



Annual Report 2018

A YEAR IN REVIEW



Growing smallholders out of poverty

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“Farming is the heart of our family; without it we cannot support our children who depend on us.”

- Haiki Posiano, Nyamhoza village

Haiki Posiano has been a Seed Change farmer since 2015. Over the past three years, he has carefully managed a 2-acre oil palm farm of local *dura* trees and high-yielding *tenera* trees, which is finally starting to fruit. Thanks to Seed Change’s farmer extension program, Haiki is trained on best agricultural practices, which he applies on his farm. Haiki works from sunrise to sunset, weeding and pruning his trees every day to ensure they are in optimal health. This year, Haiki harvested over 4,320kg of fresh fruit bunches (FFBs) from his young trees. He was able to sell his FFBs to a local oil palm mill for a premium price. Haiki’s trees will produce even more in the coming years as they reach maturity and will continue to do so for the next 30 years. Before farming with Seed Change, Haiki’s yearly income was \$573, and his revenue this year was \$859, that’s a 50% increase! With the additional revenue, Haiki intends to expand his oil palm farm and teach other smallholders in his community how to become successful farmers.

Haiki is an example of a determined farmer who took control of his situation. Things are looking good today but life hasn’t always been easy for Haiki. He runs a small vegetable farm with his wife where they grow maize, cassava, and beans but profits were barely enough to break even. Due to the lack of sufficient income, Haiki and his wife struggled to pay for their children’s school fees. They could not send their youngest daughter to school. In 2016 Haiki took a chance on Seed Change and hasn’t looked back since. “Seed Change has helped me realize my farming skills. Before I was only farming a few vegetables, now I am also growing 57 healthy *tenera* trees.” Haiki is glad he started farming with Seed Change. He hopes other farmers will do the same.

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Foreword

We are proud to present you with our 2018 Annual Report. It's a tried and true communication tool that we hope gets you as close to the action in Kigoma as possible (without boarding a plane, of course!). Here we cover everything that has kept us busy over the past year, examine some of our achievements and shortcomings, and briefly look ahead for what's to come in 2019.

Since opening our doors in 2013, Seed Change expanded rapidly. 2018 was certainly no exception. We had less trees than in previous years, which gave us time to focus on a new approach to poverty alleviation (see The Year Ahead on pg. 15) in Kigoma and prepare for serious investment in Kigoma's palm oil industry by the government (see Palm Oil in Kigoma on pg. 11).

Soil health has been a problem in Kigoma in recent years. In our 2017 Livelihood Survey we found that the majority of farmers were unable to afford fertilizers. To address this farmer identified issue, in the past year we started a composting program to help our farmers improve soil health at little to no cost as well as design an agroforestry program which will repair soils while still yielding crops. We applied compost to our 2019 seedlings and taught composting lessons to our staff, local farmers, and students at the neighbouring Luiche Secondary School.

We are immensely proud of our staff at the Seed Change nursery as well as our extension officers. This year they were busy as ever ensuring our seedlings kept with international growing standards and making trips to all of the villages where our farmers live and work. Our extension officers also worked closely with the regional government to help build and manage small nurseries in new areas around Kigoma. We are looking forward to our continued partnership and eliminating poverty in the region!

Of course, none of this would have been possible without the help of generous donors like yourself. Donors are the lifeblood of Seed Change and allow us to keep working hard to fight poverty and protect Kigoma's valuable soils, rivers, and forests. The responsibility we have to turn donations into action is not something we take lightly and we constantly strive to improve all aspects of our work. We welcome you to read our 2018 Annual Report and see for yourself.

Asante sana,

Seed Change Team

About Seed Change

Seed Change is a community-led nonprofit organization working in the Kigoma region of western Tanzania. Our mission is to alleviate poverty for smallholder farmers and their families. Farming inputs in Kigoma are scarce; we link farmers with the essential tools they need to run a successful farm such as high-yielding seedlings, fertilizers, and agricultural training. Through our mentorship programs, we prepare farmers to have a successful harvest, year after year, to make a decent living for them and their families.

Seed Change is here for the long run. We believe that any development initiative should work in partnership with local stakeholders to meet the identified needs of its community to achieve long-term, sustainable development. Our goal is to strengthen the smallholder industry built on local knowledge systems and our expertise to create an unbreakable chain of economic and social empowerment.

