# BETTER COTTON INITIATIVE 2014 HARVEST REPORT



### Welcome to the Better Cotton Initiative 2014 Harvest Report

This year marks the fifth harvest of Better Cotton and we have a lot to celebrate! As we reach this milestone, our momentum is growing on the journey to Better Cotton becoming a mainstream commodity.

On the following pages you will find the latest global results, results by country and updates on our strategic thinking and progress.

Better Cotton is sown and harvested in different annual cycles all over the world. In some regions sowing and harvesting take place in the same calendar year, and in others these activities spread over two calendar years. For example, in the southern hemisphere cotton sown in the last months of 2013 is referred to as the 2014 harvest, whereas in other regions, cotton harvested in the last months of 2014 and the first few weeks of 2015 is also referred to as the 2014 harvest. All of the data in this report refers to the 2014 harvest.

Because this report is published later in 2015, you'll also find references to our 2015 thinking as we learn from our previous experience and work to continually improve the Better Cotton System.

We hope you enjoy reading about our year

White ripe cotton field ready for harvest, USA © Better Cotton Initiative

# NOTE FROM THE CEO

#### **GROWTH IS GOOD** (BUT HOW TO MEASURE IT?)

In most sustainability circles, growth is viewed as a bad thing. After all, we are depleting the planet's resources, and expanding CO2 emissions linked to our insatiable quest for more 'stuff' are cooking the planet. Well, in 2014 BCI grew dramatically, but for once this growth is great for planet and people. In 2014, 1.2 million farmers participated in our programme, up 79% from the prior year, and those farmers produced 2 million metric tonnes of Better Cotton, up 118%. (We continue to forecast increased growth in 2015 with our share of global production increasing from 7.6% to over 11%.) More importantly, the underlying premise of our model was confirmed by our 2014 results: higher yields, reduced inputs of synthetic pesticides and fertilisers, resulting in much higher income for our farmers. The results we observed this year compared to farmers not yet using our methodology are inspiring. BCI Farmers in Pakistan for example, achieved an average of 9% greater yields while using 15% less pesticide 18% less water. Further to achieving this, they generated a staggering 46%

Growth is good. With results like these, our greatest challenge is to grow even faster. We are currently represented in 21 countries, and there is a long waiting list of other interested countries, so we are confident the trend will continue.

Human nature always leads us to highlight the 'agronomic' side of our programme as I have done above because progress is presented in neat, quantifiable results that tell a compelling story. However, of equal importance to BCI is progress on the softer, 'social' side. But how do you measure 'social' progress? For example, in the areas where we operate we could measure 'school registration of



increase in income.

children'. Then again, perhaps 'school attendance' might be more important than school registration. But does attendance at school mean that the child is not doing hazardous forms of child labour, e.g. applying pesticides, before or after class? Hmmm. This social stuff is a bit complicated.

We engaged some experts to help us think through this 'social measurement' aspect. One of the things they recommended to us is that it is more important to show systemic change, than 'counting for the sake of counting'. They also showed us that the best way to generate systemic change is by building partnerships, rather than trying to do everything ourselves. We're delighted to show you in this report our very first measurement results of social betterment. For each country we operate in, we decided to measure the number of 'active partnerships' (defined by objective criteria) with other local groups engaged in child welfare that our Implementing Partners have entered into. You will also find in this report metrics on how well the communities we operate in understand the concepts of (unacceptable) 'child labour', and how this differs from (acceptable) 'child work' and the intolerable worst forms of (hazardous) child labour.

We also began measuring in 2015 important indicators concerning the betterment of women (by far the largest element of the workforce in the production of cotton). We'll report these first measurements to you in next year's report.

Reporting social indicators will probably never be as simple as 'improvements in yield' or 'reduction in water used'. Nonetheless, at BCI we consider them just as important, and we will strive to improve the guality of our reported data, as we continue to grow around the globe in our quest to achieve scale and impact. Size matters.

Patrick Laine, CEO

### **A WORD OF THANKS**

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This year, over 1.2 million farmers around the world have been able to apply the continuous improvement methodologies promoted by the Better Cotton Standard. But the farmers do not work alone. From the Standard to the field, BCI operates with a wide variety of organisations who together contribute in time, funds, collaboration and knowhow to help BCI Farmers bring about the results that are now in your hands.

NGOs. retailers and brands. manufacturers, spinners, ginners traders, governments, foundations and other donors - too numerous to list individually here - we would like to use this opportunity to recognise your contribution. Thank you.

See bettercotton.org for comprehensive coverage of BCI's Members' and Partners'.

### **BETTER COTTON IN 2014**

OUR MISSION . BETTER COTTON GLOBALLY THE BETTER COTTON STANDARD SYSTEM ..... FROM FARM TO MARKET: FABRIC MILLS

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GLOSSARY

Better Cotton Initiative www.bettercotton.org



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### **GLOSSARY**

ha hectares MT metric tonnes

#### BETTER COTTON TRACER

The online volume and transaction tracking tool used by parties authorised by BCI. These parties include ginning factories that volunteer to gin seed Better Cotton, and merchants, spinners, retailers and brands that are BCI members.

#### BENCHMARKED STANDARDS

Benchmarking is a process of comparing one organisation's policies, practices, standards or systems with those of similar organisations, and identifying gaps between them. We work with other standards on benchmarking with the Better Cotton Standard System, ultimately allowing the cotton produced under that standard to be sold as Better Cotton, increasing global supply.

#### LEARNING GROUP

A group of farmers who meet to learn from each other and receive training on the Better Cotton Production Principles and Criteria.

#### PRODUCER UNIT

A collection of Learning Groups or Medium Farms. The size of a Producer Unit will depend on local circumstances, though the optimal size is between 3,500 to 4,000 smallholders or 100 Medium Farms.

#### IMPLEMENTING PARTNER

An organisation responsible for creating an enabling environment in a given project area(s) so that farmers can participate in the Better Cotton Standard System. These Partners implement capacity-building and training based on the Better Cotton Production Principles and Criteria, and collect data at field level.

#### COMPARISON FARMERS

Previously called 'control groups', Comparison Farmers are comparable producers operating in the same area as BCI project participants, but not receiving BCI training.

#### SMALLHOLDER FARMS

Producers whose cultivated cotton area does not exceed 20 hectares and who are not structurally dependent on permanent hired labour.

#### MEDIUM FARMS

Producers whose cultivated cotton area ranges from 20 to 200 hectares and who are structurally dependent on permanent hired labour.

#### LARGE FARMS

Producers whose cultivated cotton area exceeds 200 hectares and who are structurally dependent on permanent hired labour.

#### **ORGANIC FERTILISERS**

Carbon-based fertilisers derived from animal or vegetable matter. Examples include manure and other types of animal waste, compost and other types of plant waste. We also classify unrefined minerals (such as rock phosphate) under this category. Crop residue (green manure) is excluded.

#### STRATEGIC PARTNER

National or international organisation responsible for the coordination of Implementing Partners in a given country or region. Strategic Partners take significant leadership for Better Cotton in the country(ies) where they have been mandated by BCI.

#### SYNTHETIC FERTILISERS

Chemically, artificially manufactured fertilisers, mostly inorganic (mineral) compounds. Examples include NPK complexes, as well as single nutrient fertilisers such as Ammonium Nitrate, Urea (a synthetic organic compound) or superphosphates.



### **BETTER COTTON IN 2014**



### THE BETTER COTTON STORY

Look down. What are you wearing? Chances are that one or more of your clothes are made from cotton. Or maybe it's your bed sheets, towels or the bank notes in your pocket. Nearly everyone on Earth uses or wears cotton products every day.

Cotton is a renewable natural resource but the future of cotton production is vulnerable to poor environmental management, poor working conditions and unstable markets. In 2005, a group of visionary organisations came together to work out a practical solution that would secure the sustainable future of the industry. The result was Better Cotton.

Better Cotton means producing cotton in a way that cares for the environment through processes that minimise the negative impact of fertilisers and pesticides, and cares for water, soil health and natural habitats. BCI Farmers can achieve better yields and more financial security through access to global markets, whilst improving the working conditions in their fields.

