Cultivating New Frontiers

2021 ANNUAL REPORT

ESTHER NYIRAHARERIMANA FROM KARONGI, RWANDA.
Greetings from One Acre Fund. I am happy to share our 2021 Annual Report, which takes stock of our work in helping smallholder farmers to achieve sustained prosperity for their families.

At the beginning of 2021, we embarked on program improvements to put us on track to double our impact by 2025 — with only a slight increase in donor funding — and help 10 million farmers become more prosperous by 2030. We challenged ourselves to strengthen our services for farmers and to strengthen our team by investing in diversity, equity and inclusion. We’ve laid an important foundation for the next chapter of One Acre Fund.

Farmers’ needs are changing, and we are changing with them. We are making it easier for farmers to access our products and training with convenient shops and digital access. We are offering new commercial crops like macadamia, avocado, and coffee; better access to markets; and an expanded agroforestry program. We have exciting pilots that give farmers access to carbon credit markets, encouraging tree planting and supporting the environment.

We have also made important changes in the daily staff experience of diversity, equity, and inclusion at One Acre Fund. Our senior management teams and top leadership bodies increasingly reflect the diverse identities of our staff, with a balanced representation of genders and a mix of nationalities. We now openly publish our demographic data in our annual People and DEI Report. To increase equity, we also began a comprehensive redesign of our pay, benefits and performance management systems, which is rolling out in 2022.

Our commitment to double farmer impact was — and remains — an audacious goal, but we are well on our way. I am grateful for your continued support of our teams and the farmers we serve. Thank you.

Farmers First,

ANDREW YOUN
Executive Director, One Acre Fund
2021 HIGHLIGHTS

In a second straight year filled with challenges and uncertainty due to COVID, climate change, and inflation, we prioritized adaptation and innovation in supporting our clients to develop additional, diverse pathways to increased food security and better livelihoods.

Org-wide Milestones

As of the close of 2021, we are now reaching more than 3 million unique farmers for the first time (across our full-service program and country-scale partnerships). We have now supported farmers in planting over 100+ million cumulative trees.*

Upgrading Digital Infrastructure

Our web hosting, tech deployment, and call centers are now cloud-based, delivering more stable and secure services for customers. Our warehouse management, distribution tools, client ID verification, and partner shops are now fully digital.

Progress on our DEI Commitments

We made strong progress on diversity, equity and inclusion (DEI) in 2021, with African nationals comprising 90% of management-level hires and 50% of our global leadership group. We also published an annual People and DEI Report to increase transparency, and established a new mediation and reporting mechanism.

Agroforestry and Carbon

We expanded agroforestry programs to build farmer resilience against rural poverty and climate change. We are also exploring carbon credit programs that link farmers to global carbon markets to incentivize tree planting and environmental stewardship.

A Strong Nigeria Pilot

We exceeded enrollment targets and retained high-impact growth in our full-service program, with an average farmer impact of $200+ and a repayment rate of 95%+. We are now branching out into agroforestry, yam seed multiplication, and rural retail as we lay the groundwork for future expansion.

Burundi Program Expansion

We reached an agreement with the Burundian government that enables us to expand our program for the first time in years. We also increased the average impact per farmer to $110+ due to greater focus on maize planting compliance.

* This figure refers to trees planted, the standard metric used by peer agroforestry initiatives. We estimate that of 136.6 million trees planted between 2012 and 2021, about 57% have survived or will survive to maturity, so this represents about 78 million cumulative mature trees.
SCALE AND SUSTAINABILITY

After 15 years of operation, we’ve expanded to serve rural communities in nine different countries (the seven below, as well as pilots in Nigeria and Ethiopia). Our clients’ needs have evolved during that time. Farmers now need the flexibility to access our services and to buy farm supplies throughout the year, not just at the main planting season. In addition to staples like maize and beans, they want to farm more profitable commercial crops to sell and improve their incomes and livelihoods. They want to invest in assets like trees, which grow in value over time. By continually listening to farmer feedback, we can more effectively design our offerings.

