

WeFarm farmer

#NT100IS5: WEFARM

Celebrating 5 years of NT100

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SHARING LIFE CHANGING SOLUTIONS TO FARMING CHALLENGES

By Cafédirect Producers' Foundation

Project URL: <https://wefarm.org/>

Project Twitter: [@we_farm](#)

Organisation URL: producersfoundation.org

Organisation Twitter: [@TheCPFoundation](#)

To celebrate five years of NT100 we've revisited WeFarm to understand what's helped the initiative grow, since it featured in our 2014 NT100.

Clara, a smallholder farmer in Kaptumo, a Kenyan village close to Lake Victoria, was in for a surprise when she went to milk her two cows early one morning. One of the cows was struggling to stand up.

A single mother of five, Clara depended on milk from her cows for income, just as the local market depended on Clara for milk. As days went by and the cow wasn't getting any better, Clara grew anxious. She thought about contacting a roaming bovine insemination official, but found it hard to get hold of him. Instead, she sent a free SMS to a farming community called WeFarm, describing her problem and asking for help.

A few minutes later she received a reply. Another WeFarm member, perhaps from a few miles away or on a different continent, had exactly the same problem, and suggested that Clara's cow was suffering from a mineral deficiency. He recommended a feed rich in calcium and phosphorus to solve the problem. A second farmer messaged Clara to explain how to grow hydroponic fodder, a cheaper alternative to mineral-enriched cow feed.

Within days, Clara's crisis was averted. She was feeding her cows new food richer in minerals and growing hydroponic fodder. She is now a proud owner of two healthy cows, and a more experienced farmer.

Clara is one of an estimated 500 million smallholder and family farmers that

produce the majority of the world's food supply. Together, they operate 87% of agricultural land worldwide, and produce 80% of the food consumed in Asia and sub-Saharan Africa, according to the Food and Agriculture Organization of the United Nations and the International Fund for Agricultural Development, respectively.

This crucial part of the global food supply chain is often subject to disruption, such as adverse weather and blights, affecting local as well as global food resources. While problems can be hard to avoid, knowledge shared among farmers can help manage them.

Unfortunately, up to 90% of the world's small-scale farmers don't have access to the internet, or good infrastructure that allows them to travel easily. As WeFarm founder and CEO Kenny Ewan explained in a recent Forbes article, "what you'll find is that a farmer will have an answer to a soil erosion problem and he or she will tell his neighbours. But the solution won't be available to someone living even ten miles down the road."

Even worse, when farmers are given information, it's often handed top down from NGOs, without real engagement or understanding of everyday problems on the ground. The information is then mainly ignored.

Ewan experienced this first hand, when working for a non-profit in Peru. Frustrated by the approach of most NGOs, he wanted to do something better for the local population. He began talking to farmers and learned that free communication through mobile phones was far more useful than information available online or through an app. Statistics support his findings. The International Telecommunication Union estimates that while 3.2 billion have access to the internet in 2017, 6 billion have access to a mobile phone.

Ewan initially set up a small-scale pilot project while working for Cafédirect Producers' Foundation (CPF), a UK-based charity that works with coffee, tea, and cocoa farmers across Africa and Latin America. He developed a platform that connected farmers through SMS texts routed through an online machine-learning platform so that questions were matched to relevant answers, without farmers needing access to the internet. As WeFarm says, it's "an internet for people without internet."

The pilot was developed between 2009 and 2012 in Kenya, Tanzania and Peru, thanks to a grant from Nominet Trust, and re-launched in 2014 with funding from the Knight Foundation. Later that year WeFarm won Google's Impact Challenge and the £500,000 prize that comes with it, and in 2015, spun out into its current form – a limited company based in the UK.

The technology behind WeFarm is as simple as it is clever. A farmer sends an SMS to a free local number. The SMS is archived and posted on WeFarm's online platform, where a machine-learning algorithm scans it for content and matches it to a number of farmers based on their location and expertise. If a difference in language is found, the SMS is translated with the help of volunteers, currently covering English, French, Spanish and Swahili. Recipient farmers can

then respond to the SMS by sending a text to their own local number, which is then routed back to the original sender.

