

Final Report

**External Final Evaluation of the
Multi Country Sustainable Cotton Programme
implemented by CottonConnect in China, India
and Pakistan**

Submitted by

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November 2017

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Acknowledgements

The evaluators will like to thank C&A Foundation team, CottonConnect team, their partners and the program beneficiaries covered during the evaluation for their valuable support in making this evaluation possible. Everyone has been very open to share their experiences with the evaluation team – the good experiences and opinions as well as the not-so-good ones. Thanks to CottonConnect team for the logistical support and the guidance on local transport which ensured all the field visits as per schedule. A big thanks to the local consultants Shakir Hussain in Pakistan and Dr. Jun Zhao in China for their invaluable support in carrying out the field work and offering local contexts.

Executive Summary

This report presents the results, findings, and conclusions of the final evaluation of the C&A Foundation supported Multi Country Sustainable Cotton Programme implemented by CottonConnect and their local implementing partners in China, India and Pakistan from May 2014 to March 2017. This programme was comprised of several components of which not all were present across all countries. To a large extent, the overall programme can be thought of as several independent projects whose only shared characteristics are that they all have as their overarching goal the promotion of sustainable cotton and that they are all being implemented by CottonConnect and/or their local partners.

Both the C&A Foundation and CottonConnect and the various stand-alone programme components that existed prior to 2014 went through a gradual evolution process. Finally, in 2014, these separate programme interventions and projects were integrated into the current Multi Country Sustainable Cotton Programme. This integration also required a number of gradual adjustments made to accommodate the learning derived from this evolution process. This evolution process is reflected in various programme level changes to provide more realistic estimates of programme outcomes.

This evaluation was conducted using a mix of quantitative and qualitative methods, including quantitative analyses of datasets provided by CottonConnect, various Focus Group Discussions (FGD) conducted with programme component beneficiaries and implementing partner staff members, Key Informant Interviews (KII), and review by the evaluation team of the extensive set of programme documents (~400 separate documents and/or files) provided by the C&A Foundation and/or CottonConnect. The various findings and conclusions drawn from these different approaches have been integrated into this evaluation report.

The overall conclusion from this evaluation is that

- 1) Separately, the individual programme components promoted sustainable cotton with differing levels of success. The measures of success varied from component to component; more quantitative determinations of component outcomes were hampered by the lack of consistency in the logframe of Organic Cotton Farmer Training Program (OCFTP) and lack of an overall programme-level logframe that provided outputs, outcomes, and targets for all the components combined. In such cases proxy variables supported by the available data were defined and used for these purposes.
- 2) In general, those components that worked directly with farmers, i.e., OCFTP, Drip Pool, and Responsible Environment Enhanced Livelihoods (REEL) to Better Cotton Initiative (BCI) Conversion, were largely successful in meeting their objectives. The farmer-oriented components are sustainable in the sense that the REEL to BCI and OCFTP farmers are likely

to continue to follow various practices and sustainable cotton growing methods promoted under these programmes because these actions are in the farmers' economic interests and they are recognized as such.

- 3) The farmers may adapt the learning from these components for their own purpose because both of these components require an ongoing influx of funds to obtain BCI license or organic certification. While in both cases, the programme should emphasize a system to offset the aforementioned costs as well as to encourage the farmers to continue participating in the certification/ licensing. The evaluation team found no evidence of CottonConnect moving towards developing such systems. This failure may also represent lost opportunities to sustain these programme components in their original form.
- 4) By failing to have any integration or overlap of the farmer beneficiary subsets of the different farmer-oriented components (OCFTP, Drip Pool, REEL to BCI), the opportunity to test, determine, and assess the synergistic benefits of presenting interventions from different program components to the same set of farmers was lost. This is a significant missed opportunity, as having at least some group of farmers presented with the interventions from, say OCFTP and REEL to BCI or being given credit to acquire drip systems would have provided clear economic benefits to the beneficiaries as well as suggesting designs for future cotton programs. Prime examples of a possible beneficiary overlaps would be to have offered some of the OCFTP and/or BCI farmers drip irrigation equipment under the Drip Pool component in order to see if this would have increased OCFTP/ BCI farmer yield and/ or net income, and
- 5) Either because of very close relationship between the C&A Foundation and CottonConnect or because some of the current programme components were legacy projects that were folded into the current programme, there appeared lack of adequate management oversight of CottonConnect's implementation of the required Foundation M&E practices and of the overall programme. Although the Foundation periodically brought in experts to try to give a more focused direction to what is admittedly a very complex and ambitious programme, the net result is that CottonConnect failed in some instances to exercise appropriate management oversight over their local partners and also failed to meet many of the requirements set out in the Foundation report “*C&A Foundation Monitoring and Evaluation Minimum Requirements* (September 2014)”.

Examples of such failures include the failure to define *any* measurable indicators for some of the programme components as well as defining only an incomplete and shifting logframe for OCFTP; a complete logframe with SMART indicators should have been defined for *all* programme components from the start of those components, no matter if they were legacy stand-alone projects being implemented by CottonConnect.

In order to apply a consistent set of ratings for the different programme components and their constituent interventions, a set of ratings and their definitions as applied to the different aspects of the programme components was defined by the evaluation team (given in the Table 3.1). Based on the evaluation conducted of these components, the ratings of the different aspects of the programme component aspects is presented in table EX-1, below. The evidence and rationale for these ratings are presented in the relevant sub-sections of Section 3 in the report.

Table EX-1: Programme Component Rating

Component Aspect	Programme Component				
	Drip Pool	Organic Seed Development	REEL to BCI Conversion	Organic Cotton Roundtable	OCFTP
Relevance	Good	Good	Good	Good	Good
Efficiency	Good	Poor	Adequate	Poor	Poor
Effectiveness	Good	Poor	Adequate	Adequate	Good
Results	Good	Poor	Good	n/a	Good
Sustainability	Good	Adequate	Adequate	Poor	Adequate

The overarching programme level recommendation is that, going forward, the Foundation takes the mix of programme successes and failures to heart and ensures that future Foundation activities are designed to guard against the failures experienced here. This would entail the following:

- 1) Limiting the planned interventions to a set that is consistent with the anticipated resources to be put against them.
- 2) Requiring that a complete, approved logframe and programme sustainability plan be defined and developed with all necessary indicators at all logframe levels *before* any programme interventions begin.
- 3) The Foundation scrutinizes all proposal received from prospective bidders to ensure that the proposed human and other resources being bid are commensurate with the quantity and quality of the work to be done.
- 4) The Foundation continues to conduct programme level periodic meetings with the grantees as well as all the sub-grantees in order to review programmatic aspects and encourage cross learning.

Component-level recommendations include

- 1) CottonConnect, in its organic strategy presentation, envisaged “Closing the Gap” by creating the business case for organic cotton farmers through promotion of good agricultural practices, drip irrigation and farmer empowerment. While it has been successful in promoting good agricultural practices, there is still more to do on farmer empowerment and promoting drip irrigation with the organic cotton farmers, which must be the focus going forward.
- 2) A small study should be conducted to ascertain the accuracy and reliability of the sizes of cotton fields to understand the level of error margin in the existing data. Total farm area with a farmer is noted as per the government records. However, cotton area within that total land is recorded only as estimated and reported by the farmers, which is just an approximation and even the third-party certifiers do not accurately measure the cotton area of the sample farmers visited during the audits. Because the *size of the cotton fields* is a parameter that is critical to some of the programme Key Performance Indicators (KPI) such as *yield (kg/ha)*, and *water use (cubic meters of water per hectare of cotton)*, sporadic or systematic inaccuracies in farmers' estimates of field sizes can have a significant effect on conclusions regarding the achievement of KPI target values and cause significant uncertainty in the stability of the results.
- 3) A detailed impact evaluation/ or ex-post performance evaluation of the Drip Pool programme in Gujarat should be done. The drip pool programme, over the years, appears to have generated a wealth of benefits to the programme beneficiaries. Both C&A Foundation and CottonConnect can use the outcomes from this assessment to design similar drip pool support to the OCFTP and BCI cotton farmers in other regions.
- 4) The Foundation should require CottonConnect, as part of the CottonConnect overall exit and closeout activities, to provide a complete, organized archive of all programme reports prepared by themselves and/or their implementing partners, other documents, and data files. Such an archive would be in sharp contrast to the completely unorganized trove of reports made available for this evaluation and would be an invaluable resource for both the Foundation (and CottonConnect) going forward.

Finally, the evaluation team’s overarching recommendation is that the C&A Foundation must design and implement a sustainable exit strategy for the Multi Country Sustainable Cotton Programme. This strategy must take into account the mechanisms for covering programmatic costs (e.g., organic certification/ BCI licensing costs) and for facilitating market linkages of the programme farmers so that they are incentivized for their association with sustainable cotton farming and can continue the same after the project funding is over.

1. Introduction

Cotton, a primary raw material in the multi billion dollar global textile and apparel industry, is an important and heavily traded commodity and touches the lives of millions of people. An estimated 40 million cotton farmers are from the developing countries and account for three quarters of the global cotton production¹. While the conditions in textile factories in developing countries attract much attention, cotton farmers – the key raw material providers to the sector – and their conditions largely go unnoticed. The struggles of cotton farmers are manifold and are only exacerbated by the issues of the cotton sector; including, but not limited to, excessive water use, soil depletion, inappropriate use of fertilizers and pesticides, biodiversity loss, forced labour, child labour, lack of gender equity and high levels of debt due to high input costs.

India, China and Pakistan consecutively hold the first, second and fourth position among the top cotton producing countries in the world and collectively account for around 57% of the global cotton production². Although cotton cultivation provides the much-needed cash income to the farmers in these countries, the conventional methods of cotton cultivation, characterized by these interconnected environmental, social and economic problems, puts heavy stress on resources and threatens to undermine the long-term sustainability of cotton sector in these countries alike.

Believing that the apparel industry has tremendous potential to be a force for the greater good by creating economic opportunities which can uplift lives, strengthen livelihoods and empower millions of people, C&A Foundation initiated programmes to address the challenges faced by sustainable cotton production programmes. Initially the Foundation supported CottonConnect to implement Drip Pool and Organic Seed Development in India in 2010 and Responsible, Environment, Enhanced Livelihoods (REEL) cotton programmes in India and China in 2012. However, realizing that organic cotton represented an incredible opportunity to radically transform cotton industry's impact on the environment and on the cotton farmers' lives, in 2014 the foundation realigned its programmatic support under a unified Multi Country Sustainable Cotton Programme in China, India and Pakistan and engaged CottonConnect to implement the programme.

Through the strategic approach of the Multi Country Sustainable Cotton Programme, CottonConnect aimed at addressing the following ambitions³ –

¹ Report of the Executive Director to the 64th Plenary Meeting of the ICAC, Liverpool, UK, 22-25 September 2005.

² <https://www.statista.com/statistics/263055/cotton-production-worldwide-by-top-countries/>

³ *CottonConnect and C&A Foundation Organic Strategy Development* presentation, 21 March 2014

a) Closing the gap by creating business case for cotton farmers, promoting good agriculture practices, drip irrigation and farmer empowerment, b) Designing the future by bringing innovation to the sector through new seeds, new technologies and gender holistic farm approach, and c) Inspiring the sector by creating belief in the sector and demonstrating that organic has a future and is a ‘new vision for agriculture’.

An overview of various components of the multi country sustainable cotton programme and the field partners is given in the Table 1.1 below.