What We Do

Our programs address the needs of our farmers. We use an integrated approach to achieve our goal of sustainably improving the lives of smallholder farmers and their families.

Seed Nursery

There are currently no oil palm seed suppliers in Tanzania nor East Africa. Of the estimated 30,000 total palm oil farmers in Kigoma, they almost exclusively cultivate *dura* oil palm, an unproductive local species. Seed Change imports high-yielding *tenera* seedlings from breeders in Costa Rica to supply to smallholder farmers. *Tenera* is a crossbreed between the *dura* and *pisifera* palm varieties which are higher yielding than their parent species.

Breeding *tenera* seeds is a long and complicated process. *Dura* and *pisifera* varieties must be carefully crossed through a minimum of seven generations to guarantee a pure batch of *tenera*. Nevertheless, the *tenera* tree yields 1 to 3 tons more than the *dura* variety and has an oil content of 26% while *dura* has an oil content of 7%. With increased yields, farmers can generate an increased income of up to 1,000% over the 30 years which *tenera* trees are

expected to produce; Seed Change aims to provide more *tenera* seedlings to farmers each year.

We import pre-germinated *tenera* seeds from commercial breeders in Costa Rica and grow them in our seed nursery for 12 months until they are ready to be received by smallholders. The few first months of growth are critical; the seedlings are planted into small polybags and spend three months in our greenhouse where they are cared for by our local staff. They receive daily watering, weeding, and fertilization. After three months, the seedlings are transplanted to our field nursery for a further nine months of growth. Seedlings should be transplanted into the field at the beginning of the rainy season. The timing for transplant is crucial because the soil water content is higher in the rainy season, therefore, seedlings have a higher rate of root establishment and growth. After nine months in the nursery, the 1-year old seedlings are healthy enough to be taken home to a farming family!!



Tenera seeds



Seedlings in the greenhouse

Farmer Extension Program

We support smallholders in every aspect of farming; we believe a holistic approach to agriculture is required to become a prosperous farmer. Seed Changes offers one-on-one and group outreach programs to assist farmers on a variety of topics such as agricultural best practices, financial literacy, and environmental awareness. Field officers make weekly site visits to offer specific guidance for individuals' farms. We have a *shamba darasa* (farmer field school) where we invite farmers can come learn about proper farm management and its effects on crop yields. Here we keep our fully grown *tenera* trees, that are fruiting just three years after being planted. We prioritize creating an environment where farmers can collaborate on their past experiences, knowledge, beliefs, and values to learn from one another and improve their farming techniques.



Farmer field class

Where We Work

We work in the Kigoma region of Tanzania, where the majority of the population are born into extreme poverty passed down from generation to generation. Kigoma is a rural district located over 1,000 km west of Dar es Salaam, the commercial capital of Tanzania. The region lacks adequate healthcare services, necessary infrastructure, and most basic services, making it difficult for one to break out of the cycle of poverty.

Due to the lack of economic opportunity in Kigoma, farming is the only viable option. Over 80% of people living in Kigoma are subsistence farmers, and despite the region's plentiful rainfall and ideal climatic conditions, agricultural production is not a lucrative industry. Most farmers cultivate staple crops such as beans, maize, and cassava. Farmers who cultivate oil palm, grow the local variety, *dura*, which is native to Tanzania and abundant in Kigoma. Even though oil palm farmers earn more than their non-oil palm farming counterparts their incomes remain meagre. *Dura* yields are too low to provide a decent living wage for a farming family. Based on our Livelihood Survey we found the average annual income of a Kigoma smallholder farmer to be less than \$300 a year; an income level associated with 'extreme poverty' according to World Bank definitions.



Why We Do It

Seed Change is determined to break the cycle of poverty one tree at a time. By improving palm oil production on every level of the value chain, we can stimulate economic growth at the local level which will relay back to the farmer. We start with the smallholder; seeds and other inputs are too expensive for most farmers, so we provide high yielding seedlings at a heavily subsidized cost.

Our commitment to socially and financially empowering smallholder farmers does not have to come at the expense of the environment. We've learned from our friends in SE Asia that clear-cutting forests for agricultural production is not the answer. We've also observed that local communities are the first to experience the negative impacts of environmental degradation. Climate change, soil depletion, and biodiversity loss all immediately affect smallholders and their crops. We are equally devoted to serving smallholder farmers as we are to protecting the environment.