Indeed, to achieve our goal of doubling the impact we generate on roughly the same resource base we have today, we must tailor our crop offerings and delivery models to respond to each market we serve. We’re rolling out new products and services to create more impact and value for farmers, to give farmers more options about when they can sign up and which products and services they choose to buy. We are piloting valuable commercial crops, like avocado, macadamia and coffee, to increase farmers’ access to export markets and unlock higher profits. We’re also creating new channels to increase farmer access to services, products and training, like scaling retail shops and enhancing digital services to enable farmers to access important information virtually, on the go.

We are ushering in a healthier financial future through responsive innovation and strong implementation to create meaningful, lasting livelihood changes.

1,441,000
Total Farmers Served

73%
Financial Sustainability

92%
Farmer Repayment

KENYA

527,600

Scaled Duka Program
Opened 80 new retail shops (Dukas) in 2021, taking our products and services closer to the farmer.

Commercialization
Increased farmer participation in agricultural trade through market access programs for macadamia and avocado. By giving farmers access to an assured market for their produce, we provide access to additional income streams.

RWANDA

631,800

Seed Production
Solidified our position as one of the leading seed providers in Rwanda, processing 2,100 metric tons of maize seed. Our partnership with API and Western Seed Company now meets half of the country’s demand for hybrid maize seed.

Market Access
Helped farmers sell 2,300 tons of maize, 37,700 chickens, and 10 tons of avocado under our product buy-back program.
Trees Planting
Partnered with the government to expand local tree planting by offering free agroforestry seedlings.

Diversified our Crop Mix
Leveraged new channels such as retail and cooperative outreach to diversify our crop offerings, including legumes such as groundnuts, soybeans, and beans.

Pivot Towards Cash Crops
In response to farmer feedback and market conditions, we shifted focus to coffee and trees in line with our vision to offer more value and impact for farmers on a smaller budget.

Scaled partnerships and commercialization
12,400 farmers planted 346,000 trees in the first year of our Ugandan tree program, of which we expect about 121,000 to survive to maturity.

Retail Shop Expansion
Piloted 28 retail shops, expanding access to inputs for farmers, especially those from remote areas.

Strong Repayment
Achieved 97% repayment due to strong farmer engagement.

Regained Service Fees
Reached an agreement with the Burundian government to expand our program for the first time in years.

Strong Service Delivery
Drove up efficiency by moving to 340 clients per field officer while marking eight consecutive years of at least 99.9% repayment.

Trees and Agroforestry
Following a final year of standard operations, in late 2021 we pivoted to a purely agroforestry program, establishing 48 decentralized nurseries.

Carbon Credits
Launched partnership with Acorn to pilot carbon credits, signing up over 200 farmers into the inaugural program.

ZAMBIA

- 14,300

- Trees and Agroforestry
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- Carbon Credits
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TANZANIA

- 55,200

- Retail Shop Expansion
  Piloted 28 retail shops, expanding access to inputs for farmers, especially those from remote areas.

- Strong Repayment
  Achieved 97% repayment due to strong farmer engagement.

MALAWI

- 62,100

- Tree Planting
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UGANDA

- 12,800

- Pivot Towards Cash Crops
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- Scaled partnerships and commercialization
  12,400 farmers planted 346,000 trees in the first year of our Ugandan tree program, of which we expect about 121,000 to survive to maturity.
One Acre Fund dedicates itself to making Africa’s smallholder farmers more productive and resilient. In 2021, farmers faced considerable challenges, from COVID-related disruptions in receiving farm inputs and sporadic farm output market closures, to erratic weather and pests in certain regions.

**IMPACT**

One Acre Fund dedicates itself to making Africa’s smallholder farmers more productive and resilient. In 2021, farmers faced considerable challenges, from COVID-related disruptions in receiving farm inputs and sporadic farm output market closures, to erratic weather and pests in certain regions.