Table 1.1: Overview of the Multi Country Sustainable Cotton Programme Components

Programme	Project Duration	Interventions	Partner organization & Location
INDIA			
Organic Seed Development	2010-15	Development of organic cotton seed (supporting non-Genetically Modified seed development programs) and seed champions	Center for Sustainable Agriculture (CSA), Maharashtra Pratibha Syntex, Madhya Pradesh Vaagdhara, Rajasthan
Drip Pool Error! Bookmark not defined.	2010-15	Managing revolving loan fund for drip irrigation unit access to smallholder farmers in Gujarat, India Expansion of drip pool with new partners	Aga Khan Rural Support Programme (AKRSP), Gujarat
REEL to BCI (Better Cotton Initiative)	REEL 2012-2015 BCI 2015-17	Helping convert farmers from REEL to BCI standards	OMAX, Gujarat OMAX, Gujarat Puneet Enterprises, Maharashtra
Organic Cotton Roundtable	2014-15	Catalysing the sector through organic roundtables and accelerator platforms	
OCFTP (Organic Cotton Farmer Training Program)	2014-15 2015-16 2016-17 2017-18	Provision of technical support (training and capacity building) to cotton farmers in India on organic farming practices Farmer empowerment to create groups for making collective actions and holding annual farmer convention and farmer fair Development of new technologies for supplementary premium payment to farmers, holistic farm approach and farmer business schools	- Vivekanand Research & Training Institute (VRTI), Gujarat - Mahiti, Gujarat - Pratibha, Madhya Pradesh - Pratibha, Rajasthan - PRERANA, Madhya Pradesh - Sanjeevani Institute for Empowerment & Development (SIED), Maharashtra - Tirupati, Maharashtra
CHINA			
REEL to BCI	REEL 2012-2014 BCI 2014-17	Helping convert farmers from REEL to BCI standards	Xinjiang region Hebei region
Organic Seed Development	2014-17	Development of organic cotton seed (supporting non- Genetically Modified seed development programs) and seed champions	Huafeng Chahete Organic Cotton Processing Plant, Xinjiang
PAKISTAN			
REEL to BCI	REEL 2014-2016 BCI 2016-17	Helping convert farmers from REEL to BCI standards	SAFE, Sindh Lok Sanjh Foundation, Punjab
Organic Trials	2014-15	Organic Trials to pilot conversion of cotton farmers to organic.	Lok Sanjh Foundation, Punjab

Out of the five programme components mentioned above C&A Foundation's support to four components ended in March 2017, only the OCFTP component in India is still being supported until 2018, under a no-cost extension.

It is to be noted that both the C&A Foundation and CottonConnect and the various stand-alone programme components (such as the REEL intervention) that existed prior to 2014 went through a gradual evolution process. Finally, in 2014, these separate programme interventions and projects were integrated into the current Multi Country Sustainable Cotton Programme. This integration also required a number of gradual adjustments made to accommodate the learnings derived from this evolution process. This evolution process is reflected in various programme level changes such as the strategy to transition programme farmers under REEL into BCI licensing, and the need to make changes to the OCFTP logframe indicators and targets to reflect more realistic estimates of programme outcomes.

Similarly, as the C&A Foundation set up a sustainable raw materials team on the ground, the Foundation placed greater emphasis and focus on analysing the individual programme components more closely. This resulted in periodic review meetings with CottonConnect Management and staff, assessments of interim outcomes from the programme data, and the alignment of programme strategy as per field situations (and the resultant adjustments in the programme deliverables). CottonConnect, as the organization responsible for implementing some of the earlier legacy programme components as well as the current, integrated programme, has also seen their staff and programme activities evolve. Starting with a small initial team, they kept on adding further staff capacities to be able to keep pace with the requirements of the programme and provide adequate ground support to their field teams and local implementing partners.

2. Evaluation Design and Methodology

The purpose of this evaluation is to assess full operations of the multi country sustainable cotton programme in China, India and Pakistan implemented by CottonConnect from April 2014 to March 2017 and to evaluate their achievement of stated objectives as well as the appropriateness, effectiveness, efficiency and sustainability of the operations that were employed to meet the program objectives. The Terms of Reference (ToR) for this evaluation specified the criteria of relevance, efficiency, effectiveness, sustainability, learnings derived from this evaluation, and the key questions that this evaluation will address within each evaluation criterion. The evaluation team worked closely with the key stakeholders for this evaluation and restructured the questions into a key evaluation question and a set of secondary evaluation questions. The restructured evaluation questions are presented in the [Annexure 1](#).

The evaluation team used collaborative and participatory methods to conduct the evaluation along with more conventional quantitative analyses. Given the complex nature of diverse programme components under evaluation, the evaluation team used Contribution Analysis⁴ for the overall evaluation. While the primary method for addressing those of the evaluation questions amenable to quantitative analyses involved analyses of the programme datasets, for the remaining components and evaluation questions the evaluation team followed the key steps⁵ in contribution analysis in order to establish the contribution. The evaluation team focused its evaluation approach by a) seeking to triangulate different sources of information on changes in programme outcomes by taking a mixed methods approach to the data collection, and b) limiting the set of contributory factors to those identified by key stakeholders in the analysis and in the literature review.

This evaluation was carried out during July-October 2017. After the initial preparation and inception phases, field visits were carried out during August-September 2017 and data were collected from the local implementing partners of CottonConnect across China, India and Pakistan for all the programme components. The timeline for evaluation and schedule of field visits is given in the [Annexure 2](#).

Purposive sampling of the stakeholders and programme beneficiaries to participate in interviews and Focus Group Discussions (FGDs) was done so as to ensure adequate outreach in terms of programme geographies and range of field implementing partners and get proper and reliable outcomes. The sampling strategies for all the programme components under evaluation are outlined in the [Annexure 3](#).

A list of the documents consulted for this evaluation is given in the [Annexure 4](#). The evaluation team visited a total of 42 villages across China, India and Pakistan for data collection. Table 2.1 below provides the summary of the different data collection instruments for various programme components during the field visits. Detailed list outlining the field visit coverage is given in the [Annexure 5](#).

Table 2.1: Summary of data collection for the evaluation

Programme component	Projects covered	Villages visited	FGDs conducted	Brief interviews	KIIs conducted
OCFTP	8	21	20	28	9
Drip Pool	1	2	2	5	2
REEL to BCI	7	18	11	15	8

⁴ A theory based robust and recognised methodology for establishing contribution that offers a more systematic way to arrive at credible causal claims in the absence of experimental approaches.

⁵ As outlined by *Mayne, John, 2012 – Contribution Analysis: Coming of age? – mentioned in the Inception Report*

Seed Development	2	1	1	2	7
Organic Cotton Roundtable	1	n/a	n/a	n/a	2
Other stakeholders	n/a	n/a	n/a	n/a	11
Total	19	42	34	50	39

A total of 441 programme beneficiaries (farmers) and field members of local implementing partners were covered under 34 FGDs, out of which 30 participants were women. Women participation in FGDs was highest in China (19 women out of total 37 participants in 2 FGDs), low in India (11 women out of total 320 participants in 27 FGDs) and nil in Pakistan (no women out of total 84 participants in 5 FGDs). Out of the 50 brief individual interviews conducted with the programme farmers, only 4 were with women participants – 2 each from China and India.⁶

2.1 Limitations of the evaluation

There were several factors that imposed limitations to this evaluation. Major ones included:

- Several changes made to the log frame and targets for OCFTP component over the course of programme implementation.
- Lack of proper Baseline and/or Endline data for some of the programme components. This precluded the use of ‘before and after’ analyses.
- Lack of robust data and comparison groups for various programme components. This posed methodological limitations and inhibited production of rigorous evidence on impact.

Additionally, due to time and budget limitations, the evaluation team did *not* collect any new raw data on programme farmers. Therefore, the team relied on the farmer-level data contained in data files provided by CottonConnect. The evaluation team did not validate or verify any of these data themselves, and therefore cannot vouch for the integrity or accuracy of these data. *The reader should note that all quantitative results presented in this report were calculated from the raw data provided by the Foundation and CottonConnect and did not in any way rely on calculations or quantitative results presented by either of these organizations.*

3. Key Findings

The Multi Country Sustainable Cotton Programme implemented by CottonConnect in China, India and Pakistan during the years 2014 to 2017 had five distinct components i.e., i) REEL to BCI conversion, ii) Drip Pool, iii) Organic Seed Development, iv) Organic Cotton Farmer Training Programme, and v) Organic Cotton Roundtable. An overview of the key findings from

⁶ While there may be several reasons that so few women participated in the FGDs and interviews, the Evaluation Team relied on the local CottonConnect staff to mobilize the farmers for these events. The Evaluation Team was told that the low participation of women was primarily due to their low infrequent status as the principal cotton farmers in their households.

the evaluation of all the five components is given below. Component-specific answers to the different evaluation questions are presented in the [Annexure 6](#).

In order to apply a consistent set of rankings to the evaluation findings applicable to the different aspects of the programme components, the rankings and their definitions given below in Table 3.1 will be used.

Table 3.1: Ranking system for programme components

Component Aspect	Ranking for the Component and Interventions		
	Poor	Adequate	Good
Relevance	Interventions not relevant to the promotion of sustainable cotton	Some of the interventions promote sustainable cotton	All of the interventions promote sustainable cotton
Efficiency	Insufficient results were achieved for the effort and money expended	Results achieved were commensurate with effort and money expended	Results achieved exceeded expectations for the effort and money expended
Effectiveness	Component beneficiaries do not see any economic or environmental benefit to them in practicing promoted methods	Component beneficiaries see some economic or environmental benefit to them in practicing at least 75% of promoted methods	Component beneficiaries see some economic or environmental benefit to them in practicing all of promoted methods
Results	Achieved KPI values are less than 80% of the target values for at least 75% of the defined KPIs	Achieved KPI values are at least 80% of the target values for at least 75% of the defined KPIs	Achieved KPI values meet or exceed the target values for at least 75% of the defined KPIs
Sustainability	Component interventions unlikely to continue after programme funding ends	Some parts of component interventions are likely to continue after programme funding ends	All interventions and promoted practices are likely to continue after programme funding ends

3.1 Drip Pool

CottonConnect implemented the Drip Pool project with the Aga Khan Rural Support Programme (AKRSP) in Gujarat state of India for a period of five years from 2011 to 2016. The objective of this project was to set up an interest free revolving loan fund to assist cotton farmers in adopting the drip irrigation technique for cotton cultivation. The evaluation covered achievement of programme targets for the period 2014-2015.

3.1.1 Relevance

Cotton is considered to be a thirsty crop. The **Drip Pool component of the Multi Country Sustainable Cotton Programme has been relevant in terms of both cotton production and environment sustainability**. The relevance of this component was therefore judged to be good. In terms of cotton production, drip irrigation requires far less water and, therefore, less consumption of diesel fuel for pumping water than does conventional flood irrigation, provides

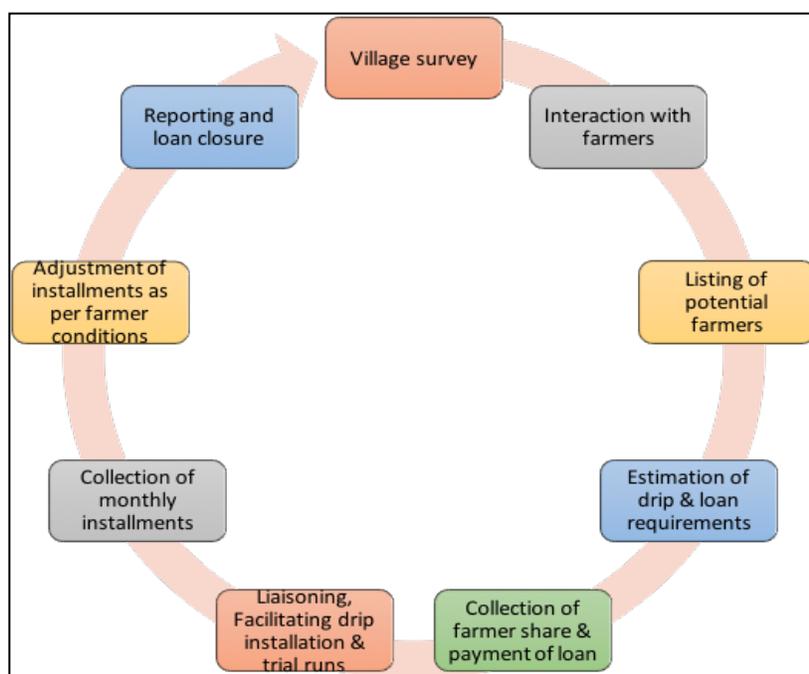
sufficient water to crops at the crucial times and thereby contributes to the productivity. Environmentally speaking, drip irrigation is relevant because it inherently promotes water conservation, reduced soil erosion, and, as a result of reduced pumping, lower level of diesel emissions being released into the atmosphere.

The selection of AKRSP as the partner to co-implement this projects in India had been very appropriate as AKRSP has extensive experience of working with the farming communities over more than 20 years. During this period, AKRSP has worked with over 100,000 farmers on sustainable agriculture. The C&A Foundation programme, through the drip pool fund, facilitated adoption of drip irrigation technique by the small and medium cotton farmers also who otherwise would not have been able to afford this capital-intensive investment despite the government subsidies. The project has done a good job in reaching out to appropriate stakeholders (such as Gujarat Green Revolution Company Limited, the special purpose vehicle set up by Gujarat Government to channelize subsidy for drip irrigation and major companies providing drip system) and also in leveraging their support to ensure timely clearance of government subsidy, installation of drip systems and the resultant programme success.

