



HAITI'S NEW COTTON ECONOMY

Smallholder Farmers Alliance + Impact Farming Foundation

August 21, 2019



STATUS REPORT

Update on Rebuilding the Cotton Sector of Haiti's Agricultural Economy

The [Smallholder Farmers Alliance](#) (SFA), with the support of the [Impact Farming Foundation](#) and in partnership with [Timberland](#), is building a new smallholder cotton supply chain in Haiti.

SFA farmer members harvested the first commercial cotton crop in over 30 years in January of this year, marking the formal return of what was once the country's fourth largest agricultural export. Additional farmers planted the second crop this past July which, when harvested in January of next year, is projected to yield close to one million pounds of raw cotton. That translates to as much as 320,000 pounds of ginned cotton (with seeds removed).

Over the course of the next five years our goal is to reach at least 10 million pounds a year of ginned organic cotton.

Timberland has committed in writing to purchase up to one third of their annual global cotton purchase from the SFA farmers in Haiti, subject to price and quality. Based on their current volume, this translates to roughly 6 million pounds of ginned cotton a year.

We are pleased to announce a new SFA partner, the [Raising Haiti Foundation](#). Together we are empowering rural communities through a program that will soon include cotton.

Timberland has secured interest from the global action sports and lifestyle brand [Vans](#) and outdoor clothing company [Patagonia](#) to potentially help ensure a market for the SFA's entire long term output.

The [VF Foundation](#) is also a major financial sponsor of the SFA's cotton project in Haiti.

Timberland is currently exploring (but has not confirmed) launching new footwear in Spring 2021 made from a canvas fabric that contains Haitian cotton.

This document is intended to serve as a progress report on five key elements of the SFA's new smallholder cotton supply chain:

- **Cotton Cultivation:** supporting the planting and harvesting of Haiti's first cotton crops in 30 years;
- **Cotton Processing:** building the capacity for the ginning and baling of cotton;
- **Data Management:** developing a new data system for smallholder cotton farmers;
- **Artisanal Cotton:** enabling women artisans to hand-spin and produce cotton products; and
- **Tree Currency:** planting trees to finance farm improvements for smallholder farmers.





1 COTTON CULTIVATION | Supporting the planting and harvesting of Haiti's first cotton crops in 30 years

The Smallholder Farmers Alliance (SFA), in partnership with Timberland—and with additional support from the VF Foundation, Patagonia and Vans—has harvested Haiti's first commercial cotton crop in 30 years (planted summer, 2018 and harvested January, 2019) and this summer has planted the second crop (which SFA farmers will harvest in January, 2020).

Photo: SFA members harvesting cotton near the Haitian city of Gonaïves in January, 2019.
Credit: Thomas Noriell/SFA.



Crop #1 | 2018-2019 season | harvested January, 2019

The first 100 farmers planted cotton in mid-2018 southeast of the city of Gonaives in an area that was historically the epicenter of cotton growing in Haiti before it disappeared as a commercial crop.

The SFA set up its first cotton purchasing center in order to buy the resulting 44,300 pounds of

raw organic cotton. The center consisted of a building that was made available at no cost to the SFA by the Ministry of Agriculture, but which required some minor construction to make it viable. The SFA also provided some basic equipment and additional personnel to manage the weighing, sorting and storage of the cotton.

100

number of smallholder farmers who grew first cotton crop

1/4 hectare

average plot size growing cotton

44,300 lbs

total volume of seed cotton harvested in January, 2019



SFA farmer member with his cotton harvest.



SFA cotton purchasing center.

Crop #2 | 2019-2020 season / planted July for harvest January, 2020

The second cotton crop in Haiti was planted this July by 530 smallholder farmers, still in the vicinity of Gonaives. The SFA expanded its team in order to train the new group of farmers in cotton cultivation. Farmers requested help to prepare their fields and so the SFA rented a tractor, the cost of which will be deducted from the farmers' sale of cotton next January.



Planting cotton seeds.

530

*number of smallholder farmers
currently growing second cotton crop*

2/3

hectare
average plot size growing cotton

954,000

lbs
*projected total volume of seed cotton
to be harvest in January, 2020*



Preparing field for cotton planting.