<table>
<thead>
<tr>
<th>Source of Farmer Income</th>
<th>Additional Farmer Profit</th>
<th>Growth in Farmer Profit</th>
<th>Social Return on Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$80</strong> Annual Impact (value of crop harvests)</td>
<td><strong>$104</strong></td>
<td><strong>$232</strong></td>
<td><strong>$336</strong></td>
</tr>
<tr>
<td><strong>$24</strong> Asset Impact (net present value of assets like solar and trees)</td>
<td></td>
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</tbody>
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*For every $1 invested, the farmer produced $3.60 in extra income.*
Over the years, our rigorous impact assessments have consistently shown that farmers working with One Acre Fund improve their bottom-line profits by at least 40%, even after repaying program fees and controlling for what they would have earned without participating in the program. We are happy to report that in 2021, farmers who participated in our full-service program generated $104 in additional profit, representing a 45% increase in income on activities supported by One Acre Fund. Across the 1.4 million families reached, this represents $150 million of impact.

This result is an improvement from 2020, when we posted $81 in additional profit per farmer, representing a 33% increase in profit on supported activities. Relative to the donor resources required to provide our services — or what we call Social Return on Investment — the farmer produced $3.60 in new income and assets for every $1 donated, representing strong impact efficiency for the poverty levels of the farm families we reach.

Our work also generated a spillover impact of $4.9 million. We define spillover impact as additional farm profits accruing to nonparticipating farmers who have close networks with One Acre Fund clients, and who learn from our clients through informal interactions.

In addition to our full-service program, One Acre Fund delivers “systems change” interventions in partnership with public or private sector actors, targeting all farmers in a particular region or country. These programs range from setting up rural retail shops that serve farmers year-round to distributing trees in entire regions or countries to market access interventions for commercial crops. In 2021, these programs generated $60.6 million in new farm profits for 1.8 million unique farmers beyond our full-service program.

**BIG HARVESTS**

In 2021, One Acre Fund clients increased their maize harvests by 18% on average compared to nonparticipating farmers. The improvements differ across countries — ranging from 117% in Uganda to 12% in Rwanda — depending on weather patterns, soil conditions, and baseline yield conditions.

Access to high-quality inputs is a major driver for yield improvements. We consistently promote planting best practices to improve yields. In 2021, we ran behavior change campaigns in Burundi that led to big improvements in farmers’ adoption of good agricultural practices. As a result, we achieved a 15% increase in farmers practicing proper seed spacing, significantly increasing maize harvests per acre.

We now offer tailored site-level or farm-level recommendations to farmers on optimal seed choice — for example, switching to a seed best suited to particular farm conditions can generate significant yield improvements. We have also begun to provide weather-based advisory services to prompt timely planting. Over the coming seasons, we plan to further refine our planting timing recommendations and offer more up-to-date training to our field staff and farmers.
We increased access to improved farm inputs and post-harvest services for higher-value commercial crops with the potential to generate significantly higher impact per acre of farmed land. Across our country programs, we have identified context-appropriate crops such as avocado, macadamia, coffee, and sunflowers where we can improve output quality and provide aggregation, processing, and sales services that generate higher prices for farmers’ harvests.

HEALTHY FAMILIES
Empowering farmers to end hunger is a vital component of our vision. We assess hunger using the Food Insecurity Experience Scale (FIES), developed by the Food and Agriculture Organization, which measures the severity of food insecurity. Our FIES assessments show that about half of farmers in our areas of operation experience moderate-to-severe hunger, and about 15% experience severe hunger. In 2021, we attained a 21% decrease, on average, in farmers reporting severe hunger after joining the program.

A rich, diverse diet reduces malnutrition and contributes to the long-term prosperity of farm families, and this is an important focus of our work. Our Monitoring, Evaluation and Learning team has started studying trends in the intake of the recommended minimum dietary diversity amongst our clients’ children. Looking at client families in Rwanda and Malawi, for example, the share of children under two years meeting minimum dietary diversity needs rose by 18% and 37%, respectively.

