



Semilla Nueva

Annual Report 2016



Letter from the Executive Director



We have a dream. We want to improve the daily diet of the poorest people in the world's fifth most malnourished country. We want to pull tens of thousands of children per year out of stunting, and a future of poverty, sickness, and lost potential.

2016 was a year of foundation building. In 2015, we decided that our whole organization would pivot into a focus on biofortified, or more nutritious, corn. One of our projects would become our entire organization. It was a risky move. It was a difficult move. But by all respects, we are on our way, helping improve the diets of 4,800 families along the way.

In partnership with the world's best scientists and a sympathetic branch of the local government, we produced 36,000 lbs of our own seed, built the first commercial brand for biofortified corn in Central America, and hired some of the best talent from the private sector. Additionally, we were able to convince fourteen organizations around the country to try these new seeds with 3,000 families, which was on top of the almost 2,000 families using seeds we produced and distributed ourselves.

In total, 27,000 people changed what they ate for breakfast, lunch, and dinner. It was the biggest biofortified seed pilot in Latin America—and it's just the beginning.

Semilla Nueva has a long way to go, but we've never been clearer on our goal, our strategy, or the unison in our team to make it happen. That being said, we only made 2016 happen due to huge amounts of faith, patience, and support from our donors and partners, as well as tenacity, long days, and perseverance by our staff.

To all of you who've helped us enter into this new phase, and are helping us reach our next one, thank you. We wouldn't be here without you.

- Curt Bowen, Executive Director

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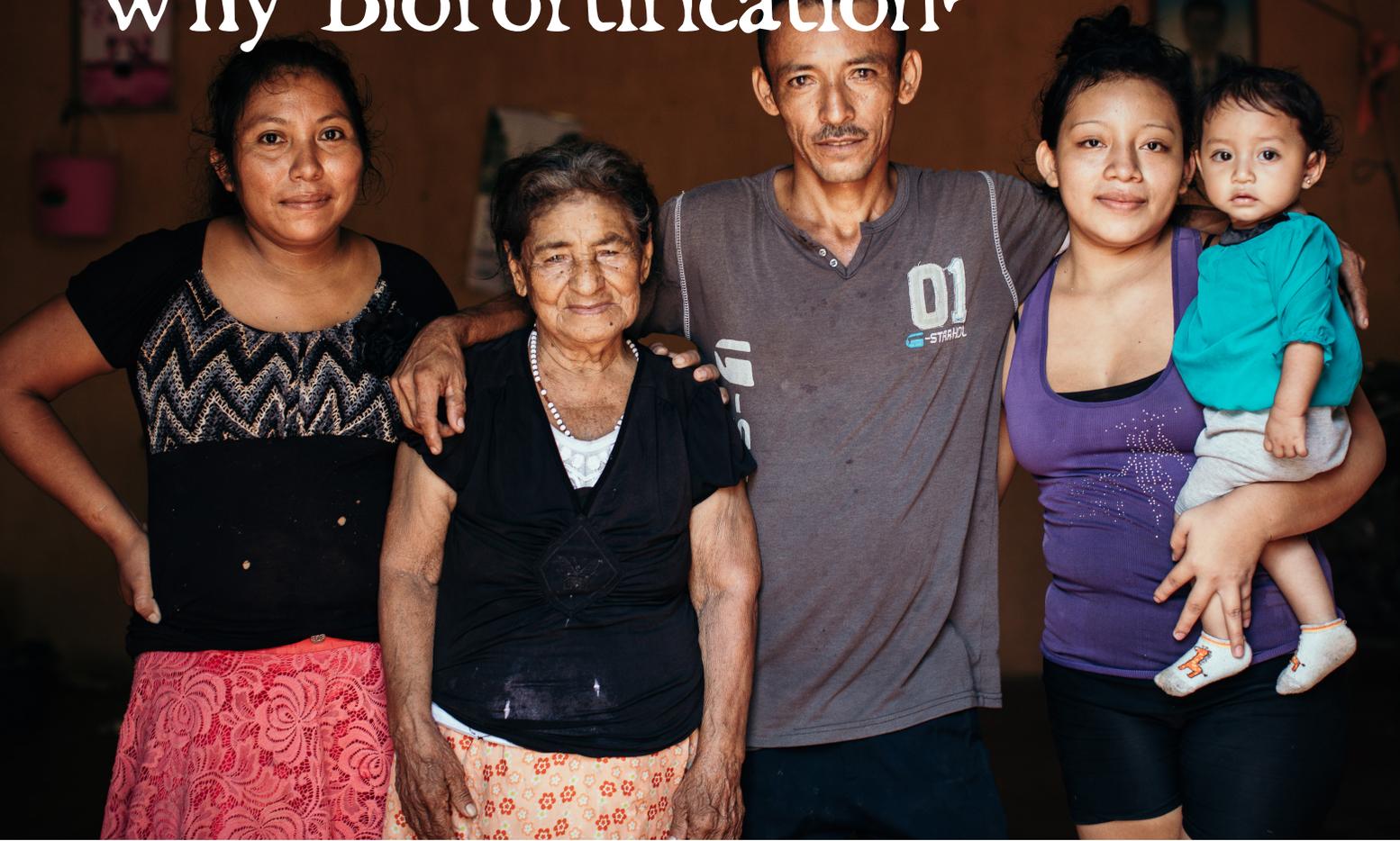


