In the backyard of a suburban house in Kaduna, northern Nigeria, two dozen women watch keenly as a trainer takes them through the steps of processing tomatoes using a semi-automatic crusher. He speaks loudly so as to be heard above the din of the small generator powering the machine. Tomatoes, chillies and onion are cleaned in a large basin using water from a tap in the yard, then poured into one end of the processor, emerging as a rich, red sauce on the other.

“We have a modern processing kitchen inside the house, but because we have no power today, we are using the semi-automatic processor for training,” explains Ogola Lois Kange. She is the proprietor of Smiley’z Mobile Kitchen, a cottage processing company that produces tomato paste and tomato-based sauces. The business started off in 2014 as a mobile catering kitchen but in 2018, the proprietor took part in a food collection challenge that motivated her to find ways to reduce post-harvest loss.

“Since I was already processing tomatoes for the catering business, I already knew what their demand was. I therefore decided to commercialize the operation so that I could procure more tomatoes from farmers,” says Ogola. “I got a small grant from a Dutch company to rent this space and to buy an electric steamer, an autoclave, grinders and jars. Once I had

Ogola Lois Kange processes 12.5 metric tonnes of tomatoes at Smiley’s Kitchen every month. With additional funding, she will be able to increase her output and absorb more tomatoes from farmers, thus reducing post-harvest losses.
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“Since I was already processing tomatoes for the catering business, I already knew what their demand was. I therefore decided to commercialize the operation so that I could procure more tomatoes from farmers,” says Ogola. “I got a small grant from a Dutch company to rent this space and to buy an electric steamer, an autoclave, grinders and jars. Once I had installed the commercial kitchen, I needed a steady source of tomatoes, so I was planning to go out and meet farmers, train them on production of quality tomatoes, and establish a supply system with them.” It was at this point that she encountered YieldWise through TechnoServe, which was working on Rockefeller Foundation’s YieldWise Project to reduce post-harvest loss in the tomato value chain in Nigeria. TechnoServe linked Ogola up with farmers’ groups that they had trained on modern production practices and which could supply the quality and quantity of tomatoes she needed.

“This arrangement helped me greatly. I was able to work with farmers who were producing tomatoes in a sustainable way, which meant that I had a reliable source, while the farmers would have a ready market for their produce at a good price, even when the market was poor,” says Ogola.

Rather than the raffia baskets that are popularly used in the country, the farmers transport tomatoes to Smiley’z in crates, minimizing chances of brushing and crushing. The plant processes 12.5 metric tons of tomatoes per month, resulting in between 100 to 150 jars of tomato sauce or pepper sauce daily. With plans to increase capacity to 20 metric tons, Ogola has plans to expand her facility, by purchasing a larger autoclave that can sterilize up to 168 jars every couple of hours. She also plans to buy a powerful generator so that the kitchen can keep running even when there is a power outage.

Smiley’z products are mainly tomato sauce, pepper sauce and tatashe sauce (made with bell peppers), which are all tomato-based. The tomatoes she uses are of the same quality as those used by large processors since the farmers’ groups she works with use improved seed varieties, which are fleshier and firmer than traditional ones. Considering that most people prefer to buy fresh tomatoes from the market for domestic use, Ogola targets to sell her products when there is a shortage and prices are high. The boiled-down content and cost of a 500g jar of her tomato sauce is the same as a small bucket of tomatoes on the market, giving Smiley’z a truly competitive edge. Her major customer so far has been a boarding school, but she plans to expand to hotels, restaurants and caterers. “Anyone that does large-scale cooking needs our products.”

Recently widowed, Ogola is able to cater for her family with proceeds from the business, and from her job as a university lecturer in English and Literature. But her biggest source of satisfaction is the fact that she is able to work with and empower other women. She is keen to train women in business skills and of her nine employees, eight are women. “The fact that I am employing people and giving them a source of livelihood gives me great joy. My happiness also comes from supporting the farmers because by buying their tomatoes, I am making a contribution to reducing post-harvest loss.”

**Ogola Lois Kange with some of her workers. The majority of employees at Smiley’s Kitchen are women.**

Rockefeller Foundation’s YieldWise initiative was launched in 2016 with the goal of reducing post-harvest loss in select countries and value chains by up to 50 percent. More than 40 percent of fruits and vegetables in developing regions spoil before they can be consumed.

Using a multi-pronged strategy, YieldWise sought to improve millions of rural lives by increasing incomes, increasing the availability of food and protecting finite environmental resources.

The initiative targeted tomato and cassava production in Nigeria, mangoes in Kenya and maize in Tanzania.

YieldWise Initiative in the tomato value chain in Nigeria is implemented by TechnoServe and Pyxera Global.