As part of this we are committed to a zero-land use change policy. Seed Change promotes the sustainable management of forests and farmlands; farmers are encouraged to increase productivity on their current plot by intensifying their crops rather than encroaching onto the forest. This approach is just one way we help smallholders to meet the needs of their families without compromising the environment.

Poverty in Kigoma

Farmers earn less than \$2 a day



Less than 8% of the population attended secondary school

Families eat only 1 meal a day



Children under 5 are significantly malnourished

Overall GDP per capita is less than \$275 a year



Mission and Values

Our Mission

We are guided by four commitments to the farmers of Kigoma:

1. Improve livelihoods by sustainably increasing incomes.
2. Empower women by actively promoting female farmers.
3. Insure agricultural futures by encouraging sustainable farming practices.
4. Protect the environment by committing to zero land-use change.



Our Values

Transparency and Honesty. We will always be open and honest about our work and its results. We will share successes and failures alike, be honest about what worked and admit mistakes when things didn't. A lesson not shared is a lesson that has to be learnt the hard way twice.

Humility. We work hard and are proud of what we do but we know that it is the farmers who are the true agents of change in their lives. We help them, but it is they who deserve the credit for lifting their families out of poverty.

Constant Improvement. We know we're not perfect and that we don't know everything. But we strive to constantly improve and actively continue to learn.

Commitment and Hard Work. We meet farmers on their own turf. If you can drive the last mile, it's not the last mile. Get out there and get some Tanzanian mud on your boots!

Equality. All farmers are equal. We work with all willing farmers regardless of gender, religion, education, tribe or proximity to the main road.

Action is Character. Pretty words are nice but actions speak the loudest of all. We say what we mean and do what we say.

History of Seed Change

2017

- 28,000 trees grown
- 47,000 trees planted on farms from 2016 cohort
- Conducted a Livelihood Survey
- Delivered farmer training lessons to 800 farmers in STEP program

2015

- 15,000 trees grown
- 5,000 trees planted on farms from 2014 cohort
- Delivered agriculture and Sustainability lessons to 75 farmers

2013

- Initial research and organization set up

2018

- 5,000 trees grown
- 28,000 trees planted on farms from 2017 cohort
- Expanded the *shamba darasa* to include an agroforestry system
- Collaborated with the FAO and UNIDO to propose a 3ADI+ project to the government
- 33,000 seeds donated by the FAO and UNIDO

2016

- 47,000 trees grown
- 15,000 trees planted on farms from 2015 cohort
- Transitioned to social enterprise model
- Built *shamba darasa* and farmer resource center
- Delivered agricultural, financial literacy, and sustainability lessons to 420 farmers

2014

- Nursery established
- 5,000 trees grown
- Delivered agriculture lessons to 75 farmers