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Why Biofortification?



Sometimes it's our biggest failures that lead us to our biggest successes. The fight against malnutrition in Guatemala has largely been a failure, but we can learn the lessons to turn it into a success.

So why have we failed?

Before we point the finger, we'll do what most people don't. We'll share one of our failures. We had an awesome bean called the pigeon pea. It grew in between the rows of farmers' existing crops. It allowed them get their cash crop and produce a healthy bean for home consumption, chock-full of vitamins, protein, minerals, and everything you'd need for a balanced diet. We saw the potential for more than 100,000 farmers to increase their income, improve their diets, and change their lives. We imagined it being served every day across the country. And we gave five years to the idea. But we missed one piece:

Pigeons peas were objectively good for families, but it wasn't what they wanted.

It tasted a bit different from the beans farmers knew. No farmer woke up in the morning and said, "How can I eat more pigeon peas tomorrow?" Although it was an objectively good idea, it wasn't a felt need.

The hardest thing in the fight against malnutrition is that almost no affected family thinks that its biggest need is more nutritious food. People in rural Guatemala have heard of malnutrition, but most don't think it affects them.

Why Biofortification?



And yet every year . . .

Tens of millions are spent by NGOs and government programs designed to teach people about better foods, foods that maybe taste a bit different than what they are used to (moringa, pigeon peas, etc.) or are outside their income range. Most of these efforts require large amounts of work, like gardens. When a problem isn't a felt need and the solutions are difficult, you don't have the variables in an equation for success.

Biofortification, or increasing the nutrition of the crops people already eat daily, is a great way to raise nutritional intake without all of the big barriers. We don't need to convince mothers to teach their kids and spouses to like some new food. We don't need to ask the poorest families to buy more expensive foods.

Reflecting on the mistakes we've made and the failed projects we've seen, biofortification makes sense for Guatemala and around the world. We're proud to be dedicating all of our resources to helping farmers increase their incomes and yields, and ensuring that every kid gets the nutrition they need.

About the Seeds



Roland Bunch, champion of the farmer to farmer movement, wrote an essential commandment in his Magnum Opus, *Two Ears of Corn*. We're paraphrasing:

If your new farming technique won't help a farmer make more money, take your idealism elsewhere.

Higher yields can make the difference between putting food on the table and going to bed hungry, between paying for your kids to complete middle school and them dropping out. **If we want farmers to adopt new biofortified seeds, we have to ensure they will be able to grow more corn at a lower cost.** It's their primary motivation.