3.1.2 Efficiency

The project tracked outputs in a very systematic manner. AKRSP had set up proper systems and documentation mechanisms for various steps from the identification of beneficiaries to the recovery of loans, as outlined in the figure 3.1.1 below.

Figure 3.1.1: Various operational stages of the Drip Pool Fund component

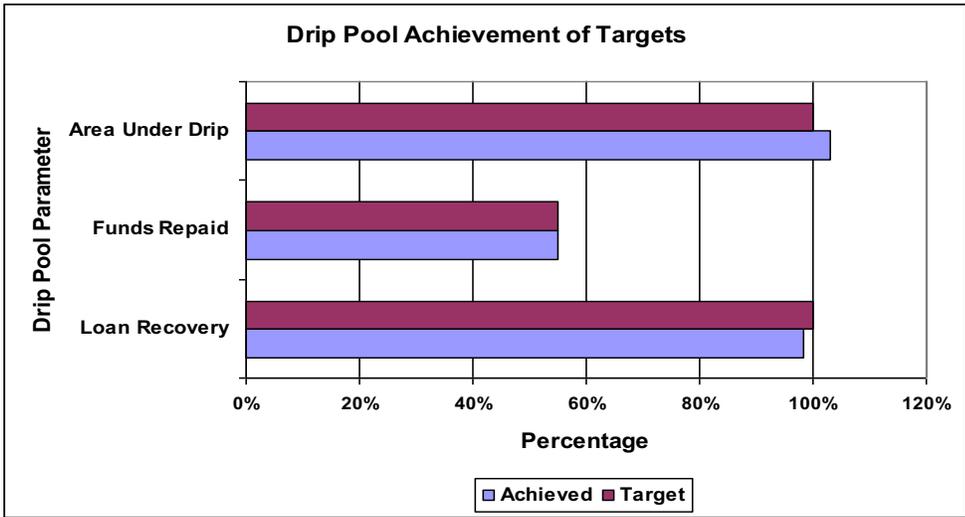


The programme targets included numbers of acres and farmers covered with the drip pool funds, percentage of funds repaid and the level of loan defaults. The small and medium farmers in the programme area for drip pool had reportedly poor credit records with local banks as a result of which lending in that region was considered to be a risky proposition. Given the profile of programme beneficiaries in the project locations, programme targets were a bit difficult to meet. **Nevertheless, the project team has done commendable work and has been successful in achieving the targets within the programme timeframe. Therefore, the efficiency of the Drip Pool component is rated to be Good.** As per AKRSP, CottonConnect played a critical role in helping to set up the project, facilitating the liaison with government agencies, performing quarterly reviews of the programme and setting up external studies⁷ to examine the outcomes.

3.1.3 Effectiveness

The Drip Pool component has been almost completely successful in meeting their targets and objectives. The beneficiary farmers report clear economic and environmental benefits accruing from using drip irrigation. Also, over a period of 5 years, a total area of 2,577 acres was covered under drip irrigation through the drip pool fund as against the target of 2,500 acres. Although the loan recovery, at 98.3%, has been little less than the envisaged 100%, there have been no defaults. Therefore, the **effectiveness** of the Drip Pool component is judged to be **Good**. Payment of the remaining 1.7% of the outstanding loans have been deferred by AKRSP based on the farmers’ economic situation. These results are graphically presented in the Figure 3.3.2 below.

Figure 3.3.2: Overview of Drip Pool targets vs component achievements



⁷ “Impact Analysis of Drip Irrigation Programme under CottonConnect Project” by the students from Institute of Rural Management, Anand.

3.1.4 Results

The drip pool project effectively bundled the benefits of government subsidies with the ease of availing interest and collateral free loans and flexibilities in loan repayments as per the economic situations of individual farmers. As farmers in the Focus Group Discussions (FGD) at village Pipaliyaraj told *“Timely water availability to save the crop has been the biggest benefit of the drip system. Now, besides getting other benefits such as water conservation, reduction in the fertiliser use and labour costs, prevention of soil erosion, high rate of seed germination and the increased yield, we have higher chances of getting the crop (in case of delayed/ less rains)”*.

AKRSP developed the system such that a farmer only had to pay his/ her share of money and make his/ her choice of the company from which (s)he would get the drip system. Everything else (from putting up the application to government under the subsidy scheme to facilitating drip installation and ensuring subsidy adjustments) was taken care of by the project team. AKRSP effectively used various extension activities (such as organizing village level meetings through opinion leaders, conducting exposure trips for potential farmers to the drip beneficiaries and facilitating experience sharing) to highlight these benefits and reached out to even those farmers who, otherwise, would not have installed drip system due to a variety of reasons including lack of funds or the bureaucratic procedures and difficulties involved in availing the government subsidy. As noted above, the targets for this component have been met or exceeded with the exception of one small target deficit of less than 2%. Therefore, the **Results** of this component are judged to be **Good**.

3.1.5 Sustainability

Because the drip pool project has been explicitly cognizant of the beneficiaries’ ability to pay for the drip system and has tailored repayment plans to the farmers’ ability to pay, the evaluation team judges the project to be replicable as well as amenable to increases in scale so long as these considerations are respected. Further, because the drip systems offer clear income benefits to the farmers who have them, these farmers are expected to continue to use these systems for their operational life. Thus, in this sense, the project is considered to be sustainable. AKRSP is currently implementing the drip pool project in the adjoining regions with the aims of achieving higher coverage. AKRSP has also adjusted the programme design to closely involve farmers’ institutions in the project management. **The evaluation found that CottonConnect had made efforts to leverage the outcomes from this project in getting micro finance partners for drip irrigation projects, as envisaged in its grant proposal, but had not been successful.** It conducted meetings with International Finance Corporation (IFC), Industrial Development Bank of India (IDBI), Housing Development Finance Corporation (HDFC) and Rajkot Cooperative Bank but no concrete outcomes could be achieved. Furthermore, CottonConnect also explored

possibilities to replicate the drip pool project in other regions where it is working with the cotton farmers but was not able to work out an operational model.

3.2 Organic Seed Development

As a means to ensure the availability of high quality organic cotton seeds, CottonConnect implemented organic seed development projects in India and China with four partners. An overview of these project partners is given in Table 3.2.1 below.

Table 3.2.1: Overview of field projects for Organic Seed Development

SI	Project partner	Location	Duration
1	Pratibha Syntex Limited (PSL)	Madhya Pradesh, India	2014-2015 ⁸
2	Centre for Sustainable Agriculture (CSA)	Maharashtra, India	2014-2015
3	Vaagdhara	Rajasthan, India	2014-2015
4	Huafeng Chahete Organic Cotton Processing Plant (HOCPP)	Xinjiang, China	2014-2017

The evaluation team made field visits to Pratibha Syntex Limited in India and Huafeng Chahete in China and conducted telephonic interviews with the project managers of CSA and Vaagdhara in India. However, as the projects had ended some time back, the evaluation team faced recall issues during the field visits.

3.2.1 Relevance

The Organic Seed Development component has been relevant in supporting the growth and sustainability of organic cotton production at the farmer, programme, country and the overall industry level. India and China hold the top two positions globally in organic cotton production, and therefore enhancement or facilitation of organic cotton production in these two countries is particularly relevant to the overall C&A Foundation programme goal of promoting sustainable cotton. These projects sought to address non-availability of (non-GM⁹ contaminated) organic seeds, one of the most important challenges organic cotton farmers in both the countries face. The **Relevance** of the Organic Seed Development component is judged to be **Good**.

3.2.2 Efficiency

CottonConnect followed a very systematic approach to work with the partners and to track outputs and outcomes for all the four projects. It meticulously tracked the selection of seed varieties, testing for GM contamination, field trials involving those varieties and their outcomes. **The selection of PSL, CSA and HOCPP as partners to co-implement the organic seed**

⁸ CottonConnect had worked with Pratibha Syntex Ltd. on organic seed development since 2010.

⁹ Genetically Modified

projects in India and China had been appropriate. PSL and HOCPP are vertically integrated suppliers of organic cotton products and have long term interest in ensuring the supply of non-GM contaminated organic cotton. Similarly, CSA also works towards ensuring proper seeds are available for a large number of organic farmers it works with. **However, with no such exposure to cotton as well as lack of organizational intent to work on cotton seed development beyond the project funding, the selection of Vaagdhara for this project had been somewhat less appropriate.**

Numerical targets for the projects were set for the volume of organic seed produced from the projects and, specifically for the project in China, an increase in the yield of selected variety. In addition, envisaged demand for organic seeds produced from the projects was also considered to be a subjective outcome. **Given the scale of operations, the targets had been realistically set and also included provisions for variations due to weather externalities. The project in China exceeded the targets but the projects in India failed to meet the immediate outcomes for the grant year** as the seeds produced at PSL and CSA were lower than the envisaged projections and the crop at Vaagdhara failed due to uncontrolled pest invasion and infiltration by wild animals¹⁰.

All the partners were reportedly satisfied with the quality of CottonConnect’s technical support to the project. However, the evaluation found that **CottonConnect did not use the project outcomes from India to revise this vital project component for organic cotton promotion in India.** CottonConnect, in the “End of Year Report 2014-15”, had mentioned proposing a new model for seed development in India but the evaluation team was unable to find any developments towards it. The Chinese part of this component was successful. However, the selection of an inappropriate partner for the Indian part of this component coupled with the failure of this component in India and CottonConnect’s subsequent apparent failure to revise the Indian part of this component leads to a ranking of the **Efficiency** of the Organic Seed Development component as **Poor**.

3.2.3 Effectiveness

The project results in China have been very encouraging. The identified variety for development, Xinluzao 36, successfully passed non-GM test, while the quantity produced was 13 MT against project target of 3.5 MT. This variety showed yield improvement of 6.5% against envisaged project target of 5% and is in high demand by the organic farmers in HOCPP’s

¹⁰ This experience points out the potentially severe consequences of not doing proper planning in area selection and preparation for these types of occurrences. Pest invasion is a common problem for cotton farmers that could, and should have been anticipated. Also, previous experiences with wild animals in the project area should have been used to better plan this component in these areas.

neighbourhood. **In India, trials with Vaagdhara failed**, reportedly due to uncontrolled pest invasion and infiltration by wild animals, **and only 839 Kg and 472 Kg seeds were produced by PSL and CSA respectively**, mostly owing to the late sowing and poor weather conditions, **which were much lower than the expected outcomes.**

Though CottonConnect engaged with various stakeholders to develop better understanding of the issues in organic seed development it failed to perform as per its intended and stated ambitions. CottonConnect had envisaged¹¹, among other things, coordinating across all existing seed projects, developing distribution networks that can be utilized by all seed projects, developing market models that could be adopted by seed projects, engaging with the for-profit seed sector to build interest and support and carrying forward seed work identified at the Roundtable. However, the evaluation team was unable to find evidences to these works. Because only the Chinese part of this component was successful, and because the Indian part suffered under an inappropriate partner and failed to meet its objectives, the overall **Effectiveness** of the component is rated as **Poor**.

3.2.4 Results

For a research project like this, one year is too short a period to declare any success or failure. Therefore, it will be inconsequential to comment on the results from seed development projects in India. As explained above, the project design for organic seed development in India had not been as methodical as it had been for the initiative in China. There hadn't been a clearly defined long-term outcomes for all the three projects in India. The project in China exceeded its envisaged outcomes only in the third year; in the initial two years, it too was under-performing due to a variety of factors including hostile weather conditions, low germination rates and reduction in the planting area. Even with the relatively short duration of the component, the Chinese part of this project reached and exceeded its desired outcomes, while, as noted, the Indian part was a failure. Given more adequate planning, time and remedial support from CottonConnect, the Indian project might have ultimately reached the desired outcomes and achieved its objectives. Because only the Chinese project can be deemed successful, the **Results** from this component are judged to be **Poor**.

3.2.5 Sustainability

The project in China appears to be self-sustainable. HOCPP is a commercial entity with a long-term interest in sustaining the supply of non-contaminated organic cotton. Good performance of Xinluzao 36 has proved its commercial viability as a result of which, in 2017, HOCCP has expanded its planted area to 10 times than the area planted during the project period, and aims to further increase this area to 40 times the original area in the coming years. Besides,

¹¹ as outlined in the grant document "CA Organic Strategy 21st March revised_LAR Comments.pptx – page 19".

