

## I. EXECUTIVE SUMMARY

Farming is the dominant economic activity of the world’s poor. One Acre Fund makes that activity significantly more productive.

- **The opportunity:** The majority of the world’s hungry people are farmers. Farming is the primary profession for most of the world’s poor, outnumbering every other primary profession combined. Finding a way to improve small farm productivity represents the greatest humanitarian opportunity of our time. Importantly, most of these farmers are women who are willing to work hard for their children’s future.
- **Our solution:** One Acre Fund possesses an incredible asset: we have a general solution for Africa’s smallholder farmers that improves profits on the activities we support by 50% (historical average) in a cost-effective, highly-scalable manner. As of late 2019, our core model was reaching nearly one million families.
- **One Acre Fund vision:** In the coming years, One Acre Fund is dreaming about “moving the needle” on rural development at continent-wide scale – with a realistic implementation plan. By the end of 2023, we aim to double our scale to directly serve nearly two million farmers per year, with 20 million direct beneficiaries within these households. Beyond our core program, we will also continue to scale our “impact ventures” platform, partnering with private- and public-sector actors to touch the lives of a greater number of smallholders—serving 2.8 million farmers in 2023 through services such as tree distribution, extension services, and rural retail.

## II. BACKGROUND

### The Enemy: Hunger

No matter how far civilization has advanced, one of our most embarrassing failures is our inability to properly feed every member of our human family. Even today, in an age of unprecedented prosperity, over 237 million people in Sub-Saharan Africa are chronically undernourished.<sup>1</sup>

Hunger represents the most severe form of poverty, and stifles all human potential. One in nine children in Sub-Saharan Africa die before they reach age five, and hunger is implicated in half of these deaths<sup>2</sup>. For surviving children, hunger has life-long consequences: nearly half of surviving children are underweight, stunted, or both, and in many cases their brain scans show physically smaller brains. This severe rural poverty represents an unacceptable curtailment of human potential: UNICEF estimates that less than one-quarter of rural African children complete high school, due to an inability to pay school fees. Countless families have to choose between educating one child, and feeding the rest of their family.

### The Opportunity: Agriculture is the Most Effective Way to End Hunger and Extreme Poverty

Despite this bleak story, one incredible fact represents the largest humanitarian opportunity of our time: *farmers represent approximately 70% of the world’s poor.*<sup>3</sup> Their profession is to grow food, and they each already spend thousands of hours doing it every year. If we can figure out how to make them more productive, mass numbers of people could earn their own way out of poverty.

<sup>1</sup> FAO and ECA. 2018. Regional Overview of Food Security and Nutrition. Accra. 116 pp.

<sup>2</sup> UN Millennium Development Goals Report, 2013; Black et al. 2013

<sup>3</sup> IFAD, “Rural Poverty Report 2011”

If the stakes were not high enough, this opportunity is complemented by two other factors. First, the product of farmers' work is food. When we make farming more productive, we end hunger for whole countries: agricultural growth has been proven to be 2.5 times as effective at increasing the incomes of the rural poor, when compared to the manufacturing or service sectors.<sup>4</sup>

Second, agriculture uses more land than all other human activities combined. If we fail to make *existing* land more productive, Africa's uncultivated land will quickly be converted to agriculture, with disastrous consequences for global greenhouse gas emissions and climate change. Africa has more unused land of any continent that could still be converted to agriculture. Farming is the key to our climate future.

### III. ONE ACRE FUND

#### Our Approach

It is well known how to increase agricultural productivity, using only environmentally-appropriate seed and fertilizer combinations (more detail in the "Environment" section). The problem is that these solutions have not been delivered in a way that is usable by Sub-Saharan Africa's smallholding farmers. One Acre Fund has developed a general solution that increases the productivity of food farmers in Africa. The success of our model stems from two innovations:

- **Bundled solution:** One Acre Fund delivers a complete 'market bundle' of services: 1) We distribute high-quality farm inputs direct to farmers. But we also surround this with support: 2) we extend these inputs on credit, and collect 97%+ on-time repayment, 3) our field staff deliver bi-weekly trainings on best farming practices, ensuring farmers achieve the profitability from their inputs, and 4) at harvest time, we help farmers to store their harvest until market prices are at their highest. Delivered in isolation, these services would fail to have impact; by delivering them together, we enable farmers to achieve significant, sustained yield increases.
- **Deep rural distribution:** Importantly, we deliver our solution to the last mile. A key reason farm families remain in poverty is that they live in highly remote areas—beyond the reach of farm input retailers, other NGOs, and microfinance institutions. One Acre Fund operates a rural infrastructure of well over 1,500 'market points' across East Africa, through which we deliver our solution within walking distance of our families.