Semilla Nueva's entire focus now is exactly that. We want to get seeds to farmers that help them grow more corn at a lower cost, but also leads them to produce a crop that improves thousands of diets and gives kids a future. After four years working with hundreds of farmers, international experts at CIMMYT and HarvestPlus, and the Guatemalan government, we have high-impact seeds that are either launching or in the pipeline. Check them out!



Launched in 2016:

ICTA-B9 (far left) or Fortaleza SuperCriollo (middle), is an open-pollinated seed good for subsistence farmers at lower elevations. It is a QPM seed, possessing 90% of the protein quality of milk. Farmers get moderate yields and can save their seed.

Launching in 2017:

ICTA B15 has all the benefits of ICTA B9 but it also possesses far higher levels of zinc. ICTA HB18 or Fortaleza 3 (right), is the first QPM and high zinc commercial hybrid. In some of our tests it has provided similar levels of farmer profit to the best materials from companies like Monsanto, and even better profit than the locally produced seeds most farmers used. It's launching in the commercial sector in 2017.

Launching a Brand



May 1st 2016: unpacking our first semi-truck of seed into pickups to go all over Guatemala. With partners, we distributed 2,912 bags of seed that week.

Semilla Nueva begins using Social Marketing

2016 began with a burning question—how could we get hundreds of thousands of families to deeply want more nutritious corn? The problem is that malnutrition doesn't matter to most families—they don't understand it or think it affects them. In communities with over 50% malnutrition, we'd attend meetings and run interviews, and always we'd get the same answer. In communities with over 50% malnutrition, we'd attend meetings and run interviews and always get the same answer: families thought maybe one of the hundreds of kids in their community was malnourished, but never their kids.

Enter Appleseed.

A 501(c)3 formed by Philip (pictured above, bottom left) and Ruth Kao, a marketer and a pediatrician. Together they wanted to take the tools of social marketing and help organizations like ours learn how to make a dent in malnutrition. We ran focus groups and listened to farmer perceptions. We identified motivators and barriers for change. Then, we took those findings and created a new brand, a new kind of seed.

Farmers left local corn for commercial hybrids about a generation ago in much of tropical Guatemala. While their yields went up, the taste just wasn't as good as what their grandparents grew. Farmers had to choose: good tasting corn or high yielding corn. Luckily, our new biofortified seeds taste great — even better than local seeds. Fortaleza, the seed brand we launched to market and sell biofortified corn, is a brand about family. We know farmers care more about their family than anything else, and we want to help them provide for their family. This means not just the biggest yield, but the best tasting tortilla to be eaten for breakfast, lunch and dinner.

For us, this was a massive change. Instead of educating, we appealed to deeper sentiments and desires, and the results spoke for themselves. Fortaleza is the third highest perceived brand in our region of Guatemala, and we hope to turn this into much higher adoption in 2017.

Impact



Each bag gets filled with 12.5 lbs of seed, enough to help the average family grow a year's worth of corn.

In 1977, a group of scientists asked a question: what would happen to thousands of Guatemalan children if half got the protein they needed and half kept their normal diet? So they designed a massive experiment, the INCAP Longitudinal study. 2,392 children participated and were tracked for the rest of their lives. Kids who got a high protein drink grew more, girls went to 1.2 years more of school, and later in life, these healthier, more educated kids became adults who earned on average 46% more. The right food as toddlers changed their entire lives.

Our organization strives to give every child in Guatemala a chance to be part of **the lucky group**, **the protein group**. Changing from normal tortillas to our Fortaleza tortillas will provide children the quality protein that they need to continue to grow and have successful lives.

This year we not only produced our first quantities of a higher yielding QPM seed, but worked with partners who launched the seed as well.

Between us both, we reached **4,856 families**, ensuring that every child gets the protein they need.