CottonConnect has provided them adequate guidance to conduct farm trials of different seed varieties and HOCCP reportedly intends to carry on with the trials of new varieties and move away from its dependence on only one or two seed varieties.

In India, Vaagdhara is not doing any further work on organic cotton seeds but both PSL and CSA continue to work on organic seed development. PSL has set up a dedicated research station, has gone further into hybridization of organic cotton seeds and has 40 acres area under organic seed trials and production, the produce from which is supplied to its organic cotton farmers. It is interesting to note that PSL does not consider the organic seed development project with CottonConnect to be unsuccessful and attributes that as a stepping stone for their present work in organic seed development. Avinash Karmakar, the head of PSL’s organic division said - *“Initial period with CottonConnect grant were very crucial and helpful for PSL in understanding farm trials as well as in developing traction with farmers on seed development”*. Therefore, **from an overall long term point of view, the work with PSL may also be considered to have been successful but only over an expanded timeline.**

The clear success of the Chinese component and the *anticipated* longer term success of one of the Indian partners for this component lead to an overall rating of its **Sustainability as Adequate.**

3.3 REEL to BCI Conversion

Responsible Environment Enhanced Livelihoods (REEL) is a three-year agricultural training course, delivered by CottonConnect that promotes sustainable cotton farming practices¹². CottonConnect implemented REEL programme with cotton farmers in

- Gujarat and Maharashtra states in India during the year 2012 to 2015
- Hebei and Xinjiang provinces in China during the year 2012 to 2015, and
- Punjab and Sindh provinces in Pakistan during the year 2014 to 2015

In 2015, C&A Foundation decided to convert farmers enrolled under REEL to Better Cotton Initiative (BCI), a much wider industry recognized standard, so that the farmers could get licenses under the Better Cotton Assurance Programme (BCAP)¹³ of BCI and thereby have opportunities for better market access for their sustainable cotton. Accordingly, CottonConnect became the “Implementing Partner” for BCI and provided capacity building support to seven producer units covering a total of 11,019 farmers across China, India and Pakistan, as outlined in Table 3.3.1 below.

¹² Internet at: <http://cottonconnect.org/what-is-reel-cotton-code/>

¹³ BCAP is a critical component in Better Cotton Standard System for measuring continuous improvement for farmers.

Table 3.3.1: Overview of field projects for REEL to BCI Conversion (2015-16 & 2016-17)

India		China		Pakistan	
Producer Unit (Code)	Farmers	Producer Unit(Code)	Farmers	Producer Unit (Code)	Farmers
Puneet Industries (INMH44)	2,158	CottonConnect (CNXJ30)	120	Lok Sanjh Foundation (PKLY01)	1,160
Omax (INGJ30)	2,066	CottonConnect(CNHB06)	2,000	SAFE (PKSK01)	1,053
Omax (INGJ31)	2,462				
Total	6,686		2,120		2,213

Out of the total seven projects, CottonConnect worked with local implementing partners on five projects in India and Pakistan while for the two projects in China it set up its own field teams and managed the Producer Unit (PU) itself. The evaluation covered operations under REEL to BCI conversion during two cotton seasons viz. 2015-16 and 2016-17.

3.3.1 Relevance

The project REEL to BCI conversion has been relevant in promoting the sustainable cotton at the farmer, programme, country and the overall industry level. Associated with the overuse and misuse of pesticides and fertilizers, in general, cotton production in programme countries have had adverse effects on the ecosystem as well as on the health of cotton farmers and their families. Discussions with the project farmers across all three countries revealed that they do not get proper guidance from the agriculture extension services of government agencies. Promotion of sustainable cotton production practices under these projects have been effective instruments to fill this vital gap and have contributed to the restoration of local ecosystem and health of cotton farmers and their communities in all three countries.

Sustainability standards aim to address the challenges associated with conventional cotton production. Being associated with a sustainable cultivation standard provides a powerful tool to connect sustainable farming practices with market demand and the resultant sustainability claims. Both REEL and BCI include sets of practices promoted among the cotton farmers in order for them to achieve sustainable returns on cotton production. For the most part, the farming practices promoted by both REEL and BCI are mainly the same; in fact, in the focus group discussion with farmers, in all the three projects in India, the farmers said they did not see any difference between the two systems. However, industry recognition of both the systems vary. BCI is a much wider recognized industry standard¹⁴ owing to which C&A Foundation

¹⁴ BCI represents the largest share of more sustainable cotton produced globally. In 2015-16, out of the total 2.6 million tonnes sustainable cotton production globally Better Cotton accounted for 2.5 million tonnes produced in 23 countries and out of the top 13 companies using more sustainable cotton 10 were BCI retailers and brand members. <http://bettercotton.org/bci-retailer-and-brand-members-lead-the-way-in-sustainable-cotton-ranking-2017/>

made this transition and stated that “we joined the Better Cotton Initiative and began migrating our REEL programme to Better Cotton to increase the availability of more sustainable alternatives”¹⁵. Thus, **the REEL to BCI conversion has appropriately filled in this important gap to provide more industry credibility to the programme interventions and increased opportunities for better market access to the programme farmers.**

All of the project areas, viz. Xinjinag and Hebei region in China, Gujarat and Maharashtra states in India and Sindh and Punjab region in Pakistan, are the major cotton producing areas and therefore are at the forefront of the challenges associated with cotton production such as rising crop diseases, depleted soil and resultant decrease in the net income of cotton farmers. CottonConnect did not have options to choose program intervention areas afresh. CottonConnect, under this component, only had to facilitate transition of farmers supported under REEL into BCI. However, the evaluation found that CottonConnect should have considered replacing farmers under Morbi district in Gujarat state of India (PU INGJ31). There are a large number of factories in Morbi which employed people from almost every household in the project villages and offered a steady and guaranteed source of income. As a result, farming appears to have become secondary to the people in Morbi. The evaluation found that majority of the farmers in Morbi did not cultivate their lands by themselves and gave them on share cropping to the farm contractors that migrated from other regions. It is highly likely that, with no personal stakes, these share croppers might not have taken sufficient interest in the project activities.

CottonConnect had selected both the local partners in India who are into cotton processing and brought in additional advantage of assurance for cotton purchase from the project farmers, which has been appropriate. Earlier, it implemented both the REEL projects in Gujarat with two Non-Government Organization (NGO) partners. However, based on its analysis of rigorous requirements to co-implement the REEL to BCI conversion projects and to provide the commercial advantage CottonConnect had appropriately replaced both the NGOs with Omax, a commercial entity, in Gujarat to further strengthen the projects. Similarly, **the local partners in Pakistan are established NGOs having deeper outreach with the cotton producing communities which has been helpful in promoting wider adoption of better cotton practices.**

Local partners in India did not have options for the selection of beneficiaries as the project farmers had been enrolled from REEL days (in 2012). In China, CottonConnect had selected project villages in consultation with the county agriculture bureau. It had organized consultation workshops in the identified villages and had shared the objectives, benefits and requirements of the project with farmers. Farmers from the households who had participated in those workshops

¹⁵ Internet at: <http://materialimpacts.c-and-a.com/?id=1828>

and had agreed to comply with the project requirements were enrolled under the project. Similarly, the evaluation found that the partners in Pakistan had also conducted participatory exercises in potential villages to select the beneficiaries. **From the villages visited during the field visits it was apparent that the selection of beneficiaries had been appropriate as per the regional profile**, though there were variations in the individual farmers' socio-economic situations from one country to another. Accordingly, the **Relevance** of this component is rated as **Good**.

CottonConnect had provided required guidance to both the PUs in India for the procurement of Better Cotton from the project farmers. Farmers from the projects in India reported selling their cotton to the local partners as well as to the local traders. CottonConnect reported ~80% gin uptake of Better Cotton from the project in Maharashtra and ~60% gin uptake from the projects in Gujarat. **The evaluation team was not able to ascertain the additional efforts CottonConnect had taken to facilitate marketing linkages for Better Cotton produced from the projects in China and Pakistan.** Farmers from the projects in China and Pakistan had reported selling their cotton only to the local traders/ ginners.

3.3.2 Efficiency

The programme tracked outputs and outcomes for all seven projects in a systematic manner as per the requirements of BCAP, a well-designed system for tracking outputs and outcomes and produces comprehensive datasets for the programmatic evaluations¹⁶. However, **the evaluation team identified some issues in the BCI system. Farmers' estimates of field sizes were never verified by CottonConnect or by BCI** by the use of handheld GPS devices to objectively measure the fields¹⁷. **This is coupled with the very small sample of farmers whose data were more intensely scrutinized** or whose farms were visited (15 farmers per PU) for verification of submitted data. **This means that any of the KPIs dependent on the size of the cotton plot (i.e., yield (kg/ha), water use (m³/ha), or profit (net income/ha) may have estimation errors of unknown magnitudes.**

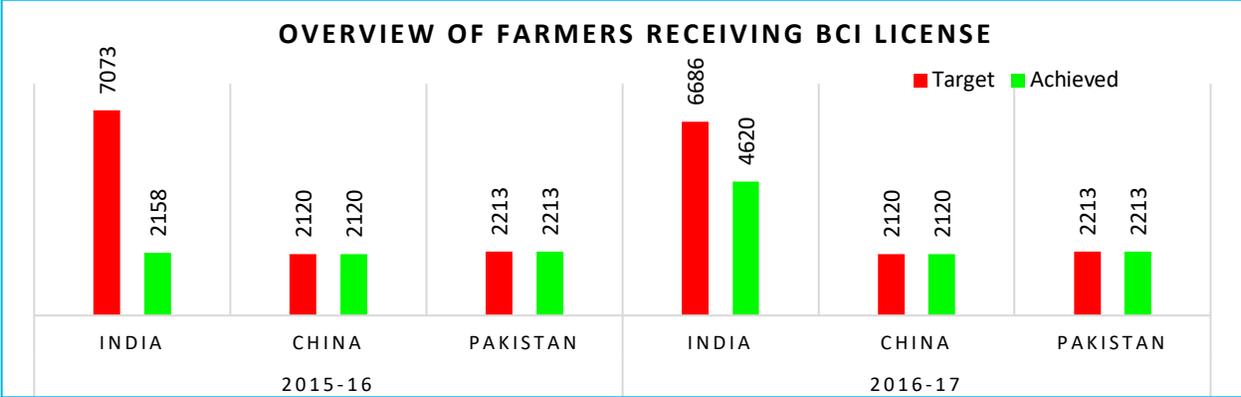
The only numerical target was in regard to the number of BCI farmers that got license and was set at 11,406 under seven projects in 2015-16 and 11,019 farmers in 2016-17, which was realistic. Other outcome indicators associated with this programme component did not have

¹⁶ As per BCAP all the smallholders are organized into Learning Groups at the field level and grouped into PUs. Field observations of all the project farmers are recorded in the Farmer Field Books and within 12 weeks after harvest each PU is required to report on the Results Indicators as per the standard format of BCAP. Sustainability improvements in the project (e.g., pesticide use, water use, fertilizer use, profitability etc.) are measured through these result indicators.

¹⁷ Although the farmers did tell us that the land sizes were as per the government land records, they are simply records of inaccurate information and no better than the farmers' estimates as the farmers agreed that the government records also included non-planted areas such as boundaries, wells or other such provisions on the farm.

numerical targets, only a statement of what was to be measured from the “Result Indicators” submitted to BCI. **The licensing targets for this component of the Multi Country Sustainable Cotton Programme were not fully achieved.** In 2015-16 the overall programme in all three countries has been successful in facilitating BCI license for only 57% of the target farmers under five projects and for 81% of the target farmers under six projects 2016-17. Two PUs in India (INGJ30 and INGJ31) did not receive BCI license in 2015-16 and one of them (INGJ30) was unsuccessful in the season 2016-17 also. An overview of country wise targets and achievements is given in the Figure 3.3.1 below.

Figure 3.3.1: Overview of target achievement under REEL to BCI conversion



BCAP offers a formal means to capture the results in the form of Result Indicator Report (RIR), which were properly prepared across all the seven projects in three countries. However, there appeared visible lack of a formal mechanism in CottonConnect to capture the experiences and lessons from across different projects and share them with its implementing partners. The evaluation team found that even the in-country programmes ran in isolation, the local partners could not recall during the KIIs if CottonConnect ever organized a common meeting with the local partners to discuss experiences and learning from BCI projects.