2 COTTON PROCESSING | Building the capacity for the ginning and baling of cotton for export

The SFA has purchased a portable cotton gin and built a hand-operated baler to meet immediate needs. We also purchased full-scale ginning and baling equipment to install in a soon-to-be-built cotton processing facility. The SFA issued a Request for Proposals (RFP) for the design and construction of a new building to house this equipment.

Photo: the portable cotton gin in operation in Gonaives on July 30, 2019. Credit: Wedo Photography/SFA.



Portable Gin and Baler

The SFA needed to process some of the first cotton crop in advance of having the new permanent cotton gin operational. As a result we purchased a portable gin from a company in Brazil. There are large numbers of smallholder farmers growing cotton in Brazil, and a range of companies such the one that sold us the gin provide specialized machinery and services.

This portable gin will continue to be used once the permanent gin is installed because the portable gin is very convenient for processing small amounts of cotton.

The SFA also commissioned local craftpeople in Gonaives to construct a custom baler. They welded metal sheets to form the basic shape of a bale, and then the cotton lint is compressed into the metal box by a backhoe and then held together with half inch straps.

The first ginning of cotton in Haiti since the late 1980s took place on July 24, 2019. This was followed a few weeks later by the first export of cotton bales to a fabric supplier in the US for turning into sample fabric that Timberland will use in exploring potential new footwear (see page 1).



Baler shown with backhoe compressing the cotton. Inset photo shows the first cotton bale ready for export.

Permanent Gin, Baler and Building

The SFA has purchased two full-scale cotton gins, one industrial-scale baler and a generator from Bajaj Steel Industries Ltd (BSI) in India. The equipment will be shipped by container in November, and two technicians from the the BSI will spend up to a month in Haiti advising on the installation and training of SFA staff to operate the equipment.

The SFA recently issued an RFP for the design and construction of a building to house the gins and baler. The building specifications

included storage areas, offices and an exterior covered area to receive and purchase the cotton from farmers. We received four very comprehensive proposals (see following page) which are currently being reviewed, all from local contractors with extensive experience in Haiti.

Our goal, subject to raising the required funds for its construction, is to have the two new gins installed and operational by mid-January, 2020 in time for the next cotton harvest.

660 lbs

raw cotton processed per gin per hour on average

1/3

approx ratio of cotton lint (without seeds) to raw cotton (with seeds)

4

number of designs submitted for new cotton gin



Cotton gin (two of this unit) purchased from India.



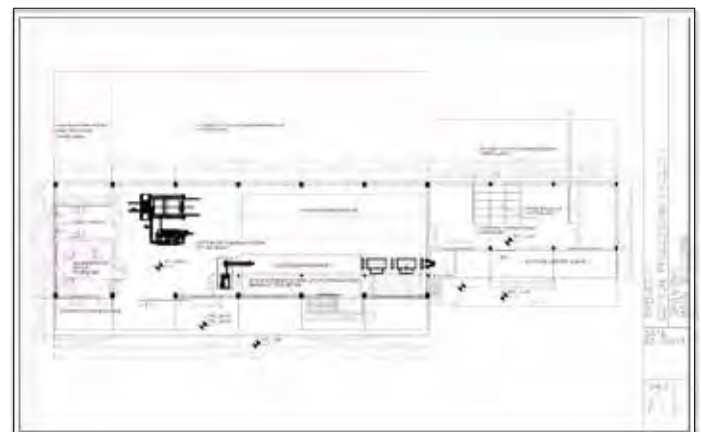
Hydraulic baling press.

Submissions for the design and construction of a cotton processing facility:

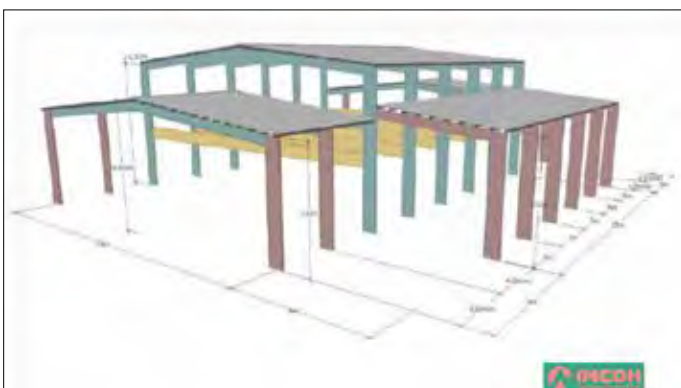
Submission 1



Submission 2



Submission 3



Submission 4





3 DATA MANAGEMENT

Developing a new data system
for smallholder cotton farmers

The SFA, in partnership with Columbia University and Timberland, is pioneering the use of data to fully integrate and benefit smallholder producers as part of a supply chain designed to track, measure and verify the environmental and social impact of individual crops.