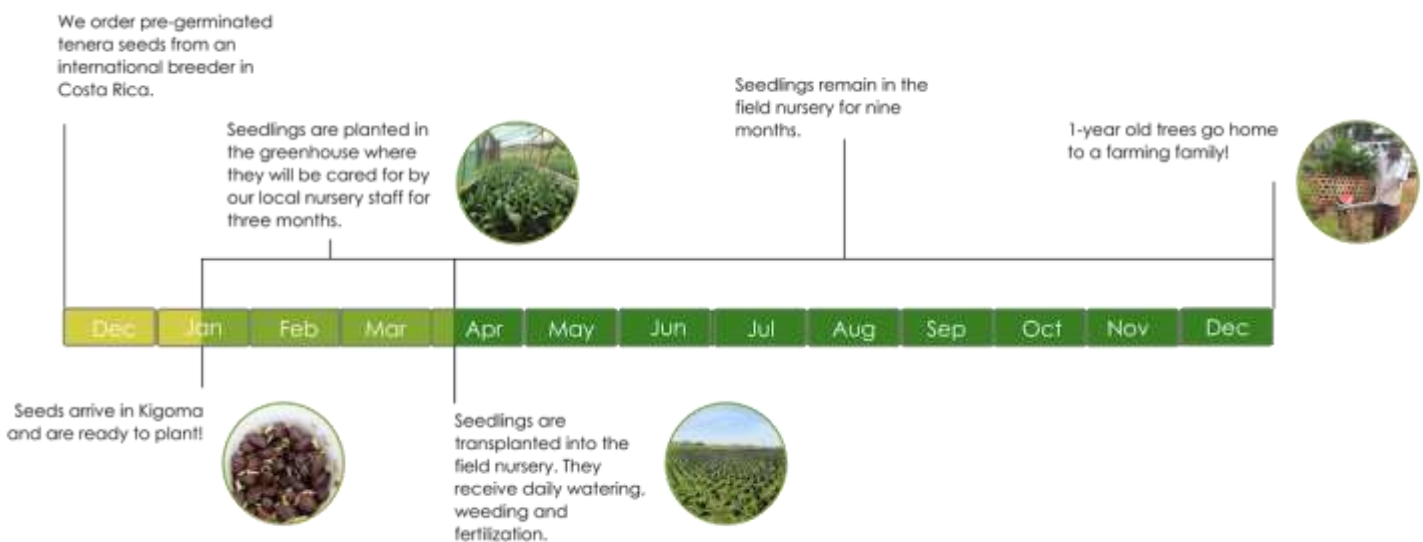


Seed Nursery

The first year of a *tenera* seedling's life is by far the most important. This crucial year decides just how productive the tree will be. If it is given good soil, ample water, and just the right amount of sunlight and nutrients, it will produce significantly higher yields than a tree that is poorly managed in its first year. This is why we grow seedlings at our nursery for twelve months before sending them out to our farmers. To be sure they are getting only the best from us.

Our nursery is run by an all-Tanzanian team of 12 men and women. Most of our staff have been with us for at least three years or more and in that time they have become *tenera* seedling experts! They make sure our seedlings are growing well by watering, weeding, and fertilizing as needed. At peak work times (planting, transplanting, fertilizing), we hire additional casual labour from nearby villages. These jobs provide much needed economic activity in an otherwise depressed area of the country. So much, in fact, that the financial impact of this extra labour on Kamara village (where we work) is quite significant to the local economy. In 2018, through direct employment of local workers, over TZS 19,672,000 (~\$8,400) went into the local economy. Jobs are especially scarce in Kigoma's villages and Seed Change is happy to be able to provide work for local people and inject cash directly into the communities we serve.

The trees grown in 2018 were our fifth cohort of *tenera* seedlings. The past four years have given our team valuable experience on how to successfully grow palm seedlings in Kigoma. We had a smaller cohort of trees this year, which meant we were able to make sure any trees that were struggling were immediately given the attention and care they needed. We conduct monthly censuses, quarterly health measurements, and continually train our staff on disease or pest warning signs to look out for. The nursery maintained a healthy tree rate that aligns with international norms and expectations.



Palm Oil in Kigoma

In 2018 we grew a significantly smaller cohort of trees than we have had in previous years. We made this decision so we could have more time to focus on our relationship with the government, which is in the process of investing heavily in palm oil. The decision to expand the palm oil industry was made, in no small part, as a result of the work Seed Change over the past five years to prove the commercial viability of smallholder palm in Kigoma. By taking the time to work with the government we are making sure we are doing everything we can to keep those smallholders at the center of the conversation.

Prime Minister Kassim Majaliwa recently announced that Kigoma must dramatically increase its palm oil production to meet the rapidly growing demand, repeating his call at a recent official visit to the Seed Change nursery. To do this, local governments are investing heavily in palm by purchasing trees and creating more nurseries across the region. Some have already reached out to Seed Change for seedlings and advice. We are currently trying to juggle meeting the growing demand from government officials with ensuring the poorest farmers are able to take care of themselves. First and foremost, Seed Change is committed to improving the livelihood of smallholders.



The current government interest in palm presents an opportunity for us to rapidly increase the scale of the industry. We will use this opportunity to ensure smallholders remain engaged and that any investments made in the region stay focused on the growth of our farmers.

To achieve this goal, we have collaborated with the United Nations Food and Agriculture Organisation (FAO) and the United Nations Industrial Development Organisation (UNIDO) to create and present a proposal to the government on how to most effectively invest in palm.