Cotton that is made in this way meets the Better Cotton Standard. The Standard has been developed by the Better Cotton Initiative (BCI), an independent, multi-stakeholder organisation whose members are committed to making Better Cotton a mainstream product. From NGO partners to garment manufacturers, from the farmers to household brand names, all BCI's members are working to transform the way cotton is produced and safeguard the future of the sector.

The Standard gives assurance that more sustainable farming is happening on the ground. Every step of cotton production, from sowing and growing to picking and harvesting, adheres to six production principles. BCI Farmers are also expected to continually improve their production processes. The Standard can be applied to different scales of cotton production – from smallholder farms in Mali, Mozambique and Tajikistan to large, industrialised operations in Brazil, China and Australia.

Top international brands including adidas, H&M, IKEA, Levi Strauss & Co., M&S and Nike already use Better Cotton in their supply chains. Their support and that of all BCI's members means that more and more Better Cotton is coming onto the market. In 2014, 7.6% of all the cotton produced globally was Better Cotton. By 2020, we want this figure to be 30%. We believe 30% will be a tipping point and lead to transformational change for the entire sector. That's better for the farmers, the environment and the cotton sector, and that's better for all of us.

## **OUR MISSION**

The Better Cotton Initiative exists to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future.

BCI works with a diverse range of stakeholders, connecting people and organisations across the cotton sector from field to store, to promote measurable and continuing improvements for the environment, farming communities and the economies of cotton-producing areas.

BCI aims to transform cotton production worldwide by developing Better Cotton as a sustainable mainstream commodity.







# **BETTER COTTON GLOBALLY**







INDIA
270,000 BCI Farmers
456,000 Better Cotton hectares
283,000 Better Cotton MT lint

### THE BETTER COTTON **STANDARD SYSTEM**

The Better Cotton Standard System is a holistic approach to more sustainable cotton production which covers all three pillars of sustainability: environmental, social and economic. The Better Cotton Standard System is made up of the following key components: Production Principles and Criteria; Capacity Building; Assurance Program; Chain of Custody Guidelines; Claims Framework; and Results and Impact. Each of the components work together to support the system and the credibility of Better Cotton and BCI. Find out more at bettercotton.org/standard.

1. Farmers make an informed decision to participate in a BCI programme.



earn the Better Cotton licence, and are able to sell their cotton on to ginners and further up the supply chain as Better Cotton.







### FROM FARM TO MARKET: FABRIC MILLS

2014 marked the beginning of our work to close the gap between spinners and retailers in our traceability system by allowing fabric mills to track their Better Cotton purchases.

After a five month period of consultation with various stakeholders, in January 2015 we rolled out an improved version of the Better Cotton Tracer (our online traceability platform used by ginners, spinners and retailers to record purchases and sales of Better Cotton). The updated system now allows fabric mills to have user accounts for the system too, making them part of our traceability efforts. This change means that BCI Retailer and Brand Members are able to trace their cotton purchases more accurately, and in some cases now have full visibility from field to fabric for the first time.

The system was first used by BCI's existing fabric mill members. After a testing period of six weeks, the system was launched for the use of all fabric mills globally.

The Tracer is intended to be functional and userfriendly. This, paired with a simple sign up process, has allowed most fabric mills to start using it to



declare their Better Cotton purchases within two weeks of application.

The long-term vision for the Better Cotton Tracer is to also include the final actor in the supply chain: garment manufacturers. In the first quarter of 2016, we aim to further develop the traceability system to accommodate them. This will be a major step for BCI, closing the gaps in global traceability and giving our Retailer and Brand Members the option to tell the story of the Better Cotton product on its journey from field to store, for the first time.

<sup>11</sup> The Better Cotton Tracer is a simple tool to enter our transactions and to keep track of our inventory It took a few weeks' time and some extra efforts to get our clients used to the new online system but thanks to the well-organised Webinars produced by the BCI Team, we feel that the new system has been successfully adopted by all the market participants. **J** 

co Bänninger, Reinhar





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### REPORTING ON RESULTS ACHIEVED ON BETTER COTTON FARMS

From the first Better Cotton harvest five years ago, we have emphasised the importance of monitoring results achieved by farmers participating in the Better Cotton System. As such, we have built annual results reporting into the requirements of the Standard - the reason is twofold:

» Inviting every farmer participating in BCI projects to record data related to agricultural inputs, costs and income earned from cotton is part of building monitoring and learning capacity at farm and community levels. » At BCI, we believe that producing cotton more responsibly will lead to improved environmental, economic and social outcomes. One step toward measuring some of these changes is collecting annual farm-level data.

The results presented in this Harvest Report compare country averages of key environmental, economic and social indicators achieved by BCI Farmers to comparable farmers in the same regions who operate outside of BCI projects. We refer to these latter farmers as the Comparison Farmers.

RESULTS INDICATORS	MEASUREMENT
1. Pesticide use	% difference between BCI Farmers and Comparison Farmers in kilograms (kg) of active ingredient applied per hectare (ha) Pesticides include insecticides, herbicides, acaricides, fungicides as well as all substances used as defoliant, desiccant or growth regulators. We collect the type and concentration of active ingredient applied because this enables calculation of the chemicals contained within pesticides that are added to cotton farms.
2. Fertiliser use	% difference between BCI Farmers and Comparison Farmers in kilograms (kg) of synthetic and organic fertiliser applied per hectare (ha) Farmers report on the category and exact composition of each fertiliser used. We store this information for use in future, more detailed studies. The long-term objective is to ensure an optimal application of nutrients that matches the needs of the crop, maintains long-term soil health and structure, makes economic sense and minimises off-farm pollution (notably eutrophication through nutrient run-off or leaching) and GHG emission (notably through nitrous oxide emissions and industrial nitrogen fixation).
3. Water use for irrigation	% difference between BCI Farmers and Comparison Farmers on cubic metres (m3) of water used for irrigation per hectare (ha) Use of water for irrigation is only measured on farms that irrigate. A cotton crop is considered irrigated if it receives one or more irrigations in a season. Rain-fed farms are excluded from the analysis.
4. Yield	% difference between BCI Farmers and Comparison Farmers on kilograms (kg) of lint cotton produced per hectare (ha) Total production at farm level is expressed in kilograms of seed cotton. We convert the unit of measurement to lint by multiplying the amount of seed cotton in kilograms by the average gin turnout ratio (set separately for each country).
5. Profitability	% difference between BCI Farmers and Comparison Farmers on net income earned from cotton per hectare (ha) This is calculated as the gross income received from the sale of the cotton crop minus the total variable costs of growing the cotton crop.



	RESULTS INDICATORS	MEASUREMENT							
	6. Elimination of child labour A	Existence of partnerships e with credible local organisat Partnerships, in the context of arrangements with a third pa child rights or supporting acce regular contact and joint activ Decent Work Criteria on chill specialist organisations is mea smallholders and medium farm							
	7. Elimination of child labour B	% of BCI Farmers who can a of children's work and hazar This indicator is measured us typical farm activities and maki labour under national law, cor context of occasional light wor During collection of results, I farmer and with control farmers to make the distinction. The ind who can accurately differentia							

In the 2014 season, BCI introduced three new social indicators. We are pleased to report Indicator 7, 'Elimination of child labour B', for all applicable countries is in its first year of implementation. Indicator 6, 'Elimination of child labour A', has progressively been integrated into BCI's and Implementing Partners' monitoring processes throughout the 2014 season, and we expect full reporting for the 2015 season. In the Harvest Report, we present the results for India on page 26, where the process has been successfully trialled. Finally, the third new social indicator, 'Inclusion of Women', will be reported in the next annual Harvest Report.

