## SUSTAINABILITY

## Redefining 'Farm to Table'

The Mexican designer Fernando Laposse turns agricultural crops into furniture, and everyone wins, including the bats.

## By RAY MARK RINALDI

MEXICO CITY — Many people look at avocados and see guacamole. An agave plant is little more than a future shot of tequila, a corn stalk the raw material for a warm tortilla.

But the Mexican designer Fernando Laposse engineers those things into the stuff of luxury furniture. Corn husks and avocado skins are diced, pressed and turned into veneers that serve as textured tabletops and wall paneling. Agave leaves are shredded into furry fibers that transform sofas and benches into playful, zoomorphic objects that invite comfy sitting — and maybe a little petting.

Mr. Laposse develops these products with a specific aim in mind: creating new markets for small-scale farmers in rural areas of the country whose operations have been squeezed out by agribusiness. Family farms are disappearing in Mexico and local economies are suffering, he said, and people in his profession can offer creative solutions to counter that.

"The philosophy of what I do in the studio is work directly with farmers, and with this environment, and find a way that design can be the motor for something else," he said.

Mr. Laposse, who lives in Mexico City and has a degree in design from Central Saint Martins college in London, came to this conclusion rather suddenly a decade ago, he said. He was experimenting with the corn husk idea during an artist residency in Oaxaca and wanted to work with the best varieties grown in Mexico.

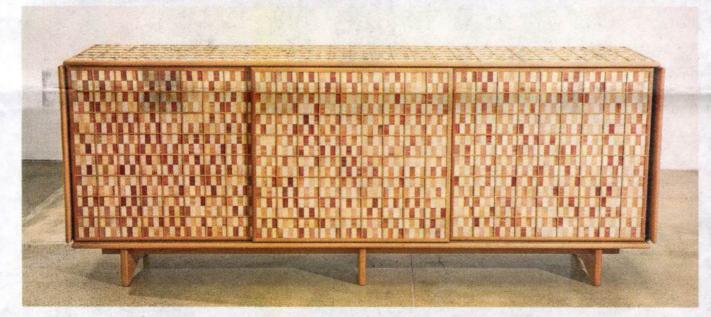
He knew just where to find them: Santo Domingo Tonahuixtla, a remote village located in the rolling hills of the southern state of Puebla.

state of Puebla.

Growing up in the '90s, Mr. Laposse spent long vacations in Tonahuixtla and he held fond memories of those times, working, playing, chasing insects and hunting rabbits in abundant fields of heirloom corn that were cultivated by a thriving community of Indigenous Mixtec farmers. Their crops grew tall — in shades of creamy yellow, brick red and pinkish brown — until they were harvested and sent to market. "I would go there every year as a child," he said. "It was my summer camp."



PHOTOGRAPHS BY ANGIE SMITH FOR THE NEW YORK



'I really see this as a proper collaboration now, a 50-50 thing.'

But a return trip to Tonahuixtla, in 2015, showed him how much things had changed. Many corn producers were out of business, the result of government and global trade policies that favored factory farms in the north. Entire families had left the area, many migrating to the United States. "It was a ghost town," he said. "It was devastating to see just how empty the whole place was."

He made a quick decision that changed the course of his career. He would turn his fledgling design idea into a business that provided work for the farmers that remained. "I realized I needed to create a whole new system for them," he said. "A sort of micro-economy that no longer existed there."

Totomoxtle, as the veneer is commercially named, was the first of several agricultural-based products he has gone on to develop and sell internationally, often through the Manhattan gallery Friedman Benda.

Mr. Laposse mainly works out of a small manufacturing facility he opened last November in Guerrero, a downtown Mexico City neighborhood known for its mix of working-class apartment buildings and light industrial shops.

He has about 10 full-time employees who fabricate the company's products with traditional tools, like mallets and table saws, but also high-tech lasers that cut husks into pieces, which are lined up and attached to a paper backing — similar to the process used for more common wood veneers.

Another facility is in Tonahuixtla, where a handful of families maintains their fields.