Additionally, we have seen firsthand how increased harvests and profits translate into increased asset accumulation, particularly productive and tradable assets, raising farmers’ living standards. In 2021, participating farmers increased their assets by 20% on average compared to newly enrolled farmers who have not yet experienced program impact, and increased the diversity of owned agricultural assets by 11%. Asset accumulation is particularly evident among farmers who have been enrolled in our program for three or more years.

RICH SOILS
Year after year, we equip smallholders with the tools to ensure the long-term sustainability of their farms. Rich soils underpin the resilience of farming systems and ensure farmers can keep producing successfully for a long time. Strong harvests are made possible when soils are rich in organic matter, contain key macro and micro-nutrients, and have balanced acidity levels.

We train farmers on soil health-improving practices and initiatives such as intercropping, crop diversity, agroforestry, lime application, and tailoring planting recommendations to each local context. We are also testing more ambitious soil fertility management techniques like conservation agriculture practices. In 2021, we measured a significant positive impact on applying carbon inputs to the soil in the form of manure, compost, or residue retention for clients across most of our program countries.

Through our tree-planting program, we continue to generate climatic and economic benefits, like improving soil structure, fixing nutrients in the soil, and sequestering carbon. In 2021, we supported over 2 million farmers to plant over 40 million trees, with over 20 million projected to survive to maturity (see Trees and Agroforestry section).
1 Farmers reporting severe or moderate hunger based on the FAO’s Food Insecurity Experience Scale (please see: http://www.fao.org/in-action/voices-of-the-hungry/fies/en/). Note that 2021 hunger outcomes (which primarily relate to 2020 harvests in most countries) were significantly less strong than in prior years due to COVID, as farmers harvested considerably less and needed to sell more of this lower harvest to generate cash for household needs. Even in this environment, in 2021 we attained a 21% decrease, on average, in farmers reporting severe hunger after joining the program.
2021 was the second straight year filled with challenges and uncertainty for Africa’s farm families, with COVID, climate, and inflation threatening agricultural productivity. Similarly, 2021 was the second straight year of adaptation and innovation in how One Acre Fund supported our clients. From COVID-response initiatives to expanded agroforestry offerings to new nutritious and commercial crops, we developed a number of additional, diverse pathways to improve food security and livelihoods among smallholders.

**COVID response:** One Acre Fund has played a pivotal role in supporting Africa’s rural communities through the COVID crisis. In addition to the health risks, the pandemic has depressed rural economies and driven up hunger — the FAO estimates that the global population facing hunger increased by 118 million in 2020, with 46 million newly hungry people in Africa alone. One Acre Fund stepped up quickly to meet this challenge as one of the first on-the-ground actors, providing direct assistance in the communities we serve. In 2020 and 2021, we trained farmers on social distancing and mask-making, distributed hygiene products, provided targeted debt relief, and facilitated vaccine access for staff. We also pivoted major elements of our model to remote delivery, ensuring uninterrupted services. In 2021, the harvests of One Acre Fund farmers fed 20 million families and community members.

**Market access in Kenya and Rwanda:** One of the ways we are deepening farmer impact is by helping farmers access markets. In Kenya, we made significant progress testing and scaling our ability to aggregate avocados.
and macadamia from smallholder farmers, a key step in connecting them to international markets. We also gained valuable experience in mobilizing farmers for commercialization opportunities, arranging partnerships with buyers and, in some cases, adding value through processing.

In Rwanda, we doubled our research and development efforts on chickens, high-value crops, and commercial agricultural packages to create pathways from subsistence to commercial farming. We are also piloting the Smallholder Resilience Fund (SRF), developed through a partnership with the Climate Finance Lab. The SRF aims to build capacity at each link of a value chain to create profitable opportunities for smallholders in climate-friendly crops. Specifically, the SRF deploys capital to farmer-centric small and medium enterprises (SMEs), like businesses that purchase crops from smallholders. Where such SMEs do not exist, we work with our Venture Studio to launch them. One Acre Fund helps farmers increase production and aggregates farmer harvests to sell to businesses supported by the SRF.