Indicators 1 to 4 are reported across all contexts, regardless of country, farm size or technology used on the farm. With regard to the improvement of livelihoods, however, we are primarily concerned with supporting and monitoring for smallholders and medium farms. The profitability indicator (a first step in understanding the economic situation) is therefore only collected from and communicated about smallholder and medium farms. Similarly, in regards to the indicators on the elimination of child labour, our greatest concern is monitoring and supportting progress in geographical areas typically dominated



### established by or on behalf of the Producer Unit tions to specifically address child labour

of this indicator, are defined as documented working arty with expertise in either child labour remediation, ess to formal schooling. The partnership must include ivities that relate directly to the achievement of BCI ild labour. The existence of a partnership with local easured at the level of the Producer Unit working with ms.

accurately differentiate between acceptable forms rdous child labour

using country-specific pictorial materials representing ing the distinction between those defined as hazardous impared to activities considered acceptable within the rk performed within the family farming context.

Field Facilitators conduct a test with each selected rs. Each farmer is given a score based on his/her ability idicator is then calculated as the percentage of farmers ate between child work and child labour.

by family smallholding and medium farms. Therefore, these social indicators are not reported by large farms.

Due to differences in local conditions, we do not compare indicators between countries. Results are also only presented for one harvest year because within a country or a sub-area of a country annual results are affected by external factors that change year-on-year. Factors like rainfall, pest pressure and market price mean that comparing results across two to three years may not allow meaningful conclusions to be drawn. We are developing several processes for longitudinal analysis of results in countries that have been participating in Better Cotton for more than three years. With time, we will be able to move in this direction.

#### FARMER-REPORTED RESULTS

The starting point for all data collection and reporting associated with the results presented here is the information recorded by all farmers during the season in their Farmer Field Book or equivalent record keeping system. We provide a Farmer Field Book template indicating the type of information that is to be recorded by farmers. In contexts where a majority of participants have limited literacy skills, Field Facilitators assist farmers in tracking and recording the relevant information. The Farmer Field Book can also be in the form of a computerised record keeping system in the case of large farms.

#### SAMPLING APPROACH FOR DATA COLLECTION

During the harvest years between 2010 and 2012, BCI collected Results Indicator data from all farmers participating in the Better Cotton System. As Better Cotton expands—and the number of smallholders rapidly increases—the costs and effort associated with collection and management of data from hundreds of thousands of farmers become increasingly complex.

Data from all medium and large farms is still collected. For smallholders, we developed a sampling methodology, which was reviewed and endorsed by researchers at Wageningen University in the Netherlands. The methodology includes the collection of data from a representative sample of Learning Groups that are randomly selected by BCI on a yearly basis at the end of the season. The Farmer Field Book is maintained by all farmers for learning purposes.

On occasion, data was excluded from the analysis because it was assessed to be incomplete or because no comparison data was available for a Producer Unit. These instances have been noted on each of the country results pages with a percentage that indicates how representative the data is with respect to the BCI Farmer population.

#### **COMPARISON DATA**

Each Producer Unit and large farm we work with is responsible for collecting data from Comparison Farmers. These farmers can live in the same community as BCI Farmers, in neighbouring communities or in other nearby locations. Their key characteristics make them as similar to project farmers as possible. Comparison Farmers should present similar socio-economic characteristics as BCI Farmers. The characteristics of their farm should also be taken into account:

- » number and type of labourers
- » size
- » irrigation system
- » general soil fertility
- » crops grown
- » experience in growing cotton

#### A NOTE ON DATA PREPARATION

The results presented in this report are weighted national averages of farm-level results, comparing the averages of BCI Farmers to those of Comparison Farmers. The weighting is a standard statistical analysis method, done so that the proportions of each sub-country region represented in Better Cotton projects are similar in both the BCI Farmer group and the Comparison Farmer group at the country level.

### OUTCOME EVALUATIONS AND IMPACT ASSESSMENTS

In addition to the data reported by farmers, BCI annually contracts researchers or consultants to conduct independent Outcome Evaluations in two or more countries. These studies allow for a deeper investigation of the results using a sample of Comparison Farmers coupled with additional qualitative assessments, focus group discussions and other approaches. The findings of these independent studies allow us to corroborate–or not–the data we receive from farmers via our partners, and leads to a deeper understanding of how BCI interventions, coupled with the particular local context, lead to outcomes and results. Two such studies will be conducted in 2015.

Furthermore, BCI encourages and supports longterm, scientific impact assessment studies conducted by expert researchers on an independent basis. We are currently collaborating on two multi-year impact assessment projects. A first study led and conducted by researchers from the Copenhagen Business School started in 2014 and will yield its first results in 2016. A second research study, commissioned by ISEAL, is conducted by a consortium of research organisations under the leadership of the Natural Resource Institute of the University of Greenwich. This study, which started in 2015, will extend to 2017.



**CHINA** 

BCI Farmer, China © Better Cotton Initiative



### **CHINA**



DEC

# **CHINA**







#### ORGANISATION

In 2014, BCI's Implementing Partners worked with 7,028 farmers organised into 10 Producer Units and 9 large farms. 6,458 farmers in China earned a Better Cotton licence.



**IMPLEMENTING PARTNERS** 







In the Shandong and Hebei regions, favourable weather conditions enabled farmers to achieve greater vields than the previous ////

For the last three years, the Chinese government have stockpiled large quantities of cotton with the intention of protecting farmers and the market from international trade and fluctuating prices. This policy was terminated in 2014, although the country still has upwards of 50 million bales of cotton in reserves.\* This year, in the Xinjiang province of China, the government piloted a 'target price programme,' with the intention of guaranteeing farmers incomes whilst moving away from stockpiling cotton.

As a BCI manager and husband, I recognised the need to raise awareness of women's status and influence in our community.

and PU Manager in China, running training on empowering women





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Not only is China the world's largest producer of cotton, it's the world's largest consumer of cotton too.





### **CHINA:** results

### **CHINA:** results



used less pesticide, less synthetic fertiliser and less water for irrigation than Comparison Farmers. In the Shandong and Hebei regions, favourable weather conditions enabled farmers to achieve greater yields than the previous season. However, the Xinjiang region suffered challenging climatic conditions, which negatively affected overall yields.



BCI Farmers applied on average 16% less pesticide active ingredient than Comparison Farmers. Some areas in Xinjiang suffered from pest pressure near river banks as a result of sand storms. Overall, BCI Farmers were able to use their experience to limit pesticide use.



BCI Farmers used on average 10% less synthetic fertiliser than Comparison Farmers, but overall achieved a higher yield. This suggests a growing ability among BCI Farmers to optimise their use of inputs.



Organic fertiliser use increased among cotton farmers in China in 2014. The use of organic fertiliser is primarily noted in the Xinjiang region. There, BCI Farmers showed greater awareness of the benefits of organic fertiliser and, in addition, received government subsidies that made its use cost competitive. In the other regions, however, the high price of organic fertiliser relative to synthetic remained a barrier to use.





Water (m<sup>3</sup>/ha) BCI Farmers Comparison Farmers

adopted drip irrigation practices.



### SUMMARY OF RESULTS FOR SMALLHOLDER AND MEDIUM FARMS IN CHINA **BCI FARMERS AGAINST COMPARISON FARMERS**

Yield	<b>1</b> 1%
Pesticide Use	▼ 16%
Synthetic Fertiliser Use	▼ 10%
Organic Fertiliser Use	▲ 276%
Water Use	▼ 16%
Profit	▲ 30%





The results presented here were calculated based on data from 1,355 BCI Farmers and 349 Comparison Farmers. Some data was excluded from the analysis because no comparison data was available for one large farm. The results shown here are representative of 99.98% of BCI Farmers in China.

Managing chemical use in China is resulting in strengthened ecosystems and the return of native species to agricultural land.

<sup>44</sup> The BCI Implementing Partner invited experts to improve our farming in a scientific way. **9** 

> Mr Wang Jianjun, BCI Farmer in China.

The Yellow River alluvial plain is home to a 5,000 year old civilisation and is a traditional farming region in eastern China. Cotton grows well in the area's alkaline soil, and as a major commercial crop, it's an important source of revenue for local farmers. In recent decades, the overuse of commercial fertilisers contributed to soil depletion and negatively impacted the area's ecosystem. BCI Implementing Partner, Huitong, trained local farmer Mr Wang Jianjun and others to grow cotton while caring for the health of the soil and protecting native plants and animals. After BCI training, Mr Wang Jianjun abandoned highly toxic pesticides and began applying natural fertiliser. He soon noticed soil conditions improve with earthworms and birds returning to his farm. For two years now, larks have lived on Mr Wang Jianjun's farm building nests in his cotton field.