There were two levels of programme monitoring activities involved in the project, one was the field level monitoring of farmer activities and recording a variety of data in Farmer Field Books (FFB) throughout the cotton growing season by PU team members. These data were ultimately used to provide feedback to the farmers on their compliance with BCI standards as appropriate but they were not used to modify the BCI program structure or the methods which are fixed. The second level involved monitoring of PU activities by CottonConnect, which were undertaken as part of its technical guidance to the PUs. **All the partners were satisfied with the quality of CottonConnect support.** However, local partners from India said that “An increase in the frequency of CottonConnect visits would have been more useful in order to provide more frequent guidance on the methods and suggestions for correcting misapplication or incorrect performance of the BCI methods”. CottonConnect did use the outcomes from their monitoring

activities to revise various components of their technical support, as required. The above considerations lead to an overall rating of the **Efficiency** of the REEL to BCI Conversion component as **Adequate**.

3.3.3 Effectiveness

The BCI programme tracked results in terms of changes in key project indicators viz. Yield, Water use, Pesticide use and Profit per ha. The country level basic indicator statistics for the above parameters, derived from the detailed BCI RIR files for all seven PUs that comprised the REEL to BCI component of this programme, are presented in Table 3.3.2 below. Detailed information on the PU specific quantitative outcomes are given in the [Annexure 7](#).

Table 3.2.2: Average country level values of BCI Key Performance Indicators (KPI)

Country	Farmer Category	Key Performance Indicators									
		Yield (Kg/Ha ¹)		Water Use (Cubic M /Ha ¹)		Total Profit (Local Currency)		Profit per Ha ¹ (Local Currency/Ha ¹)		Pesticide Sprays (Number of Sprayings)	
		2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017
India	BCI Farmer	2428	2231	1820	2592	179752	267387	53360	84441	5.76	3.81
	BCI Lead Farmer	2368	2322	2359	3497	152561	291608	49790	89082	5.68	3.88
	Comparison Farmer	2167	1662	3266	3797	103422	129244	36942	43453	6.17	4.00
	% change (in BCI farmer with Comparison farmer)	12%	34%	-44%	-32%	74%	107%	44%	94%	-7%	-5%
China	BCI Farmer	4083	4352	3256	3374	50848	56037	18738	25098	N/A	N/A
	BCI Lead Farmer	4221	4307	3398	2964	31684	31997	18116	23673	N/A	N/A
	Comparison Farmer	4164	4165	5905	5863	32199	32784	17297	19696	N/A	N/A
	% change in BCI farmer with Comparison farmer	-2%	4%	-45%	-42%	58%	71%	8%	27%	-	-
Pakistan	BCI Farmer	2011	2346	4181	3439	167750	182585	71015	104635	N/A	2.29
	BCI Lead Farmer	2205	2406	2640	3247	216152	245805	92531	111009	N/A	2.16
	Comparison Farmer	1673	2139	5243	4913	66248	67682	74518	63890	N/A	4.34
	% change in BCI farmer with Comparison farmer	20%	10%	-20%	-30%	153%	170%	-5%	64%	-	-47%

As Table 3.3.2 above shows, for the most part there have been positive changes in the values of the KPIs for this component over the performance period. And, in general, the BCI farmers are achieving better results on yearly basis than the Comparison farmers. Therefore, the **Effectiveness** of this component is rated as **Good**.

3.3.4 Results

BCI system (BCAP), with its requirement for farmers to use their FFBs to record cotton growing data meant that a wealth of relevant data was available for analysis by BCI (and the evaluation team) and feedback to the local implementing partners and, ultimately, to the farmers.

BCI's analyses of recorded data and feedback to the implementing partners are key parts of their multi-layered verification system to reinforce proper practices and accountability at all levels. Therefore, farmers were encouraged to follow the promoted practices with the resulting overall positive outcomes.

Both the PUs in China received the “Advanced Level” of BCI license which is given for three years duration and indicates that farmers in the PU are reaching maturity in terms of practising principals and criteria for Better Cotton. The evaluation found that CottonConnect had developed good contacts with local extension, research institutes and hired their cotton experts to deliver trainings which had been very effective as those trainers understood local contexts well.

Similarly, **both the PUs in Pakistan also received the “Advanced Level” of BCI license.** The evaluation found that local partner SAFE had developed better management systems as compared to the systems developed by LSF, the other local partner who was managing the project remotely from its head office in Islamabad.

In India, out of the total three PUs only one PU was successful in receiving the BCI license for both the programme years. Two of the PUs in India were not successful in getting the BCI license in 2015-16 while one of them had failed to get the license again in 2016-17. PUs in India received only one year “Pass Level” of BCI license which is given to the farmers who meet the minimum level of requirements and are found to be at the early stages of improvement.

CottonConnect has a very methodical approach to its technical support to the local partners. It has developed a standard set of operating guidelines that includes three modules for the Training of Trainers and the extension materials, and had provided similar inputs to all the projects across three countries. **Within the limited time, the evaluation team was unable to gauge the reasons for differences in the third-party verification outcomes for India with the same for China and/ or for Pakistan.**

However, **the evaluation found that results for the unsuccessful PUs in India are not primarily a reflection of the efforts and results of the farmers undergoing the conversion or the level and quality of technical support of CottonConnect.** Instead, to a greater extent, this failure was a measure of the inadequate project management capabilities of CottonConnect's local partner Omax. Additionally, the BCI licenses are only given or denied to all farmers in an entire Producer Unit, so the number of farmers receiving this license is really a question of the sizes of the PUs and not a reflection of the number of farmers that successfully mastered the trainings and adopted BCI principles. Thus, the farmers in these PUs might have deserved the BCI license, but the Omax management failures caused them to be withheld. CottonConnect was also aware of the issues with Omax team, and therefore, had made additional provisions a dedicated staff for trainings and more frequent on the ground visits to support them. However, if those issues were not addressed in the second year also CottonConnect should have taken a tougher stance with Omax.

For the REEL to BCI component, farmers that learned and practiced the promoted methods had on average higher cotton yields, lower water usage for cotton, higher profit from cotton cultivation, and sprayed pesticides fewer times than their comparison counterparts. Given the positive nature of all of these results, **practicing the methods promoted by BCI has led to improved outcomes for the farmers, thus encouraging their continued use.**

Even though the Chinese and Pakistani PUs received an advanced BCI license, the two Indian PUs under Omax failed to get even the basic license despite CottonConnect's additional efforts. Therefore, with 3 PUs failing to get their BCI license in two years, the overall **Results** taken as whole are considered to be no more than **Adequate.**

The programme presented an interesting hybrid model between conventional and organic farming, which as per CottonConnect had been a planned legacy from REEL. BCI principles and criteria recommended reduced use of chemical fertilizers and pesticides. However, **utilizing its expertise in organic farming CottonConnect promoted in-house production and use of bio-fertilizers and bio-inputs across all the BCI projects which have also contributed in project farmers achieving higher profitability** (refer Table 3.2).

3.3.5 Sustainability

The evaluation team found that **even after five years of support these projects are not likely to be sustainable.** There are two fundamental issues to the sustainability of these projects – i) the incentives for farmers to follow BCI principles and criteria or for the local partners to continue with BCI licensing, and ii) the strengthening of institutional structures to manage the PUs. Continuation of the farm data collection, analyses, verification, and licensing activities require that funding be provided to the local implementing partners on a continuing basis.

Unless the project implementing agencies are able to gain additional source of funds to bear the costs associated with project implementation, it is not clear how the support to these activities would be available on an ongoing basis. There are the following four possible options for these projects after C&A Foundation support ends

- a) Farmers organizations are strengthened to run the PU through their internal management
- b) Local partners leverage funding from other sources and continue the project
- c) CottonConnect leverages funding from other sources to support the projects, or
- d) The project is discontinued

Ideally, option a) should have been the way forward but ironically **the efforts to strengthen institutional structures of farmers were not visible across any of the seven projects**. The farmers in all the projects were clear that they will continue practising some of the methods promoted under the programme (such as bio-inputs) regardless of any future support from the project implementing partners but it was also clear that **farmers did not have any incentives to record their farming data or making efforts to obtain BCI license on their own**.

Since the C&A Foundation support to this component ended in March 2017, the projects moved on with either of the three options mentioned above. **CottonConnect managed funding from other sources¹⁸ to continue supporting four projects (two in China and one each in India and Pakistan), local partner in Pakistan managed funding from BCI to continue the second project in Pakistan and two projects in India were discontinued¹⁹.**

Because CottonConnect has not been able to work out a mechanism by which farmers will be interested in obtaining BCI license on their own or the PUs will have continuous flow of funds to run these projects it is likely that the farmers will continue to practice the promoted BCI farming methods, as these have clear economic and environmental benefits for the farmers, but the the regular BCI licenses for these farmers are unlikely. For this reason, the **Sustainability** of the REEL to BCI Conversion is only considered to be **Adequate**.

3.4 Organic Cotton Roundtable

CottonConnect, as part of its organic strategy under the Multi Country Sustainable Cotton Programme, aimed at working closely with the C&A Foundation to energize and catalyse the organic cotton sector in India for action and creating a belief in the organic sector by demonstrating that organic has a future and is a “new vision for agriculture”. Accordingly,

¹⁸ IDH

¹⁹ Although the local partner became direct Implementing Partner with BCI and received funding it chose to work with other farmers in the same region and dropped the farmers who were supported with C&A Foundation funding for the past 5 years.

together with the Foundation, CottonConnect organized an Organic Cotton Roundtable in March 2014 as the first step towards its vision to inspire the sector. The objective of this roundtable was to define and develop a number of concrete actions that would be implemented together with various roundtable participants and other actors in the sector and then further built up to achieve the vision for sector. However, as CottonConnect, under the Multi Country Sustainable cotton Programme, was only responsible for organizing the roundtable and there were no separate budgetary allocations to it for further follow up of the action points from the roundtable, the scope of evaluation has been limited, to the extent possible, only to the organization part of the roundtable.

3.4.1 Relevance

The programme component, a roundtable on organic cotton, has been very relevant and timely. By analysing the growth potential as well as various sector-wide constraints for the organic cotton sector, the Foundation and CottonConnect had demonstrated their leadership and forward thinking vision for the sector. CottonConnect had also been very successful in identifying the most appropriate stakeholders to engage on the matter. The Roundtable in March 2014 was attended by more than 170 representatives from across the organic cotton value chain, organic certification bodies, NGOs and government representatives to collaborate and align on what was needed to ensure a successful future for organic cotton in India. The **Relevance** of this Roundtable to the promotion of sustainable cotton is clear and is rated as **Good**.

3.4.2 Efficiency

By taking the lead on the Organic Cotton Roundtable, CottonConnect ventured on a very ambitious path which required dedicated efforts from various stakeholders in the sector to develop partnerships and drive scale towards achieving the vision to inspire the sector.

The roundtable rightly identified a number of crucial action points necessary to carry forward the defined agenda. As an immediate output from the roundtable a multi-stakeholder Organic & Fair Cotton Secretariat (OFCS) was established to further build on the action points emerging from the roundtable through the involvement of key actors from the industry including CottonConnect, C&A Foundation, Textile Exchange, Fairtrade International and bioRe Foundation. C&A Foundation also provided financial resources to appoint an independent consultant to coordinate the OFCS activities.

The evaluation shows that the OFCS lacked proper design, in the absence of which, going forward it could not garner collective efforts of various industry stakeholders and therefore proved to be overambitious to carry out various tasks as identified in the roundtable and

following through on the decisions and actions emanating from it. Consequently, the **efficiency** of this component is rated as **Poor**.

3.4.3 Effectiveness

Setting up of OFCS to ensure that main actors from the sector are aligned around the sustained progress along key action points had been the main result from this component. CottonConnect ensured that most of the action points that emerged from the organic cotton roundtable (such as promotion of good agricultural practices, biomass production, good quality organic seed availability, integrity and issues in organic certification etc.) became integral parts of other components of the Multi Country Sustainable Cotton Programme such as OCFTP and were adequately addressed.

Because CottonConnect ensured the action points identified in the Roundtable were properly addressed in other components of the programme, the **Effectiveness** of this Roundtable is rated as **Adequate**.