**Nutritious crop adoption:** We helped over 300,000 farm families in Eastern Africa access high-quality seeds and seedlings of nutritious crops such as iron-rich beans and other legumes, fruits, and vegetables. Crucial nutrients are often lacking in the diets of many smallholder families, leading to a high prevalence of malnutrition. We also employ social behavior change strategies to identify barriers to the consumption of nutritious food and deploy appropriate interventions to nudge farmers to adopt positive behaviors that lead to the consumption of healthy diets. One such intervention we employed in Rwanda sought to increase egg intake among children under five by ensuring access to eggs through a chicken rearing program, with promising adoption trends.

**Tree planting and agroforestry:** Tree-planting programs have been central to our impact strategy, and in 2021 we expanded our investment in them dramatically by supporting over 2 million farmers to plant more than 40 million trees, of which we project 20 million will reach maturity.

In Rwanda, in collaboration with the Rwandan government, we distributed 19.4 million timber trees for free to 1.4 million farmers countrywide, as well as 300,000+ fruit trees through other channels. We've seen high interest and uptake in Malawi in our tree offerings, including agroforestry favorites like white acacia (Faidherbia albida). Last year, we distributed over 4.1 million seedlings to farmers in Malawi. We also continue to expand our work with higher-value tree species like avocado and macadamia, and are piloting a promising carbon financing model in Zambia and Tanzania. The carbon program will pay farmers for growing trees to capture and store carbon dioxide. It is an exciting dual opportunity for farmer revenue generation and climate change mitigation.

Trees are a smart investment option. We continue to explore partnership opportunities to expand trees across our operations and we remain on track to plant 1 billion cumulative trees over the next decade.

**Optimized agronomy practices:** We initiated farming behavior change programs to improve productivity and yields, which are important indicators in assessing impact. Over the past two years, we've provided tailored farm-level recommendations in Kenya, resulting in developing a digital seed recommendation platform to be
integrated into our enrollment app. Over the coming years, we plan to improve our planting timing recommendations by incorporating weather forecast data and offering more up-to-date training to field officers and farmers.

**Strategic program expansions:** In Kenya, Rwanda, and Tanzania, we embarked on diversification work into climate-smart, high-value crops to increase resilience and enable farmers to get bigger profits. We also better tailored our product and service offerings to country-specific market-driven products and services — such as coffee in Uganda, trees in Zambia, and sunflower and fruit trees in Tanzania.

Increasing farmer impact is central to our work because we believe farmers are the answer to many of the global challenges we face today. We are bringing a sustainable financial future to life for millions of farmers anchored on solid planning, robust implementation, and adaptation to changing needs.

**Scaling impact through new country pilots (Nigeria):** Nigeria is home to Africa’s largest single population of smallholder farmers. In 2021, our fourth year of pilot operations in the country, we surpassed our enrollment target of 4,500 clients by about 95%, to reach 8,900 farmers, attained a 95%+ repayment rate, and recorded $200+ impact for the second consecutive year. We also distributed 172,000 trees to about 18,000 farmers. Pilots in new countries like Nigeria provide important opportunities to test our ability to adapt and scale our impact in new contexts.
Agroforestry and fruit trees: a crucial frontier for the food system

The potential of fruit trees to transform rural communities and renew the environment

A lot has changed for One Acre Fund over the past few years: we serve significantly more farmers, we have increased our service and product offerings, and we have expanded our innovation portfolio. We also have expanded our agroforestry offerings to include fruit and nut trees.

In 2021, we committed to enabling 10 million farmers to become more prosperous by improving how we directly serve farmers and through partnerships. Our goal is to double farmer income by 2025 — the return on investment for every dollar spent — and deliver $1 billion in annual impact in terms of food and income by 2030.

Flexibly fit each market context

We began by better tailoring what we offer to each market to ensure we provide the most impactful services to farmers everywhere. In Kenya, this included trialing, expanding, and supporting new parts of the value chain for some tree farmers, including avocado and macadamia, through partnerships that allow smallholders to access better profits through markets in Europe. Integrating trees on farms can prevent...
environmental degradation, improve farm productivity, and support healthy soils and ecosystems while providing stable incomes and other benefits. Over the coming years, we will continue to expand our tree program to benefit as many farm families as we can reach.