Photo: an SFA agronomist (left) using the beta data measurement app to register a farmer in April, 2019.



Although our new combined [data collection, management system and app](#) initially focuses on cotton production in Haiti, it will be applicable to any smallholder-grown crop in any country. The app will give farmers access to both data and financial tools and will register the impact of individual crops on farmer income, food security, climate change, biodiversity, and women's empowerment. To amplify the positive

impacts and verify this data for customers and consumers, the SFA is exploring the potential integration of regenerative agriculture methodology as well as making the overall operation blockchain-ready.

The SFA has field tested a beta app and has a comprehensive plan for the final phase to make the app fully operational over the course of 15 months.

40

number of farmers registered in first beta trial

11

number of Columbia graduate students involved in the project

4

number of agronomists trained to gather data



Screen shots of the SFA beta app being used to gather data from smallholder farmers in Haitian Creole.



4 ARTISANAL COTTON | Enabling women artisans to hand-spin and produce cotton products for local sale and export

The SFA has partnered with 2nd Story Goods, a Gonaives-based NGO that works with over 60 local women artisans and craftspeople, to revive a long-dormant tradition of hand-spinning cotton to make products for sale domestically as well as for export.

Photo: Haitian artisan crocheting with cotton yarn.



[2nd Story Goods](#) (2SG) is a unique Haitian success story, having built a social business that produces a wide range of jewelry, clothing, leather goods, home accessories and pottery that is sold in Haiti as well as through an online store to both retail and wholesale customers in the US.

The SFA has partnered with 2SG to add a line of Haitian-grown cotton products to their sales offering. 2SG artisans, using hand-operated spinning wheels, will turn organic cotton fiber, grown and ginned by the SFA, into thread

and yarn. The artisans' initial focus will be to produce yarn for crocheting, while also beginning to explore the use of hand-operated looms to eventually be able to weave the thread into fabric.

2SG is now working on producing samples of crochet fabric in different densities and showing various dyeing options. These samples will be used to explore various products, including a "summer beanie" as shown below (from a different source).

>60

*local women artisans employed
by 2nd Story Goods*

>150

*products available now through
2nd Story Goods*

>\$1.5 million

*sales in first four years
of 2SG operation*



Concept of a "summer beanie."



Selection from current 2SG products for sale online.



5 TREE CURRENCY | Planting trees to finance farm improvements for smallholder farmers, including cotton

The SFA is an agroforestry program with a mission to plant trees by enlisting smallholder farmers to grow, transplant and look after trees as a way to earn credits they can exchange for crop seed, tools and agricultural training. The resulting [‘tree currency’](#) model increases tree cover while also improving agriculture. Participating farmer crop yields increase an average of 40% and household income increases 50 - 100% in each farmer’s first season with the SFA.

Photo: SFA farmer members on their way to plant trees
Credit: A.F. Cortes/SFA



Some 6,000 SFA farmers have planted 7.5 million trees since the program began in 2010.

Farmers grow trees in 31 nurseries in 6 different areas around the country. They grow fruit trees to plant on their farms and in small orchards. They plant trees as living fences and to stabilize deforested slopes to reduce flooding. Near the city of Gonaïves, farmers have reforested large tracts of community land that will eventually be connected to form the first green belt of its kind in Haiti.