"BCI trained farmers to test the soil and save water in temporary channels. We also learned to plant trees as habitat for birds and beneficial insects," said Mr Wang Jianjun.

The BCI Standard helped Mr Wang Jianjun cut the use of costly and dangerous chemicals while repairing the natural ecosystem. Systematic training has helped improve management practices in the region throughout the pre-season, growing and harvest seasons. Thanks to these efforts, traditional farming communities in the Yellow River alluvial plain are enjoying the return of native species like the lark.





Training, India © Better Cotton Initiative

INDIA



### **INDIA**



# **INDIA**



#### **BETTER COTTON PROJECTS**





ORGANISATION

In 2014, BCI's Implementing Partners worked with 284,058 farmers organised into 96 Producer Units. 269,511 farmers in India earned a Better Cotton licence.



IMPLEMENTING PARTNERS







most important fabric, making up around 59% of the Indian textile industries raw material

All cotton farmers in India are smallholders, producing cotton on less than 20ha of land.

In previous seasons it took four to five pesticide sprays to control pests, but with the inclusion of sacrificial crops, my overall expenditure on pesticides has reduced substantially.

> Murlidhar Furange, BCI Farmer in Kupta village, Maharashtra, India



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### **5th HARVEST**



### *w*orld's second largest cotton producer





### **INDIA:** results



# **INDIA:** results



BCI Farmers achieved on average an 11% higher yield than Comparison Farmers. They used less pesticide, less synthetic fertiliser and less water for irrigation than Comparison Farmers. Generally, weather conditions were favourable for cotton production, with the exception of some states that experienced dry periods and cyclones resulting in lower yields.



BCI Farmers applied on average 20% less pesticide active ingredient than Comparison Farmers. Most cotton-growing regions felt pest pressure from early-season sap sucking pests. Gujarat saw the emergence of the pink boll worm, and the northern regions were challenged by the cotton leaf curl virus, making the application of pesticides necessary. The close collaboration between BCI Farmers and agronomists enabled well-informed decision making to respond to these challenges. Biological pest-control measures were also widely practiced among BCI Farmers.



BCI Farmers used on average 33% less synthetic fertiliser than Comparison Farmers. This was in part due to improved access to expert advice from agronomists that helped BCI Producer Units to increase efficiency and achieve positive yields while reducing synthetic fertiliser use.



The use of organic fertiliser was 68% higher amongst BCI Farmers than Comparison Farmers. Due to improved awareness of soil health and the benefits of organic matter, BCI Farmers used greater quantities of manure and other organic inputs.











#### SUMMARY OF RESULTS IN INDIA **BCI FARMERS AGAINST COMPARISON FARMERS**

Yield	<b>A</b> 11%
Pesticide Use	▼ 20%
Synthetic Fertiliser Use	▼ 33%
Organic Fertiliser Use	▲ 68%
Water Use	▼4%
Profit	▲ 32%



### **5th HARVEST**

The results presented here were calculated based on data from 22,129 BCI Farmers and 6,697 Comparison Farmers. Some data was excluded from the analysis because complete data was unavailable for 22 Producer Units. Therefore, the results shown here are representative of 74.07% of BCI Farmers in India.

### ELIMINATING CHILD LABOUR A NEW SOCIAL INDICATOR

The 2014 season marks the first year BCI collected results on **Eliminating Child Labour – Leveraging Partnership with Local Specialist Organisations**, one of two new social indicators we began measuring this year. While this indicator was not collected across all countries, we provide these preliminary results for India as an encouraging starting point off which to build. The indicator is described on page 15.

The results demonstrate the persistent efforts of BCI Implementing Partners to address child labour, as well as to identify and reduce barriers for children's education. We are excited and encouraged by the findings and plan to share information about proven good practices and encourage their adoption, as appropriate, in all countries in which BCI Farmers operate.

#### RESULTS

In India, 27 out of 93 Producer Units (29%) reported engaging in partnerships to promote access to school for children in cotton-growing areas.

These are the main categories of interventions and related partnership activities in which the Producer Units and local organisations were engaged:

» Awareness raising programmes around child labour issues. In Rajasthan, Maharashtra and Punjab, programmes were undertaken in local schools to strengthen understanding both of what constitutes acceptable work on family farms and unacceptable forms of child labour, as well as measures that can be implemented to ensure children's safety. These programmes are a great way to give child labour issues increased visibility across the whole community. Working with schools and teachers to monitor student attendance. In Punjab and Andhra Pradesh, Producer Units worked with school district offices and local schools to closely monitor student attendance. Meetings were scheduled with farmers' families to promote education and the importance of children remaining in school during the cotton-picking season. These meetings were often held in cotton fields to accommodate farmers.

- School rallies to advocate for children's rights and ending child labour. Producer Units worked with government schools and children's rights committees in Andhra Pradesh, Gujarat and Maharashta to organise rallies within villages. To complement these events, poster competitions were held as a way to encourage participation.
- Migrant labour child education programmes. Local teachers were contracted in Rajasthan and Punjab to provide education to the children of migrant workers during the cotton-picking season. This programme helped to accommodate and facilitate easier access to education for migrant worker families, who constitute the most disadvantaged and vulnerable communities within the farming sector.
- Community theatre events themed around child labour issues. In Maharashtra, street plays were staged to raise awareness around the detrimental effects of child labour. Such events are an engaging, informal way to elevate understanding in the community around child labour issues. These events were facilitated in partnership with a local civil society organisation that focuses on a variety of community issues such as art and culture, human rights, youth affairs and rural development and poverty alleviation.

School children, India © Better Cotton Initiative

Cotton farmer, Pakistan © Better Cotton Initiative

### PAKISTAN



### PAKISTAN



DEC

310,000

185,000 157,000

## PAKISTAN



#### ORGANISATION



In 2014, BCI's Implementing Partners worked with 117,558 farmers organised into 50 Producer Units and 11 large farms.

102.054 farmers in Pakistan earned a Better Cotton licence.

IMPLEMENTING PARTNERS







world's fourth largest cotton producer.

The climate 3 in 2014 was advantageous for cotton production. contributing to higher yields.

Frior to the training, most of us were following 'calendar application' of chemical pesticides, but through the training sessions, we learnt to survey the fields through pest scouting and checking the Economic Threshold Level (ETL) of different pests before applying pesticides.

BCI Farmer, Pakistan



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### **5th HARVEST**



Pakistan has scaled up Better Cotton production in 2014,

more than doubling

the amount of farmers involved in the programme.

Cotton plant with thrips (pest) and spider (be © Better Cotton Initiative



### **PAKISTAN:** results



### **PAKISTAN:** results



BCI Farmers achieved on average a 9% higher yield than Comparison Farmers. In general, the climate in 2014 was advantageous for cotton production, with the exception of some regions that were adversely affected by flooding. Expert agronomic advice from Implementing Partners enabled BCI Farmers to use less pesticide, less synthetic fertiliser and less water for irrigation than Comparison Farmers, while still maintaining positive yields.



BCI Farmers applied on average 15% less pesticide active ingredient than Comparison Farmers. Due in part to favourable weather conditions, overall pest pressure was generally low in Pakistan. However, the emergence of pink bolworm late in the season posed a significant threat in some areas. Under the guidance of our Implementing Partners, BCI Farmers were able to control this pest pressure while still reducing overall pesticide use.



BCI Farmers used on average 19% less synthetic fertiliser than Comparison Farmers, but overall achieved a slightly greater yield. Many Implementing Partners used soil testing to ensure the optimal application of synthetic fertiliser.



Generally, organic fertiliser use is low among cotton farmers in Pakistan. Farmers with smaller plots who also grow food crops and may have access to nearby animal manure are more likely to use it to boost soil fertility.