The project we are proposing, known as 3ADi+, is three-pronged and includes the following:

1. Creating an agroforestry scheme where farmers grow palm in tandem with a collection of other high value and staple crops to quickly and dramatically increase incomes.
2. Opening an agricultural university in Kigoma where young farmers can come live and learn about agricultural best practices for short periods of time. They then take that information back to share with other members of their community.
2. Establishing a 10,000-hectare palm oil plantation to generate significant output and reduce Tanzania's reliance on foreign palm oil.

Given our experience and expertise, Seed Change is planning on working closely on the first two prongs of this plan. For more on this check out our "The Year Ahead" section.

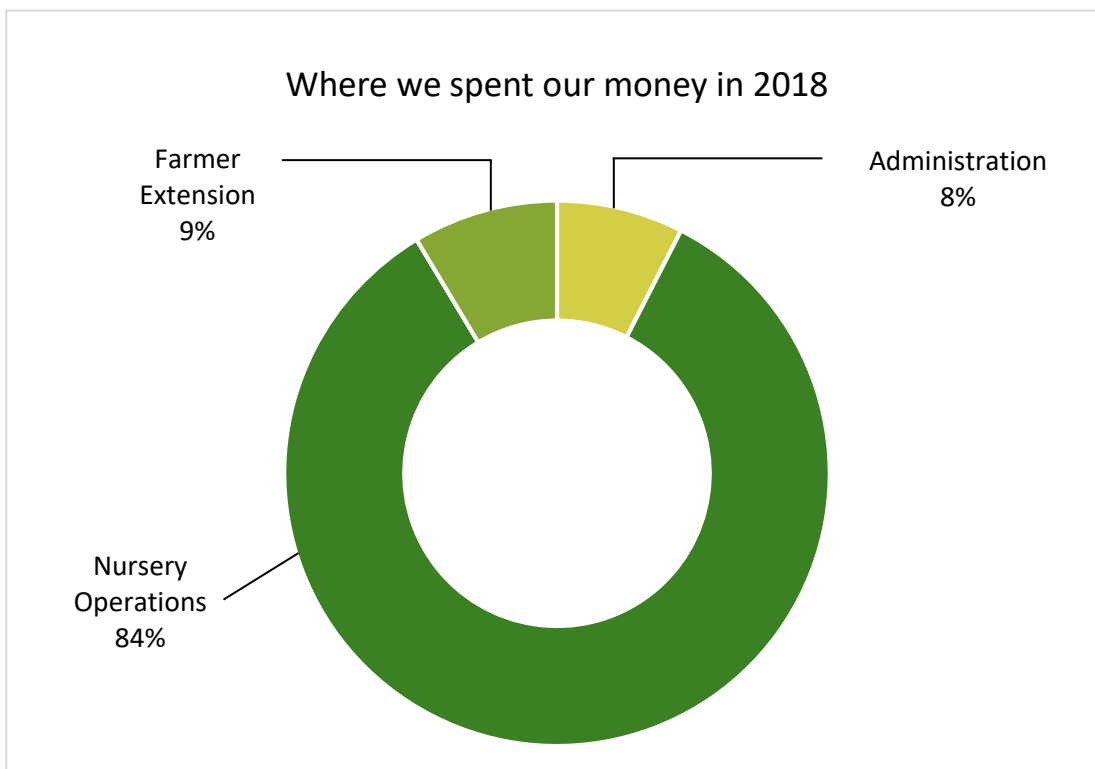
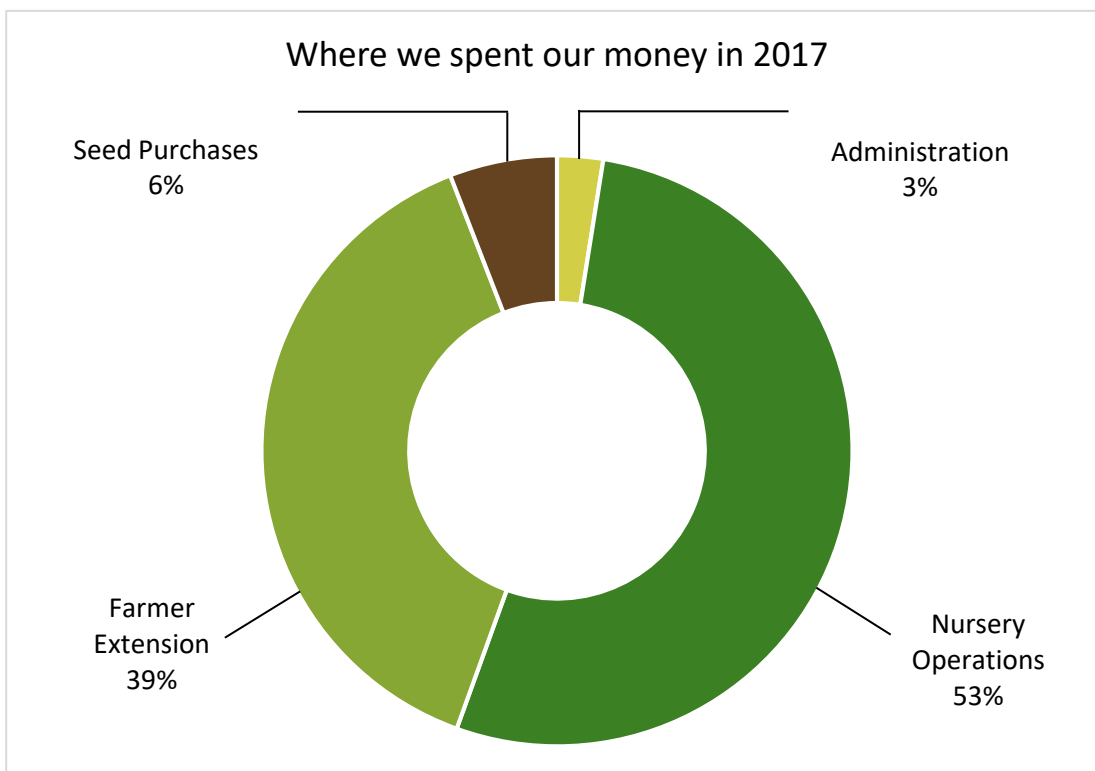
Finances