In recent years, as credits began to build up from tree planting, the SFA provided member farmers with more services they requested. In addition to the basic package of seed, tools and training, farmers can now also exchange tree credits for cows, goats, literacy classes, water source upgrades and other services depending on what

is needed. Tree planting also makes farmers eligible for neighbor work teams to help on a volunteer basis to plant and harvest (a tradition called “kombit” in Haitian Creole). Tree planting qualifies farmers to participate in new local seed banks where they return the same amount of seed they received at planting time (plus a bit more if harvests are good), and eventually this becomes a self-financed and farmer-managed guaranteed source of good quality crop seed. Meanwhile, SFA women farmers, by planting trees, earn the right to receive small low-interest loans for farm improvements or to finance small side businesses in order to supplement their farm incomes.

Every cotton-growing SFA farmer has paid for their seed, tools and specialized training using tree currency. As farmers plant more cotton, they also plant more trees.

7.5 million

*number of trees planted by
SFA farmers since 2010*

31

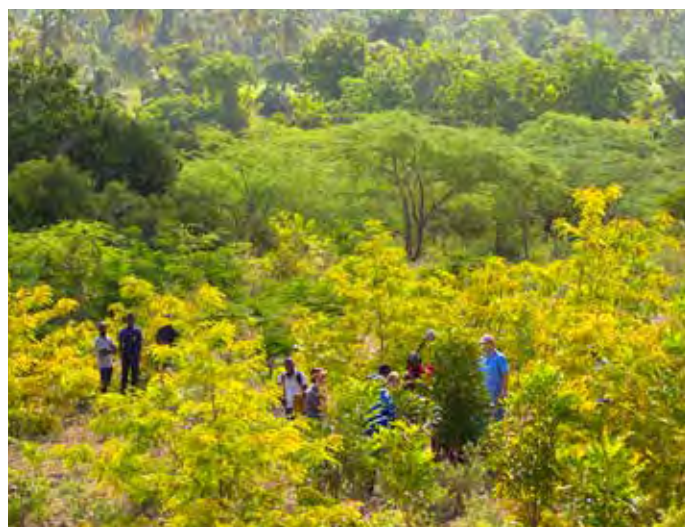
*current number of SFA tree
nurseries in operation*

6

*number of local branches
of the SFA in Haiti*



SFA tree nursery.



Reforested site near Gonaïves.

INFORMATION

The **Smallholder Farmers Alliance** (SFA) ([link](#)) is a Haitian non-profit organization that applies business solutions to help feed and reforest a renewed Haiti by establishing market-based farmer cooperatives, building agricultural export markets, creating rural farm businesses and contributing to community development. The SFA is organized as a foundation under the laws of Haiti, is identified by NIF#: 000-049-555-8 and with its principle place of business c/o Cabinet Salés at 62, rue Geffrard (angle rue Chavannes), HT 6140, Pétion-Ville, Haiti.

The **Impact Farming Foundation** ([link](#)) is a U.S.-based non-profit organization that works with smallholder farmers internationally to advance small-scale business solutions that integrate sustainable food production with increased tree cover and self-financed community development. Impact Farming also supports the work of the Haiti-based Smallholder Farmers Alliance. Impact Farming is organized as a 501c3 charitable organization under the laws of the U.S., is identified by EIN#: 47-1858572 and with its principle place of business at 3885 Ettman Street, Shrub Oak, NY 10588, U.S.A.

Timberland ([link](#)) is a global leader in the design, manufacturing and marketing of premium footwear, apparel and accessories for the outdoor lifestyle. Best known for its original yellow boot introduced in 1973, Timberland today outfits consumers from toe-to-head, with versatile collections that reflect the brand's rich heritage of craftsmanship, function and style. Timberland markets lifestyle products under the Timberland® and Timberland Boot Company® brands, and industrial footwear and workwear under the Timberland PRO® brand. Its products are sold throughout the world in leading department and specialty stores as well as company-owned retail locations and online. Timberland's dedication to making quality products is matched by an unwavering commitment to environmental and social responsibility – to make things better for its products, the outdoors, and communities around the globe.

2nd Story Goods (2SG) ([link](#)) is a Haitian non-profit organization that applies business solutions to develop the Haitian economy through employment opportunities, the making of artisanal products with both local and recycled materials, the selling of those products both locally and internationally, and the development of leadership skills within the workplace. 2SG is organized as a manufacturing and retail business under the laws of Haiti, is identified by NIF#: 000-537-793-7 and with its principle place of business c/o MPG, 429 Rue Dattes, HT 4110, Gonaives, Haiti.