Water (m <sup>3</sup> /h	a)							
BCI Farmer	s							
Comparison Farmer	s							
	0	500	1000	1500	2000	2500	3000	3500



#### SUMMARY OF RESULTS IN PAKISTAN **BCI FARMERS AGAINST COMPARISON FARMERS**

Yield	▲ 9%
Pesticide Use	▼ 15%
Synthetic Fertiliser Use	▼ 19%
Organic Fertiliser Use	▲ 87%
Water Use	<b>V</b> 18%
Profit	<b>4</b> 6%



### **5th HARVEST**

The results presented here were calculated based on data from 12,284 BCI Farmers and 3,500 Comparison Farmers. Some data was excluded from the analysis because complete data was unavailable for 1 Producer Unit. Therefore, the results shown here are representative of 97.23% of BCI Farmers in Pakistan.



In the 2006-2007 growing season, the mealy bug caused huge economic losses to the cotton crop in Pakistan. In most cases, pesticides were not effective in controlling the insect. In the district of Sanghar, Pakistan, staff from BCI Implementing Partner, CABI, worked with cotton farmers in an attempt to combat the problem. Researchers here set out to find a biological solution. Using cotton plants infested with the mealy bug, researchers successfully bred natural parasitoids and predators.

Staff placed mealy bug infested cotton shoots and leaves in trays under sheds in cotton fields. The trays attracted natural enemies of the mealy bug, which fed and reproduced on the infested plants. The parasitoids and predators produced in the trays naturally dispersed and were also manually collected and released in other fields. There is now a common saying among the cotton farmers of the region: "If you see kala jeet (a mealy bug parasitoid) in the cotton crop, there's no worry". Since its initial success, the project is being replicated in 80 more locations in the Sindh province. Similar efforts to control bollworms, which have also become serious pests in Pakistan, are underway. Infested bolls that do not open during the harvest season are collected and stored in specially designed wire gauze or porous cloth bags. While the parasitoids can escape from the bags, the larger bollworm moths remain trapped. The biological method for controlling bollworms shows great promise, but still needs further development.

Sha Nawaz Mangsi, a BCI Farmer from Shadad Pur said, "I used to be unaware of how to identify beneficial insects - I even used to apply pesticides to them. The CABI facilitator helped me to distinguish between the harmful and beneficial insects on my farm. I established a facility to breed insects, rearing and releasing thousands of beneficial parasitoids in my field to control harmful insects such as mealy bugs and other sucking pests. Now I can easily identify and produce beneficial insects on my own."





Field worker, Tajikistan © Better Cotton Initiative

TAJIKISTAN

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### **TAJIKISTAN**



# TAJIKISTAN



#### **BETTER COTTON PROJECTS**





#### ORGANISATION



#### IMPLEMENTING PARTNER



#### In 2014, **BCI's** Implementing Partner worked with 360 farmers organised into 2 Producer Units.

All **360 farmers** in Tajikistan earned a Better Cotton licence.



# In 2014, agrarian reform and

### privatisation continued in Tajikistan,

which mainly affected large farms. One element of the land reform is the division of large, collective farms into smaller family and individually-owned farms with an average hectarage distributed per farmer.

The climate in 2014 was adventageous for cotton production, contributing to higher yields and limited pest pressures.



In 2013, Sarob decided to join BCI because it aims to increase cotton yield and create a better environment for producing cotton so that farmers can access the new international market for Better Cotton ??

> Mr. Muminov Muhammadi, Executive Director, Sarob



### 2nd HARVEST

### GIZ (BCI's former Implementing Partner during Tajikistan's first season) formally handed over its responsibility to

**Sarob** - a Tajik cooperative of agronomists. Going forwards, Sarob will continue to work with GIZ's technical support.

Fertiliser and pesticides are mainly imported and therefore expensive in Tajikistan.





# **TAJIKISTAN:** results



# **TAJIKISTAN:** results





In Tajikistan, farmers who apply organic fertiliser primarily use cattle manure supplemented with some sheep and chicken manure.



BCI Farmers reported using on average 11% more water per hectare for irrigation than Comparison Farmers. Effectively measuring water use in Tajikistan continues to be a challenge, but through Sarob's extension work, BCI Farmers are now better able to measure water use and will be able to use that knowledge to improve efficiencies in the future.

#### Profit (per ha)

While BCI Farmers in Tajikistan reported improved profitability, the lack of accurate record-keeping on behalf of comparison farmers means we are not able to report on this indicator with sufficient confidence. By joining BCI, farmers in the Tajikistan have (in many instances) for the first time been trained in how to keep track of their expenditure and income and been given support in maintaining useful records.

#### Awareness of Child Labour Issues

Tajik law prohibits hiring school-aged children to pick cotton. To help ensure children attend school rather than work on farms, Sarob provides ongoing training and workshops for farmers. A remarkable 87% of BCI Farmers demonstrated an advanced awareness of child labour and 13% had a basic awareness.

#### SUMMARY OF RESULTS IN TAJIKISTAN **BCI FARMERS AGAINST COMPARISON FARMERS**

Yield	▲ 53%
Pesticide Use	▼73%
Synthetic Fertiliser Use	▲ 28%
Organic Fertiliser Use	▲ 230%
Water Use	<b>1</b> 1%









The results presented here were calculated based on data from 169 BCI Farmers and 20 Comparison Farmers, representing 100% of BCI Farmers in Tajikistan.

# TURKEY



Portrait, Turkey © Orta Anadolu

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### TURKEY



# **TURKEY**



#### **BETTER COTTON PROJECTS**







#### ORGANISATION



STRATEGIC PARTNER



In 2014, BCI's Strategic Partner worked with 582 farmers organised into 16 Producer Units and one large farm.

534 farmers in Turkey earned a Better Cotton licence.



**Cotton grown** with this criteria is hugely sought after in the textile world because big brands want their products to be produced from a cotton produced in better conditions. **J** 

Fuat Tanman, BCI Farmer, Turkey



IPUD is responsible for the implementation of the Better Cotton Standard System and the production of Better

This year, the Turkish government increased and increased costs of inputs.







### As BCI's Strategic Partner,

Cotton in Turkey.



In most regions, harvests were delayed because autumn rains. In the worst cases, the rain led to losses in yield and quality. In the Cukurova and GAP regions, some farmers couldn't harvest at all.

## **TURKEY: results**



# **TURKEY:** results



BCI Farmers achieved on average a 3% higher yield than Comparison Farmers. They used less pesticide, less synthetic fertiliser and less water for irrigation than Comparison Farmers. Some BCI Farmers had their harvest disrupted by rains, while Comparison Farmers who had planted later were not affected. This reduced the expected yield increase for BCI Farmers.



BCI Farmers applied on average 8% less pesticide active ingredient than Comparison Farmers. There were early-season sucking pests in most cotton-growing regions, making necessary the application of pesticides. Using the economic threshold spraying method based on pest scouting, BCI Farmers only sprayed when the level of pest caused significant risk to the cotton yield and quality.



BCI Farmers used on average 9% less synthetic fertiliser than Comparison Farmers, but overall achieved a slightly greater yield. This was in part due to better access to expert advice from agronomists associated with BCI Producer Unit management.



Although Turkish famers are aware of the benefits of farm manure to soil health, the use of organic fertiliser is generally low due to lack of availability and the high cost of transportation. BCI Farmers are nonetheless showing greater awareness of the benefits of organic fertiliser and this represents an increase from the last season when no organic fertiliser use was reported.





Water (m<sup>3</sup>/ha) BCI Farmers Comparison Farmers



#### SUMMARY OF RESULTS IN TURKEY **BCI FARMERS AGAINST COMPARISON FARMERS**

Yield	▲ 3%
Pesticide Use	▼8%
Synthetic Fertiliser Use	▼ 9%
Organic Fertiliser Use	▲ 789%
Water Use	▼ 9%
Profit	<b>A</b> 28%







The results presented here were calculated based on data from 528 BCI Farmers and 56 Comparison Farmers. Some data was excluded from the analysis because no comparison data was available. Therefore, the results shown here are representative of 59% of BCI Farmers in Turkey.