One Acre Fund is deeply passionate about reaching the lowest-income farmers, and deliberately serves women farmers, the most difficult to serve. Most of our clients are women, and women give 75% of agricultural labor supported by One Acre Fund. This is in contrast to traditional development aid: according to the Food and Agriculture Organization, female farmers receive only 5% of government extension services. Africa's women already each spend thousands of hours farming every year to provide opportunity for their families – we have an opportunity to make that labor far more productive. And income in the hand of female heads of household have proven to lead to greater investments in the well-being of the family (nutrition, school fees).

#### Achievements to Date

Since 2006, One Acre Fund has grown our solution from a small start-up to a major international organization spanning six countries. We measure ourselves on three core metrics:

- **Scale:** Our core program has been built for growth since day one, and has grown between 20%-40% annually in recent years. We have expanded our country operations to Kenya,

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<sup>4</sup> Ligon, Ethan & Sadoulet, Elisabeth, 2018. "Estimating the Relative Benefits of Agricultural Growth on the Distribution of Expenditures," *World Development*, Elsevier, vol. 109(C), pages 417-428.

Rwanda, Burundi, Tanzania, Malawi, Uganda, and Zambia – proving the scalability of our model across distinct agricultural and political environments. In total, we have grown from serving 125 farm families in 2006 to nearly one million in late 2019.

- **Impact:** Measurable impact is a core value for One Acre Fund. Every season, in each country of operation, we physically weigh the harvests of at least one thousand test and control farmers, to measure the incremental gains in farm income achieved as a direct result of our program. Between 2016 and 2018, our average impact was USD\$115, which is a 50%+ improvement over control farmers on supported activities. Most of our farmers are women who are deeply concerned about the welfare of their children. External research has shown that our clients' harvest gains go to benefit the family by filling the hunger deficit (12% of gains), investing in school fees (33%), investing in the farm (31%), and housing/ medical expenses/ other (24%).
- **Sustainability:** Our model requires clients to pay for the services they receive. This not only dignifies farmers as paying customers, but also every donor dollar is leveraged by program revenue, extending its reach and impact. Between 2016 and 2018, One Acre Fund earned about USD\$141M in farmer payments from our core programs. As a result, we achieved a high degree of cost-efficiency, enabling every USD\$1 in donor support to create USD\$3.5 in farmer income for our field program—this is an industry-leading level of “social return on investment.”

At a strategic level, we are on poised to becoming Africa's largest rural retailer (selling life-improving goods to the poorest populations, mostly in remote rural areas), the largest provider of crop insurance for smallholders in Africa, and one of the largest distributors of trees (in 2019, we are set to plant 15 million trees that survive past one year, and in 2023 we expect to plant over 45 million trees that survive past one year). We passionately believe that the rural poor should not be passive aid recipients—we can help them engage with markets, speaking together with a shared voice.

### Impact Ventures

One organization can only accomplish so much: we need to work with others if we are going to generate continent-wide impact. Starting in 2012, One Acre Fund was approached by several African governments to jointly implement nationwide farm programs. Today, we now run diverse “system change” projects consisting of innovative partnerships with public- and private-sector actors to strengthen the existing agricultural systems that already touch millions of smallholders. One Acre Fund's Impact Ventures work leverages the organizational competencies developed through our core program, such as:

- **Input distribution and retail:** We engage with existing private actors to increase smallholder access to life-improving technologies.
- **Training and extension:** We work through government ministries to drive adoption of more effective practices and materials for farmer training.
- **Market stimulation:** We help kickstart rural agricultural markets by promoting and popularizing higher-yielding seeds and other life-improving products; these efforts can take diverse forms, such as temporary subsidies and marketing campaigns (e.g., SMS notifications, radio broadcasts, and demonstration plots).
- **Large-scale agroforestry projects:** We collaborate closely with partners to verify that all systems-change projects generate measurable, cost-effective impact for participating farm families. Since these projects usually deliver only one or two services, they typically generate lower average impact per farmer than our comprehensive core program. However, this is balanced out by their greater scale potential and lower per farmer costs; as this unit continues to scale, we expect that its total net impact will be comparable to that of our core program.

These programs are natural extensions of our operational core competencies (especially farm input delivery, financing, training), and also made possible by the reputation we have built through our core program. Crucially, we also look beyond annual impact by working to build meaningful government or private-sector ownership of initiatives, helping to ensure permanent structural improvements at a macro-level. Our Impact Ventures platform is reaching about 0.7 million farmers in 2019 and by 2023 we expect to reach 2.8 million farmers.

### **Team**

One Acre Fund was founded by Andrew Youn, who was struck by the enormous opportunity to help boost the profitability of smallholder farmers with a simple ‘bundled’ intervention that addresses key market failures holding back the productivity of smallholder farmers. He moved to rural Kenya in 2006 to work with an initial pilot group of 125 farmers, and basically listened to what they wanted.