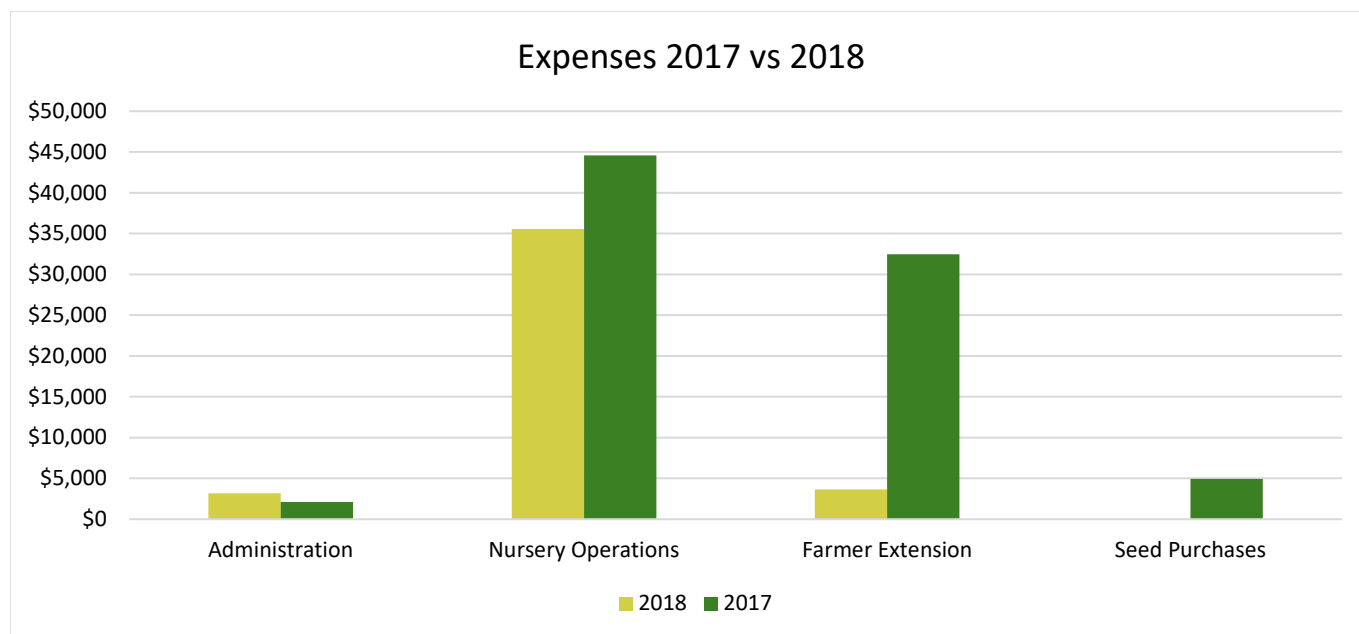
Expenditure

In 2018 we spent US\$42,402 across all activities. This is significantly lower than the previous three years because we had fewer seedlings. As in previous years the majority of our expenditure was spent growing seedlings (84%). In the second half of the year, we were fortunate to be supported by the United Nations Industrial Development Organisation (UNIDO) who were impressed with our efforts in Kigoma. They donated to 33,000 *tenera* seeds which are currently growing at our nursery and will be distributed to farmers in 2019.

The amount of seeds we purchased and cared for in our nursery decreased and so have our costs (the seeds donated by UNIDO will be grown from December 2018-December 2019). In 2018, we spent \$41,704 less on operations than in 2017. We spent significantly less on Farmer Extension in 2018 compared to 2017. This is because we were unable to secure funding for an extension series of lessons and we focused primarily on teaching about soil health from our nursery. We invited farmers to come to our farms and see composting firsthand.

	2017	% of Total	2018	% of Total	Spending Change 2017-2018
Administration	\$2,114	3%	\$3,189	8%	\$1,075
Nursery Operations	\$44,577	53%	\$35,561	84%	-\$9,016
Farmer Extension	\$32,465	39%	\$3,652	9%	-\$28,813
Seed Purchases	\$4,950	6%	\$0	0%	-\$4,950
Total	\$86,123		\$42,402		-\$41,704





Donors and Partners

We are lucky to have several major donors and partners supporting the work we do in Kigoma. Some donate funds to specific parts of our work and others give unrestricted funds, which we put to use where money is needed most. Other partners lend needed human capital and technical advice to our organisation. In 2018 donor organisations included:

Agricultural Improvement Fund – An Australian based fundraising group who are financial supporters of our farmer extension, general operations and overheads. The Agricultural Improvement Fund is a founding supporter of Seed Change and has contributed over \$152,000 as well as organisational advisory support.

United National Industrial Development Organization (UNIDO) – UNIDO supported Seed Change by purchasing 33,000 seeds for our 2018/2019 growing season totaling \$35,000.

Private Donors – Seed Change is very generously supported by numerous small private donors from around the world. In 2018 our average donation size was \$33, showing that little contributions can add up to something substantial.