BCIFarmer, Mali © Better Cotton Initiative

MALI



### MALI



### MALI

### DEC JAN OCT – DEC





I have been growing cotton for nearly 40 years. We used to spray our 20ha with pesticides that even killed the snakes. After the treatments we didn't feel well. We used to spray every two weeks, without any field observation first. I used an average of 120 litres of pesticides, costing me about 825 Euros. Since starting the Better Cotton programme in 2010, we have significantly reduced our pesticide use which increases our profits and is better for our health and our environment.

Drissa Coulibaly, BCI Farmer, Mali

### ORGANISATION



IMPLEMENTING PARTNER



STRATEGIC PARTNER



In 2014, BCI's Implementing and Strategic Partners worked with 51,516 farmers organised into **18 Producer Units.** 

29.061 farmers in Mali earned a Better Cotton licence.



Better

 $\mathbf{0}$ 

2.5m people

Cotton is Mali's largest crop

in 2014, due to conditions.



export.

### **5th HARVEST**







production has steadily

Mali is now the 2nd largest cotton producer on the African continent.



### **MALI: results**



# MALI: results



Water (m³/ha)
No water use was reported. Cotton farming in Mal
Profit (per ha)
BCI Farmers
Comparison Farmers
BCI Farmers reported on average 14% higher pro using less overall inputs contributed to this result.

#### Awareness of Child Labour Issues

Child labour is an area of concern in Malian cotton production. All farmers licensed to sell Better Cotton are trained and obligated to understand what constitutes unacceptable and acceptable forms of child work, and the importance of education and ensuring the well-being of children in cotton-producing communities. Efforts were undertaken in Mali to ensure that children remained in school during the harvest season.

50% of BCI Farmers demonstrated an advanced awareness regarding child labour, 41% had a basic awareness and 9% showed a low awareness.

#### SUMMARY OF RESULTS IN MALI BCI FARMERS AGAINST COMPARISON FARMERS

Yield	<b>1</b> 5%
Pesticide Use	▼ 51%
Synthetic Fertiliser Use	▼8%
Organic Fertiliser Use	<b>1</b> 2%
Profit	<b>1</b> 4%





### 5th HARVEST



The results presented here were calculated based on data from 2,774 BCI Farmers and 799 Comparison Farmers. The results shown here represent 100% of BCI Farmers in Mali.

# MOZAMBIQUE



Cotton storage, Mozambique © Better Cotton Initiative

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# MOZAMBIQUE



# MOZAMBIQUE



#### **BETTER COTTON PROJECTS**





#### ORGANISATION

In 2014, BCI's Implementing Partners worked with 77,415 farmers organised into 26 Producer Units. 74,824 farmers from 24 PUs in Mozambique earned a Better Cotton licence.



IMPLEMENTING PARTNERS





STRATEGIC PARTNERS



Better Cotton Initiative www.bettercotton.org



### will become the first country

to make 100% of its cotton production Better Cotton.

The price of cotton in Mozambique declined by 7% from the previous season.

lack of availibility.

IAM has become the first government organisation to adopt the Better Cotton Production Standard as its national cotton system. BCI is delighted by the leadership example the Mozambique government is setting in this field.

Partrick Lane







Synthetic fertilisers are generally not used in Mozambique due to

across Mozambique's cotton-growing regions flooded many planted areas in the 2014 season. BCI Farmers fared well in the conditions, but cotton farming as a whole suffered throughout the country.

### **MOZAMBIQUE:** results

### MOZAMBIQUE



BCI Farmers achieved on average a 57% higher yield than Comparison Farmers. BCI Farmers improved their discipline in implementing farming activities in a timely manner (for example: planting, thinning, weeding, pest management and harvest). They also increased mulching for soil health, adopted rain water conservation techniques and implemented a new monitoring tool to contribute to integrated pest management.



BCI Farmers applied on average 12% more pesticide active ingredient than Comparison Farmers. Pesticides are typically used in very low quantities in Mozambigue, in part due to limited access to all types of agricultural inputs. In some areas, the emergence of a new pest, the cotton mealybug, created a particularly high threat. Many BCI Farmers, thanks to their improved and timely access to inputs and technical advice, were able to control this threat successfully.

#### Fertiliser (kg/ha)

Synthetic fertilisers are not used in Mozambique as they are rarely available in rural cotton-growing areas. BCI Implementing Partners have started introducing the use of fertilisers thanks to improved logistics in selected areas - progress is, however, slow as farmers first need to become familiar with the economic benefit that the optimal use of fertilisers can bring before investing. Efforts to educate farmers through selected trials are underway. Organic fertilisers are also rarely used. Most farmers do not raise cattle or any animal that can provide enough manure to be used in their fields. To improve soil fertility, Implementing Partners are successfully promoting techniques like intercropping and crop rotation using maize, beans and sorghum.

### Water (m<sup>3</sup>/ha) Farmer groups, however, are increasingly using mulching to improve soil water retention. Profit (per ha) BCI Farmers Comparison Farmers

was absorbed by higher incomes due to improved yields.

#### Awareness of Child Labour Issues

The lack of secondary schools in many rural areas of Mozambigue poses a structural challenge to children's schooling, particularly at the high school level. BCI Implementing Partners make efforts to raise awareness in the cotton producing communities, attempting to ensure children attend school. In this first year of measuring awareness about what constitutes unacceptable forms of child labour and what type of help is appropriate on family farms, 13% of BCI Farmers demonstrated an advanced awareness about child labour, nearly half (47%) had a basic awareness and 40% showed low awareness. BCI's partners will continue to prioritise efforts to raise awareness in the coming seasons.

#### SUMMARY OF RESULTS IN MOZAMBIQUE **BCI FARMERS AGAINST COMPARISON FARMERS**

Yield	▲ 57%
Pesticide Use	<b>1</b> 2%
Profit	▲ 65%





•	recu	ltc
•	I C S U	ILS

Cotton is grown as a rain-fed crop in Mozambigue. Farmers do not record water use. Several BCI



The results presented here were calculated based on data from 1,088 BCI Farmers and 337 Comparison Farmers. Some data was excluded from the analysis were no data was available from Comparrison Farmers. Therefore, the results shown here are representative of 17.3% of BCI Farmers in Mozambique.

Angela Anthony is 30 years old and a mother of eight children - six of which are twins.

The Maratane community sees a positive example in my family that they can follow. They see the benefit in adopting the farming practices that we learnt in Better Cotton training.

Land allowances are managed by the government in Mozambique, and starting with just 0.5ha in 2000, as her family grew so did her land. With the help of her husband, she now earns her living farming cotton on 2ha of land in the Maratane community, Cuamba Province.

When JFSsan first approched the Maratane community there was resistance to following new crop management practices. Angela applied the new practices to a third of her land to test the results. That year the village suffered from a drought and poor crops were produced, however, the area used to test new practices was the salvation of the season. This experience served as an example for

her family and for the Maratane community as a whole, and the new practices were adopted in every area of cultivation.

"In the training, I learned about the risks of use and handling pesticides, the danger to pregnant women, nursing women and children. Because of this, no woman or child has contact with pesticides in the Maratane community anymore."

Angela says that in this season the yield was higher than the past season, and that with increased profits she wants to improve the conditions of their house and buy clothes and school materials for their children.





### **SENEGAL**



# **SENEGAL**



#### **BETTER COTTON PROJECTS**



#### **FIRST HARVEST RESULTS**



#### **ORGANISATION**



### STRATEGIC PARTNER



IMPLEMENTING PARTNERS

#### SODEFITEX



Implementing Partner worked with 3,600 farmers organised into 3 Producer Units

www.bettercotton.org

In 2014, BCI's

### confident reporting of a complete data set. We are working with our Implementing Partners: Sodefitex (Société de développement et des fibres textiles du Sénégal) and the FNPC (Fédération Nationale des Producteurs de Cotton du Sénégal) to bring you a full set of accurate results next season. **RESULTS ANALYSIS**

Initial indications show positive results for BCI Farmers. Despite a high pest pressure in the cotton-growing area, farmers have significantly reduced their pesticide use. This is due mainly to the wide adoption of economic threshold spraying methods. We also found that the implementation of soil protection and restoration techniques and increased use of organic manure coming from barns and composters funded by the BCI project helped improve soil fertility in the Better Cotton fields.