Translation enables a farmer in Peru, for example, to give and receive advice from a farmer in Kenya, and the online platform that routes and archives all messages means that WeFarm can aggregate data, spot patterns and contribute knowledge not just to farmers but also to local companies, government bodies and NGOs.

Positive stories about WeFarm from its users abound, and it has also proven to be a great motivator, encouraging more people to start farming, or expand into new areas. Two women at a Youth Education and Sports Center in Uganda used WeFarm to teach a whole community of women and girls how to farm. They had never thought of venturing into agriculture until a WeFarm ambassador stopped by. The Center now has vegetable gardens, and has sold over 100kg of maize to a buyer they found through WeFarm as well. They now teach their students and girls in the community how to establish their own vegetable gardens and sell their produce.

While there are a number of farming platforms, like mFarm and iCow, both in Africa, it's WeFarm that seems to be scaling on a global level. So far, over 440,000 farmers have registered, and almost 50 million text messages have been shared in Peru, Uganda and Kenya, where the service is marketed through a mix of radio content and on-the-ground ambassadors.

Ewan says WeFarm is currently averaging 2,500 farmer registrations a day, and 3.5–4 million SMS texts a month. He estimates that about 5% of farmers in Kenya and Uganda currently use WeFarm, and that the company is on track to have half a million users by the end of the year. The next goal is to reach 1 million users mainly across East Africa, while retaining WeFarm's 'farmer first' philosophy and always keeping the service free to use.

Ewan attributes WeFarm's success to two key factors. First, he highlights the "power of the crowd", and the focus on the farmers using the service. "We can generate something that people want to be engaged with," he says. "We're often asking the farmer to share their expertise about growing carrots for the first time, [so] they feel like it's their thing. We've built something that people are proud of."

Second, he stresses the importance of structuring WeFarm as a commercial enterprise with a sustainable business model, rather than relying on charity grants beyond its pilot project stage. "We want to build a really global product, and it's very difficult to do that as a charity," says Ewan. "It's very hard to build a functioning marketplace if you only have a thousand people using it. Our goal is for five million farmers in a country."

The company has so far raised \$1.6 million from external investors including LocalGlobe (who also invested in BuffaloGrid, Citymapper, TweetDeck and Zoopla) in a seed round in 2016, and is currently aiming to raise an additional £4.5 million in 2017.

The company's business model is structured around sales commissions and data. Ewan estimates that 3% of all content on WeFarm comes from farmers

looking to buy and sell products, whether among themselves or from a reputable third party. This is particularly challenging in Africa, where 'fake' agricultural products like seeds or fertiliser are often marketed at unsuspected farmers. WeFarm aims to facilitate agricultural supply sales, providing access to quality, good-value products and taking a cut from each transaction.

The data that WeFarm aggregates could be a huge mine of insight, with both commercial and humanitarian applications. Most interestingly, WeFarm's data can help the company identify a blight, weather irregularity or livestock disease much faster than governments, NGOs or traders, "potentially weeks before it would normally have come to light," according to Ewan. Sharing this data with the government, as well as commercial clients could significantly help to manage global food supply chains.

Ewan admits that working out how to balance the ethics of releasing this data next to the company's business model is a work in progress. His aim is to develop long-term relationships with both commercial and non-profit partners that sign up to have access to WeFarm's data on a continuous basis. "Things like forecasting, mapping, disease patterns are both commercially and socially valuable," says Ewan.

Time will tell how WeFarm will adapt as it scales, and as farmers' access to the internet improves. One thing's for sure: Ewan sees greater access to the web as an opportunity, citing Netflix, who started with mail-order, as an inspiration. "Netflix were able to turn that trust into an online platform that people still turned to. Our goal is to do the same," he says.

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