3.4.4 Results

The results of this component are somewhat diffuse. Some of the determinations and agreed actions regarding the design and implementation of other programme components were carried out by CottonConnect as part of the Multi Country Sustainable Cotton Programme. However, although these actions were carried out by CottonConnect and/ or their local implementing partners, it is not clear if they were carried out as a normal part of the component planning and interventions or if they were carried out to meet their commitments under the Roundtable agreements. Therefore, the results from the Roundtable can not be categorically ranked as per the evaluation matrix.

3.3.5 Sustainability

There seems to have been a lack of follow-through in implementing the key action points from the roundtable. Consequently, the **Sustainability** of the Organic Cotton Roundtable is rated as **Poor**.

3.5 Organic Cotton Farmers Training Programme²⁰

The Organic Cotton Farmers Training Programme (OCFTP) is the centrepiece and the primary component of the C&A Foundation supported Multi Country Sustainable Cotton Programme. The primary objectives of this component have been - i) effective dissemination of good agricultural practices as the initial building blocks for ensuring increased cotton productivity, ii) farmer empowerment to create farmer groups for collective actions and the promotion of these groups as base for shared services and opportunities, iii) investing in new technologies to promote generation three farming iv) using monitoring and evaluation to drive the programme through learning/ feedback and providing evidence based policy advocacy, and v) developing strategic alliances to drive scale, a community lifecycle model to refine the exit strategy for projects in India and developing organic opportunities in other origins to provide additional sources of organic cotton and also cross market understanding. An overview of programme partners and farmer coverage is given in the Table 3.5.1 below.

Table 3.5.1: Overview of Organic Cotton Farmers Training Programme Coverage²¹

SI	Name of local partner	Location	Farmers covered
1	Shri Vivekanand Research & Training Institute (VRTI)	Gujarat, India	3000
2	Mahiti	Gujarat, India	2500
3	Pratibha Syntex Limited (PSL)	Rajasthan, India	3000
4	Pratibha Syntex Limited (PSL)	Madhya Pradesh, India	4500
5	PRERANA	Madhya Pradesh, India	4500
6	Sanjeevani Institute for Empowerment & Development (SIED)	Maharashtra, India	4500
7	Tirupati	Maharashtra, India	1500
8	Kamalnayan Jamnalan Bajaj Foundation (KJBF)	Maharashtra, India	0
9	Vaagdhara	Rajasthan, India	0
10	Lok Sanjh Foundation (LSF)	Punjab, Pakistan	100

CottonConnect implemented this programme through local partners in the four states of India from 2014, and the programme is still ongoing under a no-cost extension granted by the Foundation. In addition, during 2014-2015 CottonConnect also piloted the conversion of 100 conventional cotton farmers in Pakistan to organic farming in order to further explore potential for up scaling in the country. The evaluation only covered OCFTP implementation during April 2014 to March 2017.

²⁰ Note that this evaluation of the OCFTP component of the C&A Foundation-supported Multi Country Sustainable Cotton Programme has been conducted before the end of this component. Therefore, the results presented below may change as the OCFTP goes through its final program period. Also, because the OCFTP is still ongoing, no Endline survey has been conducted yet; this precludes what would have been a very insightful and useful comparison of Baseline and Endline results.

²¹ Programme was implemented with KJBF, Vaagdhara in India and LSF in Pakistan only during 2014-2015.

3.5.1 Relevance

India is the topmost organic cotton producing country in the world and accounted for 67% of global organic cotton production in 2015, as per the Textile Exchange Organic Cotton Market Report 2016. This report also indicates a drop of 3.8% in the global organic cotton production which was primarily the consequence of a 13.4% reduction in the organic cotton production in India. In this context, **the OCFTP in India, probably the largest organic cotton production programme supported by a single entity, has been very relevant in promoting the organic cotton production in the country.** This programme is a clear manifestation of C&A Foundation’s vision for the sector and directly contributes to its goal of tripling the organic cotton lint production by 2020. **However, although the Relevance of OCFTP is rated as Good, piloting the programme in Pakistan had been a case of too little, too early. The evaluation found that the pilot was undertaken without much preparation, hence failed.**

Organic farming is an entire system requiring conviction, which if not taken personally at the farmer level will yield improper results. The appropriate kind of extension services to develop the proper understanding on organic farming and its advantages, technical guidance and hand holding support throughout the period of conversion to organic, and adequate financial assistance to cover the costs associated with the documentation and certification of organic farmers – especially in the initial years when they experience reduction in the yields, are some of the vital needs which if left unfilled restrain the promotion of organic farming. **OCFTP in India has played a crucial role in filling these vital gaps at the farmer level.**

The OCFTP project initially envisaged working with two local partners in India, one each in Maharashtra and Gujarat states, and covering 20,000 farmers. However, the evaluation found that CottonConnect was not successful in forging partnerships with the intended organizations as a result of which it had to identify other partners and spread out the project to four states. OCFTP involves two commercial agencies (PSL and Tirupati) and four non-commercial agencies (PRERANA, VRTI, Mahiti and SIED) as local partners. CottonConnect had selected these partners by undertaking proper due diligence which demonstrated that the commercial partners had the requisite long term interest in working with cotton farmers while the non-commercial partners had greater outreach with the cotton growing communities to effectively deliver OCFTP requirements. LSF in Pakistan had been selected for the pilot as it was already implementing the REEL project with CottonConnect.

The local partners in India conducted sufficient participatory exercises and identified appropriate beneficiaries for the OCFTP interventions. However, **the evaluation found that the selection of the project area and farmers in Gujarat (by both VRTI and Mahiti) had not been the “most appropriate” as far as the programme objectives are concerned.** The project areas in

Gujarat are near the sea coast and face severe problems of salinity ingress. During the FGDs the farmers from the region informed the evaluator that their farms get water logged and the success chances of their cotton crop were only about 50%. The majority of the farmers had to do the re-sowing after water receded from their farms, and quite often, the farmers had to go for alternate crops if water receded late. In addition, cotton grown in the region is of short staple length whereas most of the organic cotton supply chains demand medium or long staple cotton. Therefore, the evaluation team concludes that CottonConnect did not exercise adequate due diligence, which would have identified all of these issues, before selecting the project areas and organizations operating in those areas as partners. The Team further concludes that **investment in a project which would have concerns over farming constraints, the volume of cotton to be produced, as well as the market demand for the type of cotton produced was not a good decision and did not result in a good value for all the efforts made.**

CottonConnect successfully engaged with a range of stakeholders, such as technical institutes, seed/ input suppliers, certification agencies, testing labs etc., to promote the organic cotton production. From the discussions with various stakeholders it appeared that until the time of evaluation visits no buyers had yet committed to buying the certified organic cotton produced by OCFTP farmers although CottonConnect had initiated dialogues with major organic buyers including C&A, H&M and Carrefour.

3.5.2 Efficiency

CottonConnect had set out very ambitious targets for the OCFTP. In the programme design it aimed at developing the model with 20,000 farmers in 2014 and scaling it up by adding further 50,000 and 70,000 new farmers in 2015 and 2016 respectively without waiting to develop adequate capacity as well as insights on the results from the initial model, which has not been very efficient.

The evaluation team found that the overall programme design for OCFTP was poor. The basis for this assessment is that scale of operations as well as the targets envisaged were unrealistic compared to CottonConnect capacities. Also, the program was spread out in four states and as already pointed out some sites should not have been selected due to environmental conditions and inappropriate quality of the cotton fibre. Further, farm groups once enrolled could not be dropped so some sites had to continue. The result of all of this is that cotton produced in all but two locations is not suitable for the textile supply chain (because of its short staple length).

Further program design issues and unrealistic target values are reflected in the frequent changes and adjustments in the programme log frame. Rather than keeping the logframe a constant set of realistic targets with periodic analyses conducted to determine why targets were

missed, when this was the case, this **logframe was more a case of reducing the indicator targets to meet subsequently determined goals and objectives. C&A Foundation had to curtail the planned programme expansion plans for 2015 and 2016 and also agree to lower the targets for major programme outcomes** such as those for farmer certification and average annual organic seed cotton yield of OCFTP farmers in order to help CottonConnect focus on the outcomes for enrolled farmers. However, **in this process, some of the important and innovative aspects of the project on the farmer empowerment, as envisaged in the original programme design, (such as formation, strengthening and linkages of Self Help Groups (SHG), setting up of Organic Cotton Fund and Micro-finance revolving Pool), were completely dropped which reduced the quality of programme interventions.** A list of these points is given in the [Annexure 8](#).

Similarly, **some of the indicators and their associated targets for OCFTP were not thought out well.** For example, just taking the signatures of farmers to achieve *“100% of enrolled farmers have signed decent work declaration”* is not indicative of any real actions that might have been taken or progress. A much better indicator for this would have been *“the percentage of farmers that meet the conditions prescribed under the decent work declaration.”* **This finding also shows that the Foundation should provide better management oversight to this project component.**

CottonConnect, otherwise, has been Good in setting up proper systems for the project implementation and capturing results and experiences. Both the quality and the frequency of programme monitoring activities were very efficient. However, there were notable mismatches between some of the various indicators and targets set by CottonConnect and the data collected against these indicators. For example, one indicator called for the percentage of farmers using their mobiles to get farm/price information; the collected data only addressed ownership of mobiles before and after the agricultural season (not during the season as would have been more appropriate), and did not address use of the mobiles by the farmers. Another example of this is that one indicator called for the percentage of farmers that had bank accounts and that had previously taken loans from moneylenders; the collected data identified the farmers with bank accounts but did not link this in any way to previous loans they make have obtained or the source of these loans. A final example is that another KPI called for the percentage of farmers that bought cotton seeds from recommended sources; the data reflected the farmers’ seed sources, but did not indicate which of these sources were recommended, thus rendering the indicator value impossible to calculate or assess.

That CottonConnect has been able to develop the capacities of the field teams of local partners to the level they did and also facilitate the field support to achieve very high integrity results and success in organic certification of the farmers is a testimony to its efficient technical support. To

some extent, CottonConnect did use this experience to revise programme components which is adequately reflected in its decision to discontinue two local partners from project implementation after the first year.

CottonConnect has not been efficient in capitalizing on its experience from its other projects to offer further value add to the OCFTP farmers. The evaluation found that promotion of drip irrigation would have been an excellent value added intervention for the organic farmers, especially in Madhya Pradesh. CottonConnect could have piloted a drip pool with Madhya Pradesh counterparts to explore replication possibilities for its excellent experience in Drip Pool project in Gujarat, but they appeared to have been demotivated by their failure to leverage further partnerships for drip promotion in Gujarat and Maharashtra and did not make tangible efforts on the ground for the same in Madhya Pradesh. **Overall, there also appeared visible lack of a formal mechanism in CottonConnect to capture the experiences and lessons from across different projects and share them with its local implementing partners.** The evaluation found that OCFT programmes ran in isolation, the local partners could not recall during the KIIs if CottonConnect ever organized a common meeting with all the OCFTP local partners to discuss experiences and programme learning.

Similarly, **the evaluation found that as a result of the lack of proper guidance and regular programme monitoring activities under the pilot project in Pakistan, the farmers had decided to apply chemical pesticides to secure their crop.** In spite of some of the clear successes of OCFTP, as a consequence of these failures, its **Efficiency** is rated as **Poor**.

3.5.3 Effectiveness

CottonConnect provided Good management oversight of the local implementing partners and provided overall guidance regarding the monitoring and evaluation of OCFT programme which has been adequate in achieving the results as per the revised log frame and revised targets for OCFTP in India. There are several indicators and targets that have been taken from the logframe as per the scope of evaluation finalized with the C&A Foundation and these have been assessed as part of this evaluation. A brief summary of the main results is presented in the Table 3.5.2 below. These results, derived from the Farmer Field Book (FFB) data, are only for the OCFTP farmers without any reference or contrast to the Comparison farmers. A detailed analysis of the applicable available data of these indicators, sub-indicators and their target values are presented in the [Annexure 9](#).

Table 3.5.2: Results of major target parameters as per final OCFTP logframe

Indicator	Target	Result Achieved	Percentage Difference
Number of farmers certified as IC2 or IC3 in 2016-17	16,000	17,155	+7%
2016-17 average yield of 16,000 IC2, IC3 farmers	600 kg/acre	604 kg/acre	+0.6%
2016-17 average gross income for 16,000 organic cotton farmers	INR 24,000 per acre	INR 22,810 per acre	-5%
In 2016-17 organic cotton farmers use at least one water efficiency method	60%-65%	39%	-35%
In 2016-17 enrolled organic farmers use prescribed soil health methods	60%-65%	59%	-1.6%
In 2016-17 the percentage of OCFTP farmers that wear at least one of: masks, gloves, shoes/boots while spraying pesticides	60%-70%	90%	+50%

OCFTP farmers have, over the project period, increased their yield, reduced their cotton farming costs, and raised their net profit per unit of land to the point that it now exceeds that of the Comparison farmers.