2014-2015 was a difficult season for agriculture as a whole throughout Senegal. A deficit of rainfall coupled with a long delay in the onset of the rains caused droughts throughout the country. As a consequence, cotton vields were lower than expected and the production of food crops was insufficient to cover the needs of some farmer communities. Subsidies from the government for agricultural inputs combined with BCI Farmer training helped to bring production costs down and increase profits, despite lower yields.

#### SUSTAINABILITY CHALLENGES

Social standards pose significant challenges in Senegal. A major challenge is keeping all children in school through high school. As part of the BCI project, farmers were educated on the necessity of compulsory education in Senegal and the benefits to their children in attending school. As a result, this season in some PUs the number of children attending school improved. Although, an improvement of BCI Farmers' incomes has been perceived, parents continue to find providing for school supplies and school meals a challenge.

#### **MOVING FORWARDS**

The initial results, although incomplete, indicate that BCI is bringing positive change to the Kolda region. For this reason, BCI partners are committed to continuing and expanding the programme and training more farmers in 2015. With the construction of new barns and biodigestors, as well as intensive training programmes on threshold spraying and decent work principles, farmers are starting to see decreasing production costs while increasing their yields, producing better margins and driving social change.



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This season was the first full year for BCI in Senegal. Capacity to keep and report accurate records of all farm inputs and costs was not sufficiently well developed in the first season to enable



accommodate my family.

Mamoudou Sabaly BCI Farmer, Senegal

# USA





62 2014 HARVEST REPORT 3rd party verification, USA © Better Cotton Initiative

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USA



### USA



#### **BETTER COTTON PROJECTS**



FIRST HARVEST RESULTS



We see this as a great way to stay ahead of the curve, being responsive to changing market expectations and demonstrating our growers' commitment to sustainability and continual improvement.

> Todd Straley, Hart Producers Coop, Gin Manager





In 2014, in response to demand from our brand members, retailers, suppliers and interested farmer groups, we launched a Better Cotton pilot project in the United States.

The US is the third-largest cotton producing country in the world, and its cotton quality is highly prized by the textile industry. Over the last year, we have been working closely with the American cotton industry to establish a US Better Cotton supply chain and take Better Cotton a step closer to becoming a mainstream commodity.

#### RESULTS

In the first year of the pilot project, 21 growers in four states each completed a self-assessment, hosted an on-farm visit by independent, third-party verifiers to confirm they met BCI's criteria for environmental stewardship and working conditions, and reported the results to BCI. All farmers who completed the process are now licensed to sell Better Cotton to participating merchants. These farmers produced a total volume of 12,000MT Better Cotton.

#### SUSTAINABILITY CHALLENGES

The US is a key cotton producing country, leading in technological advancements and innovation. However, whilst American cotton farmers are highly advanced in their production methods, they still face sustainability challenges. Because cotton production in the US is spread over such a large area, the sustainability challenges faced here tend to be regional in nature.



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In many parts of the US cotton belt, farmers are struggling with weeds that have developed resistance to certain herbicides, making it necessary to use different materials and/or herbicide rotations to minimise resistance.

California is in the midst of a multi-year drought, making water for irrigation scarce and costly. In other regions, like West Texas, water tables are falling. These challenges are motivating growers to invest in more efficient irrigation methods. Some BCI Farmers are installing drip irrigation, which can reduce irrigation water needs by up to 50%. One BCI Farmer is also installing a large solar array, which will allow the farm to generate all of its electricity on site.

#### LOOKING AHEAD

The next step for Better Cotton in the US is working to expand supply throughout the country. Drawing on the lessons and feedback from those who participated in 2014, we are adapting our assurance model to the US context and empowering intrested gins, coops and merchants to recruit groups of growers interested in growing Better Cotton.

# BENCHMARKED STANDARDS



Cotton close up, USA © Better Cotton Initiative

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#### WHAT DO WE MEAN BY 'BENCHMARKING'?

Benchmarking (or 'recognition agreement') refers to a process of comparing one organisation's policies and practices with those of similar organisations in the same field. Within the field of sustainability initiatives, it tends to refer to comparing standards systems with a view to identifying gaps between them.

The Better Cotton Standard covers a number of dimensions, both normative (setting and implementing standards) and procedural (how things are done). So for us, the benchmarking process needs to pay careful attention to comparison of standards, but also needs to look further – to the way in which BCI and the entity or initiative in question make decisions, enable improvement of farmer performance, judge compliance, evaluate impact and collect data, finance themselves and track product through the supply chain.

This process is undertaken by an independent, competent third party. The benchmarking exercise needs to provide practical recommendations both to us and to the other entity or initiative so that, where necessary, amendments can be agreed that allow us to recognise an existing standard or programme as delivering Better Cotton: so-called 'one-way recognition'.

#### WHEN IS A BENCHMARKING PROCESS ENTERED?

A benchmarking process is considered if a national standard for sustainable cotton production exists and is publicly available in a country. We initiate a benchmarking process only if a credible Stategic Partner is available in the country and the proposal is in line with our expansion strategy. Benchmarking can be an effective way to mainstream sustainability in cotton production, by building on existing knowledge and activities through meaningful partnerships.

#### WHERE DO WE WORK IN A BENCHMARKED CONTEXT?

2014 saw BCI successfully complete the benchmarking of Australia's nationally-developed cotton standard, myBMP (My Best Management Practice), so that it is now aligned with the Better Cotton Standard. The original BMP programme

began in 1997 before being reviewed and redeveloped in 2006-07, leading to the launch of a new online myBMP system in 2010.

Recognition of the myBMP programme in Australia follows our achievement in 2013 when BCI finalised a benchmarking exercise with ABRAPA (Associação Brasileiro dos Produtores de Algodão). This alignment of ABRAPA's own ABR (Algodão Brasileiro Responsável / Responsible Brazilian Cotton) programme with the Better Cotton Standard led to a large increase in the availability of Better Cotton in the market place.

Complementing this, it's now been two years since benchmarking the 'Cotton made in Africa' (CmiA) and 'Subsaharan Cotton Standard' (SCS) of Aid by Trade Foundation (AbTF) with the Better Cotton Standard. In this case, we have also seen a notable increase in the volume of CmiA and SCS cotton available for sale as Better Cotton to BCI members.

#### **REPORTING ON RESULTS INDICATORS** IN A BENCHMARKING CONTEXT

Reporting on Results Indicators is fully integrated into the Better Cotton requirements to ensure that sustainability improvements are measured everywhere Better Cotton is produced. We also develop results monitoring and data sharing agreements with the other standards and programmes with which we have benchmarking agreements. We believe it's important to harmonise our efforts on a set of common indicators so that our measurement of results and impact in the future can be coherent across cotton sustainability initiatives with which we partner, ultimately working towards a more sustainable sector as a whole.

With this approach, we engage in joint results monitoring and learning with these standards and programmes while allowing them to publicly communicate their results when and how they choose. This is why we only present our global indicators - BCI Farmers, hectares under Better Cotton cultivation and MT lint of Better Cotton - for benchmarked standards in this report. In this report we share the exciting progress made in our partnerships during the 2014 season.



### **AUSTRALIA**







### **AUSTRALIA**



#### **myBMP REGIONS**

JAN



#### FIRST HARVEST RESULTS



Access to future growth markets is of tremendous importance to Australian cotton growers, particularly as they contend with competition from synthetic fibres. Within the global natural fibre market, demand for responsibly grown cotton is growing, and this agreement allows Australian cotton growers to participate more easily in that expanding market. J Adam Kay, Cotton Australia CEO





### AUSTRALIA

Cotton Australia, the leading body for Australia's cotton-growing industry, supports over 1,500 cotton farming families in the states of New South Wales and Queensland.

In 2012, Cotton Australia contacted BCI to begin discussions about producing Better Cotton in the country. This led to Cotton Australia joining BCI as a member organisation, and starting the benchmarking process to align myBMP (the Australian cotton industry's voluntary farm and environmental management system) with the Better Cotton Standard System. We were proud to be able to recognise this through the signing of a formal Strategic Partnership with Cotton Australia in 2014. This partnership means that certified myBMP growers now have the opportunity to increase market awareness of their lint by offering it as Better Cotton.