Mr. Laposse keeps his production volume low so that the farmers can pursue the traditional *milpa* farming method — growing corn, beans and squash alongside one another — which organically preserves nitrogen in the soil, maintaining its fertility long-term

"You have to allow the farmers to take their time to do it like they have always been doing it," he said.

The farmers also help produce the veneer panels in off-seasons, and more recently, they have been cultivating new strains of corn in unique shades, leading to new editions of Totomoxtle.

"I really see this as a proper collaboration now, a 50-50 thing," Mr. Laposse said. "I can bring the design skills but I don't know how to cross-pollinate two plants."

His work with agave is also rooted in land management.





Soil erosion has become an increasing problem in Mexico over the past two decades, as agrochemicals have replaced the milpa farming methods, depleting nutrients and leaving the dirt dry and rocky and vulnerable to being washed away by wind and rain. Farmers have taken to planting crops of sturdy agave on hillsides and along

trenches as a way of holding soil in place.

But maximizing profits from agave generally requires it to be cut down just as it matures, and right before it would flower—at the point when its sugar content is the highest—so the leaves can be sold to producers of Mexico's signature liquors. The plants have a one-time use and are



Clockwise from top: the Mexican designer Fernando Laposse, who takes natural materials and upcycles them into furnishings and wall coverings, in his showroom in Mexico City; Laposse at work on a dry bar for a private commission called Hair of the Dog, made of knotted sisal fibers; a tabletop made using Totomoxtle, a modular system of tiles; a furry armchair made of leather and woven and dyed agave fibers; and a credenza made from native corns that are cross-pollinated to create colors.

eventually destroyed, undercutting their role as land stabilizers.

In contrast, the hairy, white fibers used for Mr. Laposse's furniture pieces are harvested throughout the plant's lifetime, gently scraped from its leaves. The plants are allowed to flourish, and even to blossom, while continuing to provide a source of income for the farmers.

He estimated that famers in Tonahuixtl have seeded 15,000 agave plants since he began working with them, selling him plenty of stock for the furniture pieces, including his popular "dog benches" which come in both natural colors and pink, the result of soaking the fibers in organic cochineal dyes.

And, in what he describes as "a noncalculated positive outcome," the agave blooms have drawn scores of bats to the area that feed off their pollen. The bats also happen to consume local insects that can infest the nearby corn crops.

For his latest project, converting avocado skins into marquetry, Mr. Laposse does not oversee farming. Instead, he acquires the skins from guacamole factories that would otherwise dump them in landfills. The technique he invented to make the avocado "leather," as it is marketed, starts with fresh skins that are slowly dried, cut and finished off in his Guerrero facility.

"Each piece takes about four months with three people here working on it ever day, eight hours a day," he said.

Making labor-intensive objects means Mr. Laposse must keep his production capacity modest, and he said he is fine with that. He never envisioned expanding his business beyond the point where each project supports more than a handful of farming families. He is, after all, a designer not an industrial baron.

But he does think his practice of using design to solve social problems could be adopted by peers looking to do their own meaningful work.

"We are creating methodologies that can be taught and applied to other local challenges, in different communities," he said. "Rather than offering a series of answers, maybe we create a manual of questions that you need to ask when you go and start a project like this."

Mario Ballesteros, one of Mexico's top design curators, said that community-level effort was what sets Mr. Laposse apart from other designers in the country. He makes desirable objects, but he also raises awareness of social and economic issues.

"His narrative is so strong, and it is such an important part of what he does," Mr. Ballesteros said. "He has the ability to tell very approachable stories through his

That requires both diligent research and a commitment that must be sustained over the long haul, as Mr. Laposse is doing in Tonahuixtla.

"In Mexico, many designers are really just trying to figure out what the next trend is or what they want to show at the next design week," Mr. Ballesteros said. "Fer-

nando, from his start, broke with that."

Mr. Laposse said his projects were long term, whether he liked it or not. If the production of chairs and tables starts, as his does, with planting seeds in a field, it takes years to reap the benefits of one's work.

Designers, he said, are always asked about their next project; it is the nature of their fast-paced business. He never quite knows how to answer.

"I hate that question. Because what I'm doing next is this," he said. "I'm doing this forever"