Seed Change Interns

In 2018 Seed Change was lucky to have Jessica Brady and Candace Kumar join our team for three and nine months, respectively. Their interest in working on development projects focused on smallholder farmers and engaging with local communities drew them to working with Seed Change. Both were extremely valuable (and still are in Candace’s case - she’s with us until May 2019!) throughout their time in Kigoma; improving our administrative practices, ensuring operations ran smoothly, and ramping up our engagement with donors. Jessica and Candace made sure 2018 was another successful year for Seed Change. Thanks for everything you two!

How We Can Do Better

Reflections from 2017

“We will deepen our relationship with the government to help spread our mission” -2017 Seed Change Annual Report

In 2018 we presented the regional and national government with new plans to improve the livelihood of smallholder farmers in Kigoma. As mentioned above, the Tanzanian government is interested in investing heavily in palm oil in the region to reduce their dependence on imports from Malaysia. We are thrilled the government wants to put money into Kigoma’s palm oil industry and we are working to ensure their investment doesn’t forget about the most vulnerable in the region - smallholders. We’re eager to start turning these plans to action in the next year. Exciting things to come!

“We will promote organic farming by providing farmers with the tools to start composting” -2017 Seed Change Annual Report

In 2018 we introduced composting at our seed nursery. We are fortunate enough to partner with local restaurants that provide us with the valuable food waste we need to create compost. We are currently using our first batch of compost on a small group of our 2019 seedlings to evaluate its effects on growth. We are looking forward to scaling this up in the coming months.

We also created a two-part series of lessons on how to make your own compost. Our nursery manager, Yotham Damas, has done a great job delivering these lessons to our staff, local farmers, and students at our neighboring high school. We plan to expand these lessons to more farmers in 2019. Our primary goal is to give farmers the nutrients their crops desperately need without relying on expensive and often environmentally dangerous chemical fertilizers.