#### RESULTS

In the first year of our partnership, 22 certified myBMP growers opted-in to the Better Cotton programme, producing 54,000MT of Better Cotton lint that was sold to markets across the world.

#### SUSTAINABILITY CHALLENGES

Due to Australia's harsh climate, water usage is a major sustainability challenge throughout the country. However, Australia's cotton industry is considered one of the most water-efficient in the world. Due to a drought, 2014 was a particularly challenging year for Australian cotton growers. The final area planted was only 50% compared to 2013. Through well-developed agronomic practices, however, growers were able to achieve record yields (of up to 2,953 kg [13 bales]/ha) which provided some degree of compensation.





The Australian cotton industry faces challenges in other areas, including sufficient access to additional pesticides that would improve resistance management options for weeds and insects. Availability is mainly limited due to the relatively small market size and regulatory costs for chemical registration. In 2015, Australia's first 'AgVet Chemical Priority List' was developed and contains 400 cross-industry priorities for key weed, pest and disease challenges that can be addressed through improved access to agricultural (and veterinary) chemicals. The cost of energy and fertiliser is a key concern. Cotton Australia continues to advocate the government regarding electricty pricing whilst the farmers continue to fund research into energy and fertiliser use efficiency.

In relation to the safety of workers on cotton farms, Cotton Australia has recently upgraded this section of the myBMP programme. A series of workshops have been delivered to ensure farmers are up to date and that worker safety is the highest priority on every farm.

#### LOOKING AHEAD

Over the coming year, the newly formed BCI-Cotton Australia Partnership is expected to encourage more Australian growers to get on board with the myBMP programme. This will continue to raise awareness of sustainability issues in Australia and it is anticipated that as this momentum grows, many more Australian growers will opt-in to become part of the Better Cotton Initiative.



Ralph, farm 2,170 hectares in South West Queensland, where 17% of the property is a strict farming and grazing exclusion zone to protect native plants and animals.

Australian cotton producers can be remote om the end-user, and vice-versa. BCI bridges the gap, bringing both ends of the supply chain closer together.



In summer 2015, Barb Grey and her husband, Ralph, became BCI Farmers after participating in Australia's myBMP programme for 25 years. Barb and Ralph began farming in 1979 and as the industry expanded in the 1990's, they and other Australian farmers realised the need to better manage cotton farming practices. Major changes and steady improvements over time have helped transform the way Barb and Ralph produce cotton. Since 1980, Barb and Ralph have reduced chemical sprays from 11 to just one or two per season. They've also improved water use efficiency by 300%.

The myBMP programme and participation in BCI have given Barb and Ralph confidence in their farming practices. The comprehensive suite of guidelines covering all aspects of production allow Barb and Ralph to meet increasing demands for accountability in the textile supply chain.

"It's clear that brands and retailers now demand accountability and traceability in their cotton products, and part of this is delivered by BCI. These businesses seek to be far more informed around the 'how' in the production of Australia's cotton, and want to be reassured of the care and consideration given to the environment and our community," said Barb.

Barb, Ralph and their farm staff are proud to be producing cotton to myBMP and BCI standards. While conserving resources, caring for worker safety and protecting local flora and fauna, Barb and Ralph feel that BCI helps to connect their responsible farming practices to the global supply chain.





www.bettercotton.org



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### **ABR, BRAZIL**



### **ABR, BRAZIL**



#### **ABR REGIONS**



### GROWTH



**C** The ABR certification gives credibility to all we do on the farm. It concerns not only environmental sustainability, but also the social component including security at work. It is an accrediation of all we do for the external market - it's really positive.**)** 

Elaine Lourenco Coordinator of Environmental Managment, Grupo Bom Futuro, Brazil



BCI Better Cotton Initiative Better

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During this fourth year of Better Cotton production in Brazil, BCI's Implementing Partner, ABRAPA (Associação Brasileiro dos Produtores de Algodão), evolve to become a Strategic Partner, taking the lead for Better Cotton in Brazil. This followed the benchmarking of ABRAPA's own standard – ABR (Algodao Brasileiro Responsavel) – with the Better Cotton Standard System through a comprehensive exercise.

ABRAPA, the Brazilian Cotton Growers' Association, was established in 1999 and consists of nine state associations: Abapa (Bahia), Acopar (Paraná), Agopa (Goiás), Amapa (Maranhão), Amipa (Minas Gerais), Ampa (Mato Grosso), Ampasul (Mato Grosso do Sul), Apipa (Piauí) and Appa (São Paulo). Today, ABRAPA represents growers that produce about 99% of Brazil's cotton production mainly on large-scale mechanised farms with the aim of 'assuring and improving the profitability of the cotton sector, while seeking a strategic level of sustainability'. ABRAPA says this will be achieved by 'working together with the public and private sectors in order to foster improvements in production while being socially and environmentally responsible'.

#### RESULTS

In 2014, 190 cotton farmers were licensed to grow Better Cotton, between them growing 768,000MT of Better Cotton lint. Six states are now part of the programme in Brazil, which has led to a dramatic increase in the number of growers participating and a record crop of Better Cotton.





Better Cotton currently accounts for more than 45% of the national cotton crop in Brazil, making Brazil the largest source of Better Cotton globally. The volumes achieved this year provided a major boost to the availability of Better Cotton in the market place and contributed significantly towards exceeding our global production targets.

#### SUSTAINABILITY CHALLENGES

Brazilian cotton is mainly rain-fed, which presented significant challenges for some growers in 2014 due to disruptive weather patterns. In some states, sowing dates had to be shifted significantly, and in many cases the final planted area was considerably reduced, leading to a smaller crop than was anticipated earlier in the season. Such obstacles have been successfully countered by the growers' high levels of expertise, combined with the adoption of developing technologies such as precision agriculture. This has helped to ensure the efficient utilisation of inputs and resultant yields that contribute towards the ongoing sustainability of cotton production in Brazil.

#### LOOKING AHEAD

As brand awareness and demand for Better Cotton increase, so does interest from growers in being part of the programme. We expect that in 2015 growers from an additional state will be enrolled. This will likely lead to a further increase in the number of growers and the volume of Better Cotton being produced in Brazil.

# COTTON MADE IN AFRICA (CmiA) and SMALLHOLDER COTTON STANDARD (SCS)

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### COTTON MADE IN AFRICA



### COTTON MADE IN AFRICA



2014 was the second year of our Strategic Partnership with the Aid by Trade Foundation (ABTF), stewards of the Cotton made in Africa (CmiA) standard. This year, more than 700,000 smallholder farmers produced 346,000 MT of CmiA-BC licensed cotton in 10 major African cotton-producing countries. Having 'benchmarked' against each other, textile companies are now able to buy cotton produced under the CmiA standard and declare it as Better Cotton.

As the partnership grows, so does the global reach of our joint effort. We are proud to report that due to our partnership, an increasing number of cotton companies were able to sell their cotton as CmiA-BC to our respective Members. Uptake of this cotton reached 41,395MT at the end of 2014, a positive trend that we are confident will continue this year as demand for more sustainable cotton grows. See the CmiA section on our website for the updated list of companies offering CmiA-BC.

#### SUSTAINABILITY

There are many different sustainability challenges in the African countries in which we jointly operate. Throughout 2014, we worked closely with ABTF to develop common solutions and approaches, such as:

- » Addressing and ending child labour by sharing training materials.
- » Strengthening pest management by developing new methodology to measure the toxicity ('toxic load') of pesticides. This will be used for results monitoring and most importantly to enable farmers to make better informed decisions on the selection of pesticides as part of integrated pest control methods.







- » Aligning the techniques used to measure results and improving a shared understanding of what it means to achieve impact. Ongoing collaboration on technological solutions for data management and shared learning will help us reach this goal.
- » Making stronger links in the cotton supply chain by improving traceability systems and increasing demand.







#### **Better Cotton Initiative**

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Cotton flower © Better Cotton Initiative



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