Today One Acre Fund remains proudly headquartered in *rural* areas of East Africa, where we can listen to our farmers directly. The vast majority of One Acre Fund staff and leadership (including Andrew) live in *rural* parts of East Africa, unlike nearly every other large non-profit organization. This allows for rapid test-and-learn cycles as we try new interventions with our farmers, a lack of “HQ-field disconnect” which plagues many international organizations, and high transparency that leads to consistent operational performance. Over 95% of our staff is from East Africa, increasingly represented at senior levels.

### **Diligence**

One Acre Fund receives support from a growing pool of funders, many of who regularly conduct due diligence on our operations. As a result, we have received – and successfully passed – dozens of due diligence field visits from many foundations with professional staff, including the Skoll Foundation, the Bill & Melinda Gates Foundation, USAID, and BMZ. Our audited financials are available online.

### **Environmental sustainability**

Farmers are uniquely dependent on their environment. One Acre Fund deeply believes that one-year results are meaningless: only long-term impact will create enduring life change for farmers.

One Acre Fund pays a lot of attention to long-term interventions, and our first training is on composting to build soil organic matter. Further, plant nutrients are vital, especially in degraded soils and where little animal manure is available. Therefore, One Acre Fund also utilizes “micro-dosing” of conventional fertilizer. We use 3-5 times less fertilizer than any other region of the world, and teach farmers to micro-dose it directly to the planting hole and as a top dress after plant emergence, where it can be directly captured by crop roots, instead of running off into the environment. Another key limiter of crop yield is poor seed: farmers often plant food grain that has been saved a whole year from the last harvest. Instead, we promote the use of hybrid seed (not GMO), a century-old “technology.” Hybrid seed starts with the deliberate selection of crops that have been observed to be high-yielding, drought-resistant, etc. These crops are then naturally pollinated together to form a hybrid that displays desired traits and increased vigor.

Increased productivity is also vital for our climate. Unless we improve productivity through “sustainable intensification” on existing land, Africa will continue to experience high pressure to clear-cut its forest and savannah to convert to farmland. Africa has nearly half of the world’s unused arable land. If it were converted to agriculture vast amounts of greenhouse gases would be emitted to the atmosphere. At One Acre Fund, we strongly believe in environmentally-appropriate farming methods that increase productivity for a sustained period of time, while steadily building healthy soils and improving the farm environment. Our agricultural research team works crop stations, peer research, farmer trials, and

rigorous testing of agronomic data to hone tailored farming advice that is specific to different agro-ecological zones.

#### **IV. VISION FOR 2023**

Farming is the dominant economic activity of the world's poor. One Acre Fund makes that activity significantly more productive. At this moment, we have the practical capacity to absorb resources productively and to realistically plan for continent-scale impact.

Sub-Saharan Africa is home to nearly 50 million smallholder families who our model could benefit. Although One Acre Fund's achievements to date have been noteworthy, we are only serving between 1%-2% of these farmers in. Put another way, we are failing to serve more than 48 million families.

This is a moment to dream boldly. One Acre Fund is passionate about reaching the poorest communities, empowering farmers as market actors rather than passive aid recipients, and we generate proven impact. We have an actionable vision what is achievable via the following focuses:

- 1) **Core program:** With the right resources, we are capable of doubling our core program by 2023, to serve around two million households per year. As we continue to test our model in new countries, such as our new Nigeria pilot, we will expand into new markets. Importantly, through technology innovation (for instance, use of mobile phones for farmer repayment, and tablets for key field activities such as marketing, enrollment, and training), we will drive down our field cost per farmer significantly.
- 2) **Impact ventures:** We also need to work with other, larger-scale actors. We plan to rapidly scale-up of system change—for example, agroforestry and seed work in Ethiopia or our multi-faceted work in Rwanda that will reach the majority of the country's smallholders—enabling us to reach 2.8 million farmers annually in 2023. Our work will go far beyond traditional policy advice: because of our operational nature, we will continue to implement programs in the field together with large actors.
- 3) **Support:** Importantly, One Acre Fund would continue to invest heavily in support, to create infrastructure for continued growth beyond 2023. We are passionate about many “boring” business areas, including risk-mitigation, HR systems, government relations, finance systems, impact measurement, software development, fundraising, staff recruitment, etc. Institutional excellency drives farmer impact.

Farmers stand at the intersection of three global challenges: 1) livelihoods: farming is the dominant income source for the world's poor, 2) food security: family farms generate 80% of the developing world's food and are the key to ending hunger, and 3) sustainability: making farmers more productive is the only alternative to converting vast tracts of forest and savannah to agriculture (with disastrous climate impact). We need to plan boldly to help farmers to address these challenges, boosting smallholder productivity on a massive scale.