

PEAS - Pigeonpea for Economic Advancement of Smallholders

GuatemalaBoise, Guatemala



Curt Bowen

Organization type:

nonprofit/ngo/citizen sector

Project Stage:

Scaling

Budget:

\$100,000 - \$250,000

Website:

<http://www.semillanueva.org>

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Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

Pigeonpea has greatly increased the income of over a million small farmers in Africa in the last twenty years. As demand for this crop continues to grow, we will bring the crop to 250,000 families in Guatemala, doubling incomes, rebuilding soils, and fighting malnutrition.

About Project

Problem: What problem is this project trying to address?

Due to poor agricultural extension and chemically-intensive monocultures, 70% of rural farmers in Guatemala live in poverty, half of their children suffer from malnutrition, and 79% of their soils are severely degraded. Smallholder farmers are barely breaking even every year from their continually degrading soils. They're looking for inexpensive ways to improve their soils, feed their families better and make a better income off their land.

Solution: What is the proposed solution? Please be specific!

Pigeonpea is a small bean that grows between rows of existing crops, providing an extra crop without sacrificing what farmers normally grow. It requires no fertilizers, grows in the dry season without irrigation, and is open-pollinated so farmers can save their seed. As a legume, pigeonpea creates organic fertilizer for other crops and rebuilds degraded soils. But most importantly, pigeonpea produces a high protein food for malnourished families and if sold on the international market could help double their incomes. Many families already grow pigeonpea in their gardens and are used to eating it, but aren't aware of the growing international market or other varieties that allow them to grow in mass by planting between existing cash crops.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

Its January, the middle of the dry season in coastal Guatemala, and farming has halted for lack of rain. Amidst the dry, barren surroundings, a local farmer notices lush green fields in his neighbor's land. It looks like a smaller version of the pigeonpea he plants in his garden, but there are 5 acres of it producing a huge harvest. He asks his neighbor, and she explains, "Off my land I'll produce 4500 pounds of pigeonpea this year. We'll sell it for \$375, which is more than I made off my corn and sesame put together, and all the while its improving my soil. Semilla Nueva gave me seed and trained me how to grow it; all they asked was that I share it with my neighbors. Do you want some for next year?"

Sustainability

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

We look for culturally appropriate, market-driven and scalable solutions. Many projects push non-native 'superfoods' or labor-intensive and low-profit gardens. Our intervention promotes a better and more economic way to produce a crop farmers already know. It doesn't depend on convincing farmers through only soil health or family nutrition benefits, but also provides a way to increase their income. As success in Africa shows, pigeonpea doesn't require other non-profits to copy our work, but can scale quickly because its profitable and there is a stable world market to accept it.

About You

Organization:

Semilla Nueva

About You

First Name

Curt

Last Name

Bowen

Twitter URL

<http://www.twitter.com/grownnewseed>

Facebook URL

<http://www.facebook.com/semillanueva>

About Your Project

Organization Name

Semilla Nueva

Organization Country

, QZ

Country where this project is creating social impact

, RE

How long has your organization been operating?

1 5 years

The information you provide here will be used to fill in any parts of your profile that have been left blank, such as interests, organization information, and website. No contact information will be made public. Please uncheck here if you do not want this to happen..

Your Solution

Founding Story: Share a story about the "Aha!" moment that led you to get started and/or to see the potential for this to succeed.

In January 2013 we invited the scientist behind Africa's pigeonpea development to see our first 100 families' harvest in Guatemala. He told us it was the best work in the region and flew us to Africa to learn about their success. On the road for a month in the midst of Africa's dry season all we saw was pigeonpea. It looked like corn in Iowa, the only difference being that pigeonpea in Africa is dominated by smallholders – over 1 million of them earning a better livelihood and income. It was a tale of development done right. Our hosts from ICRISAT turned to the back seat and told me, "Twenty years ago none of this existed; Guatemala can do this too. The market needs more pigeonpea and you're in the ideal conditions to make it happen."

Select Sector(s): To which of Unilever's categories of sustainability does your solution apply?

Smallholder Farmers.

Measurable Impact

Audience: Who have you identified as your customers/recipients and why? How will you get your solution to them or engage them in your initiative?

Nearly all 250,000 smallholder farmers in Guatemala grow sesame; 20 years ago it was non-existent. Farmers adopted it once they saw it grew easily and there was a strong market - this is our model for pigeonpea. We help farmers set up experimental plots, allowing them to realize the benefit on their own land. They're sharing results with neighbors and its growing like wildfire. Along with 1000 experimenting farmers, we're finding the best ways to grow pigeonpea and working to reach export scale.

Impact: What is the impact of the work to date and expected impact in the future?

Last year 100 farmers grew new varieties of pigeonpea between rows of existing crops. Upon measuring the results, they verified that pigeonpea gave them a free crop, free protein to their family and free nitrogen to their soil without affecting their existing crops' yields. This year over 200 women joined our food security groups, learning new pigeonpea recipes and encouraging their families to try it. This resulted in nearly 1,000 families planting pigeonpea this year. Farmers are growing small plots because we don't yet have an international market. If all 250,000 farmers in the region grew pigeonpea on their entire farms, at current market prices this could generate \$125M for smallholder farmers in Guatemala.

Growth, Finance & Leadership

Scaling the Solution: How do you intend to scale your activities over the next two years (e.g., reach new markets, diversify solutions, etc.)? What will make this possible?

We've made connections with international grain traders who currently move pigeonpea from Africa to India, and are interested in buying from Guatemala as the harvest time aligns with current shortage. What they want is quantity, at least 10 containers, to make it economically feasible for them. In order to reach that threshold we're increasing production through interim markets including food and animal feed manufacturers, local markets, and pushing home consumption. We're also working on providing higher yielding and better-adapted seed. The prize money will help us

further this work towards the export market, collaborating with global experts to investigate other options such as selling processed pigeonpea to US and Canadian importers.

Financial Sustainability: What is your business model to ensure financial sustainability?

In Tanzania we asked the leading government scientists what they did to bring 280,000 families into growing pigeonpea. They said, "Once we had the right growing techniques and a stable market, the rest took care of itself." Farmers learned from successful neighbors. Exporters brought seeds to new villages. Our strategy is to lay the right foundation and let the market take care of the rest.

Experience: Please provide examples of any previous entrepreneurial initiatives you have pioneered.

I helped found Semilla Nueva in 2009. As Executive Director I have been a part of the inaugural Ignite Good class, an Ashoka Emerging Innovator, and a speaker and policy consultant at several conferences in Latin America. My values and dedication have earned mentors and partners from some of the most respected agricultural development organizations including CIMMYT and ICRISAT, whom have all played key roles in this project.

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