house,” he said. “We installed a

deep-water raft system to produce the lettuce. The lettuce that we produce year-round is used either in the meals we prepare in our store or it is sold fresh to consumers.

“All of our lettuce is now grown indoors. Once we started growing it hydroponically, we stopped growing lettuce outdoors because it is much cleaner and easier to grow in the greenhouse. What we produce indoors is about the right amount of lettuce for us to sell.”

During this summer’s cyclosporiasis outbreak linked to field-grown lettuce, Brent said they saw an increase in demand for controlled environment lettuce.

“Our deli makes pre-made salads and people were asking if the lettuce in our salads was what we grow or did we buy it in,” he said. “We had customers tell us they wouldn’t buy the salads if the lettuce wasn’t grown on our farm.”

Brent uses the majority of greenhouse space for the production of tomatoes.

“I have a friend who was involved with greenhouse and field tomato production, who I was able to work with to design a production system,” he said. “That was the biggest reason I started producing greenhouse tomatoes. We also employ a lot of H-2A labor and one of our workers had a cousin in Mexico who produced greenhouse tomatoes. He knew a lot about growing tomatoes indoors. It was a collaborative effort.”

For the tomatoes grown in the converted tobacco greenhouses, Brent totally changed the floor plan.

“The tobacco transplants were grown hydroponically in water beds,” he said. “We removed the beds used for tobacco and laid fabric on the floor and installed drip lines and injectors for the tomatoes. The used gutter-connect greenhouse that we purchased and rebuilt on the farm is strictly used for hydroponic tomato production.”

The majority of the indoor food crops are sold direct to consumers through the Cornett Farm Fresh retail store. On the rare occasion that there are any excess indoor crops, they’re sold at other farm markets throughout the state.

Making the transition from outdoor to indoor

Brent said marketing the greenhouse crops has been fairly easy because they’re available out of season, enabling him to offer the first crops to market.

The majority of greenhouse space is used for the production of hydroponic tomatoes, including a gutter-connect greenhouse that was purchased from another grower and rebuilt on the Cornett farm.

“Everyone is eager for that local produce,” he said. “Even though it’s from a greenhouse, consumers still consider it to be local and fresher than produce shipped in from Florida or Mexico.”

Brent advises growers considering growing controlled environment crops to make sure they have a market for their produce before building or renting a structure.

“Also, growers don’t need to spend a lot of money to get started,” he said. “I literally used what I had and virtually put no money into starting to grow indoors. The old tobacco greenhouses I got from other farmers, they were glad to get rid of them. I took the frames and heaters and rebuilt them, installing an electrical system and covering them with double poly. I was able to put up these hoophouses for very little money.

“Growers don’t need to spend a lot to get started, especially if they don’t have a lot of experience growing in a greenhouse or are unfamiliar with marketing the crops.” **IG**

David Kuack is a freelance technical writer in Fort Worth, Texas; email him at dkuack@gmail.com.