The evaluation found that the results for other indicators and, in fact, the indicators *per se* have not been very robust. One of the indicators on farmers’ empowerment has been *active functioning of Village Organic Cotton Committees (VOCCs)* which was to be tracked by the number of meetings organized and % of attendance in these meetings. **However, the evaluation found that these VOCCs and their meetings have been more of a routine information sharing mechanism and have failed to become effective instruments to facilitate farmer empowerment and the resultant collective actions.**

Similarly, because of CottonConnect’s failure to collect the requisite data is in part a reflection of the lack of complete data collection specifications as should have been developed in a complete Programme logframe. While it may have been the case that data collection for the Farmer Field Book was defined and subsequently frozen early in the programme, this is itself an indictment of poor M&E design (in violation of Foundation requirements for the same). These factors jointly resulted in a mismatch between KPIs and the data collected against them as exemplified and is reflected in such situations as indicators and targets such as “*100% of enrolled cotton growing farmers have bought seed from the recommended sources*” contrasted to the collected FFB data which did not indicate which seed sources were recommended as another example, the KPI “*the percentage of farmers who have bank accounts/ loan from the money lenders as compared to baseline*” cannot be effectively assessed due to the lack of linkages in the data between farmers with bank accounts and prior loans. The data needed to actually track and calculate these and a few other indicators were not collected in the FFB data. For a final example, collected data indicated ownership of mobiles but not their usage for agricultural purposes as required by KPI.

The OCFTP interventions focused on different aspects of growing organic cotton so the intervention outcomes are not comparable to one another, but they cumulatively had the synergistic results of supporting the promotion of organic cotton. **The most important outcome has been that OCFTP has been successful in convincing the project farmers that “organic is the future of agriculture.”** The evaluation team found that improvement in the quality of their land has been the foremost reason for farmers to join the OCFTP across all the seven projects in four states of India and **all the farmers covered during the field visits reported having experienced marked improvements in their land and soil quality and were satisfied to have associated with the organic project.** Another major benefit resulting from participation in OCFTP and often mentioned by the farmers, across all the projects in four states, is the significantly reduced cost of inputs for cotton farming; this of course has the direct consequence of raising the farmers’ net income.

Organic Input Centre – an effective model to promote bio-inputs

As part of its technical support CottonConnect has promoted establishment of “Organic Input Centres” in project villages so that the farmers could prepare organic inputs locally and also supply those inputs to organic cotton farmers who either do not have resources or intentions to prepare organic inputs by themselves. Although all the inputs centres visited under OCFTP were found to be very effective and useful to the project farmers, two of them require special mention because of their ability to connect with farmers beyond the OCFT programme. “Jai Ma Kalika Input Centre”, promoted by PRERANA in MP, offers packed bio-inputs to organic as well as conventional cotton farmers in and around their area. The committee running the input centre maintains proper records of its income and expenditure and the operating profits are re-invested to increase the production. Similarly, “*Sri Ganeshay Mahila Input Centre*”, promoted by Tirupati in Maharashtra, is an appropriate capacity building of an existing all women SHG who has taken up the bio-input production under the programme as an income generating activity. The SHG women, with support from Tirupati, reach out to the farmers through the word of mouth and their promotional stalls in various fairs. Since their first production in late 2016 (until the time of visit) these women had sold bio-inputs worth INR45,000 to organic and conventional farmers. They had proper records for the production and sale and the profits are distributed among their 10 members. *“Thanks to this organic project we are not only saving our lands from infertility but are also using our local resources to the best use. We are looking forward to tie up with some companies to supply these bio-inputs so as to increase our outreach”* – said the women in unison.

Due to some of the clear very strong successes of OCFTP in meeting some of its KPI targets, even in spite of consequence of the failures to align data collection with the KPIs, to meet some of the other targets, and to exercise proper oversight of the VOCC empowerment intervention, the **Effectiveness** of OCFTP is rated as **Good**.

3.5.4 Results

Several aspects of CottonConnect’s implementation of OCFTP have all led to the achievement of stated objectives; these aspects include

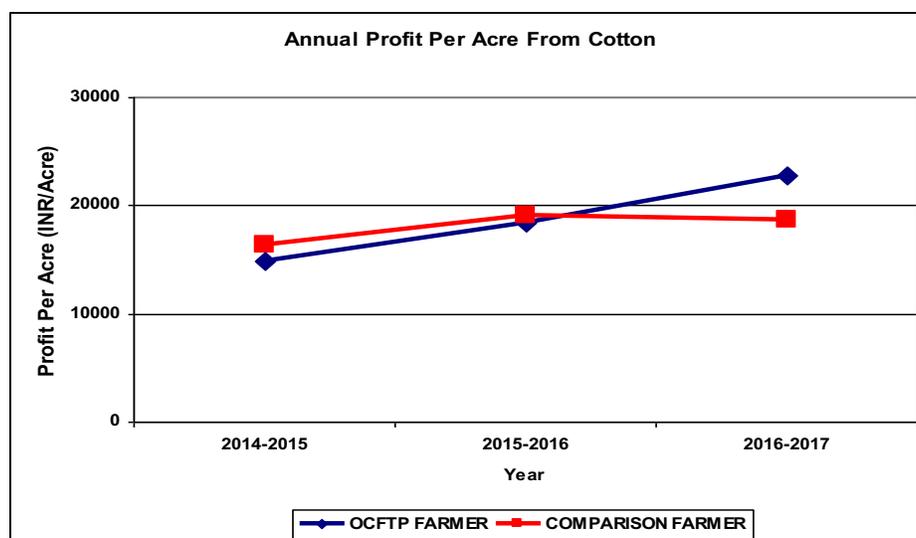
- Overall training of trainers on the methods for growing organic cotton,
- Demonstration plots for organic cotton,
- Regular follow up and on-site support,
- Promotion of soil health practices,
- Promotion of organic inputs and bio-pesticides,
- Focus on soil and seed testing, and
- Promotion of personal protection when spraying pesticides.

These activities were largely successful because the farmers could see that these activities served their own best interests and were not simply being taught with no discernible direct benefits to the farmers themselves.

Perhaps even more important is the contrast between the OCFTP farmers and the Comparison farmers with regard to key parameters of interest. It is generally recognized that organic cotton will have lower yields than conventional or, especially, GM cotton, but that the greatly reduced input costs can still result in higher profits per unit of land under cotton for the organic farmer. This result was realized in the OCFTP.

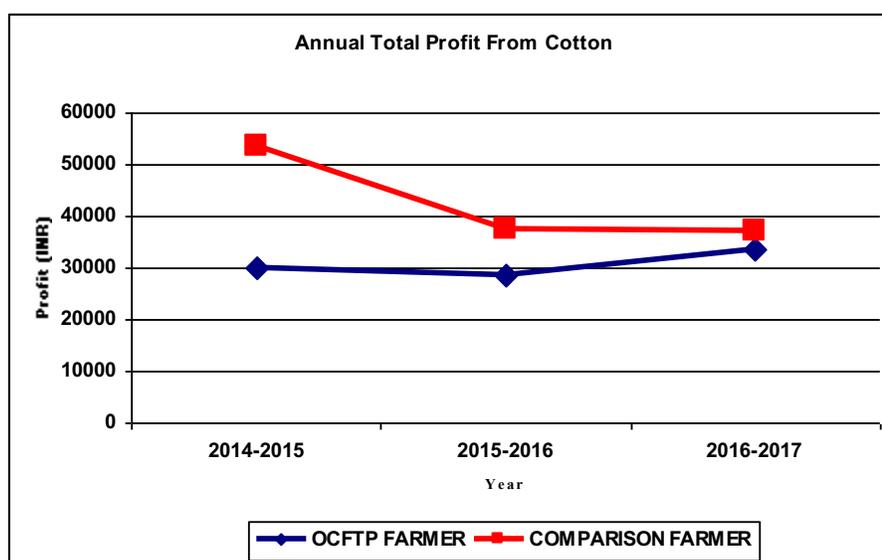
Figure 5.4.1 compares *net profit per acre of cotton* for the OCFTP farmers and the Comparison farmers who were not growing organic cotton. The figure shows that over the OCFTP performance period thus far, the average *net profit per acre* caught up to, and in the 2016-2017 year, exceeded the average net profit per acre of the Comparison farmers.

Figure 5.4.1: Comparison of annual profit per acre of organic vs conventional/GMO cotton



In general, *overall profit* is a function of yield (kg/acre), total cotton production (kg) and the price paid per kg of seed cotton. Therefore, larger size cotton fields can result in higher profit for farmers whose profit per acre is lower when compared to other farmers. However, even when *total annual profit from cotton* is considered, the OCFTP farmers almost caught up to the Comparison farmers even though the average Comparison farmer's size cotton field was larger than the average for the OCFTP farmers (1.86 acres vs 1.57 acres), as shown in Figure 5.4.2.

Figure 5.4.2: Comparison of annual total profit of organic vs conventional/GM cotton



Other key OCFTP indicators concerned *water use efficiency, soil health, and the functioning of the VOCCs*. The promotion of water saving/efficiency methods did not meet its target. It is not clear why the target for this indicator was so badly missed. Given that many of the farmers grow rainfed crops, some of the water savings methods may not have been feasible or cost effective for them. Note that data for many of the indicators and targets were missing so it cannot be determined if some of these specific activities were successful or not.

The target value of the indicator for water use efficiency was: *In 2016-17 60%-65% of the enrolled certified organic cotton farmers will be using any one of the water efficiency practices (rain water harvesting, well recharging, drip irrigation)*. Based on the analysis of the 2016-17 dataset provided by CottonConnect, only 39% of the enrolled OCFTP farmers use one or more of the promoted water efficiency methods. The year-on-year percentages of farmers practicing at least one method are²²:

²² Note that the 2014-15 and 2015-16 results are based on *samples* of the OCFTP farmers for that year while the 2016-17 results are based on *all* OCFTP farmers in that year, so the year-on-year comparisons are somewhat problematic statistically speaking.

- 2014-15: 20% (of 2,037 OCFTP farmers)
- 2015-16: 46% (of 1,783 OCFTP farmers)
- 2016-17: 39% (of 23,000 OCFTP farmers)

The target value for the indicator reflecting soil health was: *In 2016-17 60%-65% of the enrolled certified organic cotton farmers will be using either border crops and/or planting trees around the farm and at least one better soil health practice (mulching, green manure, soil testing).*

In the 2016-17 sustainability dataset, “border crops” and “soil testing” were not included, so this indicator was calculated for 2016-17 as *the percentage of OCFTP farmers that planted trees around the farm and ALSO practiced mulching and/or green manure.* When this indicator was calculated for the 2016-17 dataset, 59% of the OCFTP farmers met this criterion, barely missing the target value for this indicator. Given the earlier data showing planting of border crops, if this method had been included in the 2016-17 dataset, the percentage of farmers meeting the originally stated criteria might well have exceeded the target value.

The OCFT programme yielded an unintended result in terms of the delay in organic certification of programme farmers. The enrolment of farmers for organic certification, which begins at the time of sowing, was missed in the first year of the programme i.e., 2014. That CottonConnect would plan to train farmers on organic cotton farming but not consider their certification and the organic status of the cotton produced from the beginning is a reflection of incomplete program design, as C&A Foundation holds that organic certification of the farmers was not even originally planned by CottonConnect, and was only considered after direction to do so by the Foundation. Though CottonConnect attributes that this lapse was mainly due to the delay in finalization of projects and certification bodies in 2014.

Taken as a whole, the **Results** of the OCFTP component are rated as **Good** in spite of the shortfalls attributable to CottonConnect.

3.5.5 Sustainability

The evaluation found that CottonConnect has not been able to work out proper exit strategy for the OCFT programme which makes it very unsustainable. While the reduction in farming costs (and consequent increase in net income) resulting from adoption of the promoted organic farming practices is a clear benefit to the farmer, as explained earlier (in the section 3.2, REEL to BCI conversion), two fundamental issues, that have not been adequately addressed, negatively impact the sustainability of these projects as originally conceived, viz., i) the lack of market incentives for the certified organic cotton of the project farmers to encourage them follow organic principals, and ii) the strengthening of institutional structures to manage the organic certification and the associated costs. Continuation of the farm data collection, record

keeping, internal inspection and certification activities require that funding be provided to the organic projects on a continuing basis.