Stephen Njiru, a farmer from Manyatta District in Embu County, Kenya, is one of those who’ve benefited from this change. “I started farming avocados commercially in 2020. When the organization started offering avocado tree seedlings in 2021, I embraced their support and training as I was still new to the practice. Avocado farming can be lucrative, but you have to be committed and put in the work. You have to be ready to learn and keep adapting to improve your product to increase your yield and profit,” says Stephen, echoing our organization’s journey over the past year.

Stephen has cultivated 150 trees so far, but he plans to plant more. “My trees are still young, but I expect to have harvested 800kgs by the time we finish the season this year. We do not have a problem with the market — brokers come right to our farms. But that also means they dictate the price. With One Acre Fund as a partner, we get a fair price. I am happy that I can provide for my family, educate my children, and continue to increase my earnings with regular training and support.”

We also piloted a similar program for macadamia farming in Kenya and coffee in Uganda to increase farmers’ access to export markets and unlock higher profits. In Uganda, coffee carries a lot of promise for the future of farming families, and we are excited to see the impact of our work — including accessing new markets — over the next year. In Kenya, macadamia has become an important focus under the market access program, with the pilot phase achieving good overall success.

Across the border in Rwanda, 57-year-old Odette Mukabarame shares her experience with our new market access trials.

“I have farmed avocados for a long time. I used to harvest in small quantities, ripen and sell them at the local market. Sometimes the fruits would ripen, fall, and rot. That changed when I enrolled with the One Acre Fund’s avocado market access program. I now sell my harvest to One Acre Fund, which assures me of a regular income. I’m getting old and can’t rely on farming forever. I want to buy livestock to diversify my income sources. When I sold avocados to One Acre Fund for the first time, I used the money to buy medicine. I’ll use the next payment to buy a goat or pig as an investment for my future,” Odette says.
Expanding our agroforestry program

We stepped up work in our agroforestry venture to help build farmer assets, improve the environment, and sequester carbon in the soil. 50-year-old Angelus Mwapinga, a smallholder from Njombe District in Tanzania, exemplifies our work in creating additional income avenues. A successful maize and potato farmer, in 2021, Angelus bought 35 pine and 20 avocado seedlings from One Acre Fund.

Angelus says he got into pine farming after witnessing commercial tree planting transform his neighbors’ lives. “Every year, I plant new seedlings to have a batch to harvest regularly. I learned that One Acre Fund sells improved, early-maturing seedlings, and I decided to try them out. I feel like One Acre Fund understands farmers’ needs well. Initially, we got maize and fertilizer. Then came potato fertilizer, and this year we received trees,” Angelus says. He has a 10-acre pine plantation and grows fruit trees like apples, pears, and avocados.

To improve incomes is to enhance the resilience of farming communities. This year, our work sought to empower farmers to become better at dealing with increasing weather and market shocks and to allow them to reap the environmental, economic and social benefits of their work.
CONCLUSION

When COVID hit, it exposed the vulnerability of rural farming systems to shock and unpredictable events. It also gave impetus to our work to continue to make food systems more productive, resilient, and sustainable by better responding to the emerging and future needs of smallholders.

Building the resilience of food systems is one of the most urgent challenges we face today. As we reflect on our work over the past year, farmers will benefit more from farming strategies that respond to specific needs, rather than generalized systems and techniques. We developed a number of diverse pathways to improve food security and livelihoods among smallholders: COVID response initiatives, expanded agroforestry offerings, optimized agronomy and farming practices such as farm-level planting recommendations, additional high-value crops, and market access initiatives, among others. By providing additional avenues for impact, we offered farmers the ability to develop solutions to individual challenges and address livelihood gaps in ways that make the best sense to individual contexts.

Our work created tangible impact on the livelihoods of farm families and will continue to benefit rural communities in the years ahead. Thank you for continuing to help us put Farmers First.