Our families got access to 12.5lb of seed, enough to grow

2,000-3,000 lb of corn,

enough for their annual consumption. That's 4,856 families changing the food they eat for breakfast, lunch and dinner.

That's **27,679 people** with a better chance to develop themselves and their families.



Farmers buy seed



Farmers plant and harvest



Farmers' corn is sold in markets



Families buy corn, changing diets countrywide

Impact

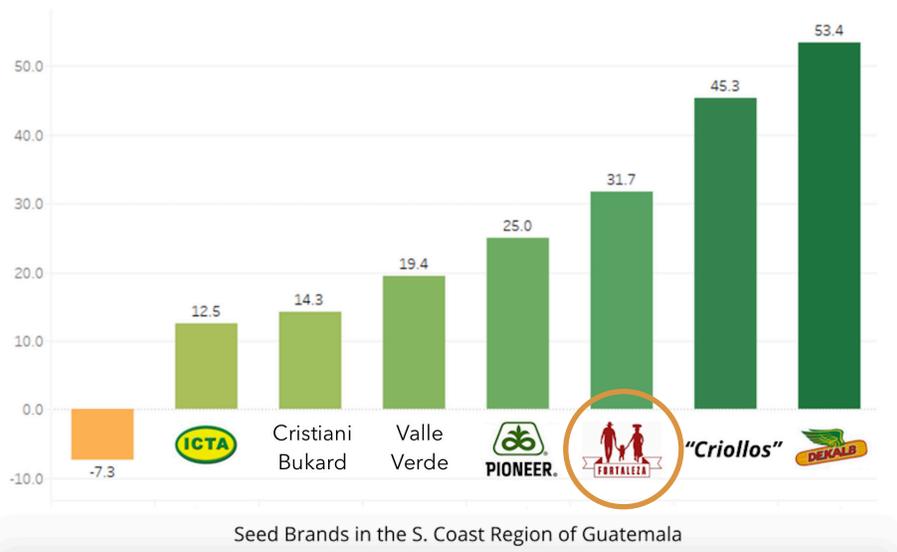


Brand Evaluation

The hope for our new Fortaleza brand is to create a sticky idea that interests farmers in trying our more nutritious seeds. Then we hook them on how their corn tastes and how they feel eating it. In April 2016, we launched the brand and we pushed it hard. In December, we initiated a brand evaluation in partnership with Appleseed Impact to determine how well we performed. We paid a professional service to survey 345 farmers in our area. The results were more than encouraging.

Of nearly a dozen seeds, Fortaleza has the **third highest net promoter score**, making Fortaleza one of the brands farmers would most recommend to their friends and family.

NPS Scores of Various Brands



29%

of farmers said that Fortaleza was the best seed for eating, a higher percentage than any other seed brand.

Of the thousands of families who received seed,

79%

could still recognize brand in December.

95%

of farmers who planted Fortaleza had a successful harvest.

72.2%

of farmers who knew of the Fortaleza brand wanted to plant again in 2017.

Platform and Partnering



2016 saw the launch of a new project with the World Food Programme and Cartier Philanthropy to help local seed cooperatives produce biofortified seeds in new regions of Guatemala.

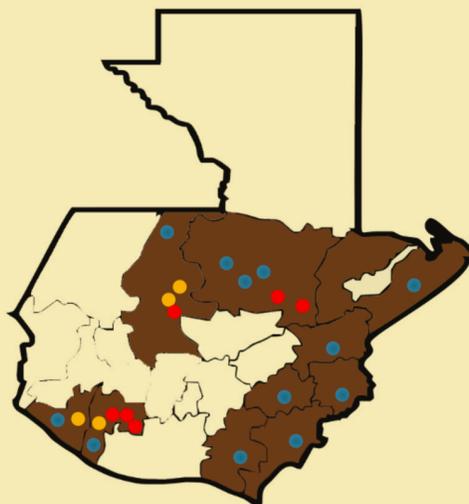
Alone we will never be able to change the corn eaten by all of Guatemala's kids. Three years ago we dreamed up the idea of a working group of organizations pulling together for biofortification.