Lessons learned in 2018

In 2018 we continued our push to provide farmers with interest free loans to cover the cost of purchasing our heavily subsidized trees. It has always been our mission to provide the poorest farmers with access to our higher-quality inputs. Even though we have switched to a social enterprise model we have tried to minimise the effect of who is accessing our trees. Although many farmers do not have the capital to cover the cost of our subsidized trees, they should be able to invest because of the high returns we have already seen for many others. So far, our loan program has not been without its challenges. It’s no surprise that our farmers have difficulty making payments. Income is irregular and what is earned is naturally spent on the family. Some of our famers have done a tremendous job sticking to our loan repayment plan. Unfortunately, they are the exception, not the norm. As payment dates keep getting pushed back, we are seeing it become more and more clear that two-year interest free loans on already subsidized trees, wasn’t a great business model (no prizes for seeing that one coming!). Going forward we need to find a better way to incentivize farmers to make payments without it being a financial burden on their households. After all, we’re here to lift farmers out of poverty, not keep them in it!

The Year Ahead

Our trees have higher yields and earn farmers more money, period. We know this to be true from years of experience working with smallholder farmers and seeing first-hand how their lives have improved because of Seed Change's work. Our trees yield fruit in just three to four years, as opposed to the local *dura* variety which takes seven to eight years. Although we have been able to cut the harvest time in half, there's still more work to be done. Three to four years is a long time for a farmer to wait to see any increase in income. In that time their child could have started and finished primary school! This is why we are transitioning from solely providing *tenera* trees to distributing trees amongst a larger agroforestry model.

By moving to agroforestry, we will be able to help farmers earn income year-round, instead of just at one or two harvests. Our plan will get farmers money faster and improve the health of their farms, by providing them with nutrient-fixing crops and lessons on how to produce compost, like we do at our nursery. This will increase crop yields and do even more to improve the livelihoods of Kigoma's most vulnerable, not to mention help with the problem of loan repayments! At harvest times we will aggregate all crops and sell them locally, in Dar es Salaam, or abroad. By connecting smallholders with new markets we will be able to give farmers a much better price for their crops than they would earn locally. If everything goes according to plan farmers will receive our agroforestry bundle starting October 2019.

Clearly this is no small endeavor. Although Seed Change has a lot of experience with Kigoma's farmers, we are relatively new to the agroforestry game. In 2019 we will conduct a pilot program with 50 local farmers so we can iron out any kinks and properly prepare our staff before scaling up. In late 2018 we turned our *shamba darasa* into an agroforestry system and have been closely monitoring growth. We are looking forward to helping our farmers with this new, innovative approach!



How You Can Help

Thank you for your interest in helping us lift smallholder farmers out of poverty. If you are wondering how you can join our community, there are plenty of ways to support our farmers. Whether it's making a donation, volunteering your time, or helping to raise money, every ounce of generosity counts toward our cause.

Become a monthly donor

Every \$1 donated creates a \$121 value to a farming family. By supporting us with monthly donations, you become a lifelong hero. Monthly gifts are the most effective way to create a long-term impact on a farming family. That way you are with them every step of the way—from the moment they plant a seedling, to the time it's fully grown.

Read more about the impact of your donation in our [Value for Money](#) report. You can make a monthly or one-time contribution via our donation page: <http://www.seedchangetanzania.org/donate>.

For our Australian donors, please contact us if you require a deductible tax receipt. These will be available in June of 2019.

Host a fundraiser

You have the power to make a difference from anywhere in the world. Rally your community and host a fundraiser to raise money for our farmers. Short of ideas? Run a marathon, throw a game night, host an auction—whether the amount you raise is big or small, every bit helps. A successful fundraiser requires a lot of planning and we're happy to help! Contact us and we'll help you organize your event.

Get involved

Your time and skills are just as valuable to us. We are always looking for like-minded individuals who are passionate about empowering smallholder farmers to join our team. We have volunteer opportunities for every skill set, get in touch with us and we'll find the right position for you.

Further Questions?

If you have any further questions about this annual report, or about Seed Change, feel free to contact us at seedchange@seedchangetanzania.org or visit our office in Kigoma.

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