The BioFORT Platform launched in 2015, and this year it made a massive impact. Using seed produced by Semilla Nueva, ICTA, and farming association REDSEGUA, we produced seed and got it to thirteen organizations ranging from farmers groups to the biggest NGOs and government groups in Guatemala, and **together we reached 4,856 farmers in fourteen departments.**

We then collectively evaluated impact. Using the free digital data collection tool, Kobo, we evaluated yields together in the field with twelve organizations and 202 farmers. We identified areas where biofortified seeds like ICTA-B9 performed well and where local seeds performed better. We learned the increase in income we could see for farmers. We shared this information with Platform members, and by late 2016, two new organizations made the decision to begin producing seed themselves for their regions.

This is just the beginning. Many on the Platform hope that eventually we will be a unified voice for both policy change and finding a way to ensure every kids gets the nutrients they need.

How did the seeds do? After crunching the numbers, we made the following map. **Blue dots represent areas where ICTA-B9 was a clear winner, yielding 37% more than farmers' local seeds,** yellow indicated similar yields. And red dots indicated areas where local seeds did better, mainly because farmers were buying high yielding commercial seeds or had highly locally adapted seeds for their region.



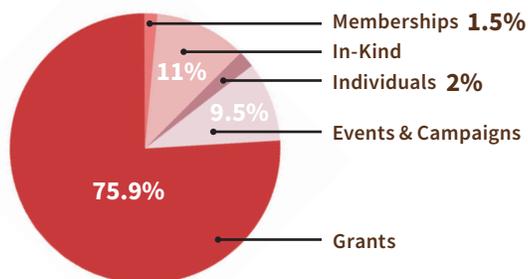
This map not only shows the potential of the new seed, ICTA-B9, but it also influenced our decision to launch a new commercial seed, which would work in the areas where ICTA-B9 wouldn't. Together we'll have something for everyone. A high yielding savable seed for subsistence areas, and a commercially competitive seed for commercial farmers. It's a decision made by data, not theory.

Financial Overview

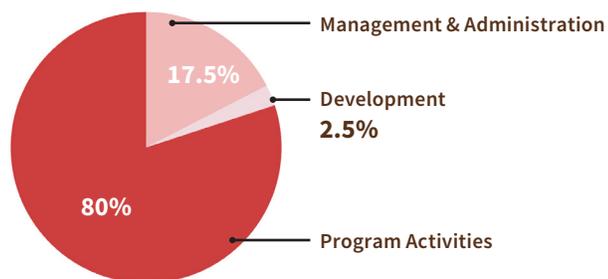


Operating Funds	2014	2015	2016
Management & Administration	\$21,669	\$62,903	\$68,568
Program Activities	\$137,378	\$322,640	\$314,309
Development	\$17,756	\$6,257	\$9,724
Total	\$176,803	\$391,800	\$392,601
Income			
Individuals	\$43,919	\$201,321	\$11,469
Events & Campaigns	\$22,771	\$11,081	\$54,479
Grants	\$225,830	\$148,874	\$433,059
Memberships	\$8,846	\$14,162	\$8,701
In-Kind	-	-	\$62,929
Experimental Farm Sales	\$1,012	\$184	-
Total	\$302,378	\$375,622	\$570,637

Summary of Income 2016



Summary of Operating Funds 2016



THANK YOU



Semilla Nueva would like to give special thanks to the supporters who have made 2016 possible.

Foundations

Swinmurn Family Foundation
Inter-American Foundation
Rotary International
Cartier Philanthropy
Miracles in Action
Conservation Food and Health

New Lifeline
One Day's Wages
Transformative Solutions
Carson Foundation
International Foundation
HarvestPlus

Ashoka
Guatemala Hope
Trinity Episcopal Church
Cottonwood Foundation

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