The farmers are likely to continue using organic farming methods since these lower the farmers' costs (and hence raise income), but these methods will work just as well with conventional or GM cotton which typically have higher yields than organic cotton. So, unless there is a market incentive for certified organic cotton, it is very likely that farmers apply the farming methods they were taught but use them with non-organic cotton, thereby achieving higher yields coupled with lower input costs. CottonConnect is supporting formation of Farmer Producer Organizations (FPOs) under the OCFT projects with a view that these FPOs would become future custodians of the organic projects and take collective actions. However, dedicated resources for a longer period of time are required to develop strong and independent FPOs, for which no provisioning had been made until the time of evaluation.

Similarly, unless there is a mechanism to recover the costs involved in organizing and certifying organic cotton projects, it is not clear what benefits the local implementing partners will get from OCFTP after the funding ends or why would they voluntarily continue it. The evaluation found that, to some extent, only PSL had purchased cotton from the OCFTP farmers. The commercial partners viz. PSL and Tirupati might be able to fetch better prices for the certified organic cotton produced by their farmers but whether they would be able to sustain the demand for such a large volume (especially PSL with 7,500 farmers in two states as they have their own organic cotton projects with around 9,000 farmers), and thereby continue to run the projects on their own, is also questionable.

Furthermore, unless CottonConnect has a direct, corporate interest in subsidizing the growth and promotion of organic cotton, or in promoting their own corporate involvement in organic and sustainable cotton for self-marketing purposes, or they are able to leverage funding from other sources, it is not clear that they will have any reason to support OCFT programmes once C&A Foundation funding ends.

Because the OCFTP farmers recognize the economic and environmental benefits of the farming practices promoted by the OCFTP, they are expected to continue using these methods. However, in the absence of a market incentive for certified organic cotton produced by these farmers, it might happen that the project farmers will not take the trouble to get organic certification after the Programme funding and support ends. Further, in view of this likely outcome, they may simply apply the promoted practices to growing GM cotton to which these practices are also suited. In view of these considerations, the **Sustainability** of the OCFTP component is rated as barely **Adequate**.

4. Lessons Learned

Various components of the Multi Country Sustainable Cotton Programme offered many lessons that should be replicated elsewhere in C&A Foundation's other projects. The most relevant ones are summarized below.

Drip Pool

- The Drip Pool Programme demonstrated that if approached with a systematic extension service, small and marginal farmers too can adopt capital intensive projects like drip that were previously only considered applicable to economically better off farmers.
- The Drip Pool Programme also showed that with the targeted approach and few modifications, project interventions designed for, and mainly catering to, the large farmers can also engender positive responses from smallholders and offer them good benefits.
- The excellent lending response from the Drip Pool beneficiaries demonstrated that financial models for rural markets can work provided they are designed to acknowledge and respond to the borrower's requirements and repayment capabilities.

Organic Seed Development

- Programmes on organic seed development component indicated that the research projects, like this, required longer periods and greater resources to achieve intended results. Therefore, selection of appropriate programme partners who had long term interest in the project and its outcomes are vital to the programme success, the usual donor driven approach will not achieve long-term results.
- Seed development is a risky proposition; issues in seed germination may pose difficulties for the developing agency. Unless the agency had in-house consumption of seeds it gets difficult to run the seed development project for a niche segment (such as organic) as a profitable enterprise. HOCCP in China benefitted from the seed development project largely because of its own in-house consumption of those seeds while PSL in India shared bearing losses from undertaking the seed development and distribution activities.
- A systematic approach for the seed trials and development coupled with the long-term planning, as followed in the Organic Seed Development project in China, is key to achieving desired results for research projects, such as this.

REEL to BCI Conversion

- The BCI experience showed that systematic, regular collection of key intervention related data coupled with serious review, data analyses, assessment of the results, and corrective feedback to both the implementing partners and the participating farmers is vital to reinforcing the training, to the farmers' following the training, and to achieving positive results.
- The BCI programme showed an interesting learning in terms of engaging commercial partners. The commercial partners will not always bring in the envisaged advantage of assured purchase and will not contribute to the project sustainability if their commercial interests were not aligned well. Although Omax in India became a direct implementing partner of BCI, they did not hesitate in dropping the C&A Foundation supported project farmers, once its funding support was over, to accommodate farmers closer to their ginning factory. Similarly, despite having its own in-house requirements Puneet Enterprises did not purchase cotton from its OCFTP farmers in order to avoid additional charges in transportation from the project areas.

OCFTP

- The programme showed that CottonConnect's model of organizing training of trainers and regular monitoring of field level implementation had been an effective model in promoting programme activities. Developing a programme of specific technical support and capacity building strategy for the local partners as well as for the farmers could have contributed to better results.
- It is important to take corrective actions in the periodic programme reviews and assessments. The OCFT programme in Gujarat presented a decision-making dilemma – whether to continue with both the local partners or not as the projects would rate excellent in terms of organic integrity (only local varieties are successful in the programme region) but would rate lower in terms of cotton production, demand for cotton quality produced and utilization of full range of CottonConnect support services for the production of bio-inputs.
- For a programme with varied components such as this, the beneficiary overlap on some of the farmer-related programme components (OCFTP, REEL to BCI, Drip Pool) might have enhanced the benefits to the farmer beneficiaries in the similar way as promotion of bio inputs and fertilizers contributed to enhanced benefits to the BCI project farmers.
- Emphasis on withdrawal strategy and programme sustainability should be given from the start of the programme.

5. Conclusions & Recommendations

5.1 Conclusions

The overall conclusion from this evaluation is that

- 1) Separately, the individual programme components promoted sustainable cotton with differing levels of success. The measures of success varied from component to component; more quantitative determinations of component outcomes were hampered by the lack of consistency in the logframe of Organic Cotton Farmer Training Program (OCFTP) and lack of an overall programme-level logframe that provided outputs, outcomes, and targets for all the components combined. In such cases proxy variables supported by the available data were defined and used for these purposes.
- 2) In general, those components that worked directly with farmers, i.e., OCFTP, Drip Pool, and REEL to BCI Conversion, were largely successful in meeting their objectives. The farmer-oriented components are sustainable in the sense that the REEL to BCI and OCFTP farmers are likely to continue to follow various practices and sustainable cotton growing methods promoted under these programmes because these actions are in the farmers' economic interests and they are recognized as such.
- 3) The farmers may adapt the learning from these components for their own purpose because both of these components require an ongoing influx of funds to obtain BCI license or organic certification. While in both cases, the programme should emphasize a system to offset the aforementioned costs as well as to encourage the farmers and to continue participating in the certification/ licensing. The evaluation team found no evidence of CottonConnect moving towards developing such systems. This failure may also represent lost opportunities to sustain these programme components in their original form.
- 4) The Drip Pool component will not be further sustainable unless a more permanent source of loans for smallholder farmers to use for drip irrigation equipment is made available. The farmers that have purchased drip equipment are certainly expected to continue to use this equipment, but large numbers of additional small farmers will likely not be able to obtain drip equipment without loans.
- 5) The Organic Seed Development component also achieved its targets, but the true value of this component lies in having a large enough pool of organic cotton farmers to take advantage of the increased availability and to buy the increased quantity of organic seeds produced under this initiative. As of yet, this result has not been achieved and so the value and sustainability of this component cannot be fully assessed at this time.

- 6) The Organic Cotton Roundtable is also not amenable to a complete evaluation because, while the Roundtable energized the participants in support of organic cotton, there were no sustained actions from the industry stakeholders. Therefore, the compliance of these Roundtable participants with the actions they agreed to take cannot be ascertained at this time.
- 7) By failing to have any integration or overlap of the farmer beneficiary subsets of the different farmer-oriented components (OCFTP, Drip Pool, REEL to BCI), the opportunity to test, determine, and assess the synergistic benefits of presenting interventions from different program components to the same set of farmers was lost. This is a significant missed opportunity, as having at least some group of farmers presented with the interventions from, say OCFTP and REEL to BCI or being given credit to acquire drip systems would have provided clear economic benefits to the beneficiaries as well as suggesting designs for future cotton programs. Prime examples of a possible beneficiary overlaps would be to have offered some of the OCFTP and/or BCI farmers drip irrigation equipment under the Drip Pool component in order to see if this would have increased OCFTP/ BCI farmer yield and/or net income, and
- 8) Either because of very close relationship between the C&A Foundation and CottonConnect or because some of the current programme components were legacy projects that were folded into the current programme, there appeared lack of adequate management oversight of CottonConnect's implementation of the required Foundation M&E practices and of the overall programme. Although the Foundation periodically brought in experts to try to give a more focused direction to what is admittedly a very complex and ambitious programme, the net result is that CottonConnect failed in some instances to exercise appropriate management oversight over their local partners and also failed to meet many of the requirements set out in the Foundation report "*C&A Foundation Monitoring and Evaluation Minimum Requirements* (September 2014)".

Examples of such failures include the failure to define measurable indicators for some of the programme components as well as defining only an incomplete and shifting logframe for OCFTP; a complete logframe with SMART indicators should have been defined for *all* programme components from the start of those components, no matter if they were legacy stand-alone projects being implemented by CottonConnect.

5.2 Recommendations

The overarching programme level recommendation is that, going forward, the Foundation takes the mix of programme successes and failures to heart and ensures that future Foundation

activities are designed to guard against the failures experienced here. This would entail the following:

- 1) Limiting the planned interventions to a set that is consistent with the anticipated resources to be put against them.
- 2) Requiring that a complete, approved logframe and programme sustainability plan be defined and developed with all necessary indicators at all logframe levels *before* any programme interventions begin.
- 3) The Foundation scrutinizes all proposal received from prospective bidders to ensure that the proposed human and other resources being bid are commensurate with the quantity and quality of the work to be done.
- 4) The Foundation conducts programme level periodic meetings with the grantees as well as all the sub-grantees in order to review programmatic aspects and encourage cross learnings.

Programme component-level recommendations include

- 1) For both OCFTP and REEL to BCI conversion and for any future project or programme component that relies on estimates of cotton field sizes for the calculation of KPIs, a small study should be conducted to ascertain the accuracy and reliability of the sizes of cotton fields to understand the level of error margin in the existing data. Total farm area with a farmer is noted as per the government records. However, cotton area within that total land is recorded only as estimated and reported by the farmers, which is just an approximation and even the third-party certifiers do not accurately measure the cotton area of the sample farmers visited during the audits. Because the *size of the cotton fields* is a parameter that is critical to some of the programme Key Performance Indicators (KPI) such as *yield (kg/ha)*, and *water use (cubic meters of water per hectare of cotton)*, sporadic or systematic inaccuracies in farmers' estimates of field sizes can have a significant effect on conclusions regarding the achievement of KPI target values and cause significant uncertainty in the stability of results.
- 2) Again, for both OCFTP and BCI or for any future projects or programme components that may require regular investments (in terms of license or certification costs), greater advance efforts should be made to develop mechanisms by which these costs are adequately provisioned to encourage programme continuity.
- 3) Some of the partners felt that instead of spending money on pamphlets/ leaflets CottonConnect should prepare specific practice wise short videos which can be shown to the farmers as well as shared on mobiles, and would be more effective, and can be tried.
- 4) The focus in OCFTP should be on *net income per acre* rather than on *net income* as was the case. Consideration of *net income* rather than *net income per acre* is ambiguous, a farmer

could simply begin farming more cotton land and his/her total net income from cotton would increase without any improvement in farming methods – and maybe even with lower yield. This resulting increase in total net income would be ambiguous because it would not be clear to what it was due. Using *net income per acre of cotton* removes any such ambiguity.

- 5) CottonConnect, in its organic strategy presentation, envisaged “Closing the Gap” by creating the business case for organic cotton farmers through promotion of good agricultural practices, drip irrigation and farmer empowerment. While it has been successful in promoting good agricultural practices, there is still more to do on farmer empowerment and promoting drip irrigation with the organic cotton farmers, which must be the focus now.
- 6) For programme components such as the Organic Cotton Roundtable that bring together a disparate set of participants, many of which are not contractually bound to the Foundation, a structure to better monitor the compliance of all participants with their agreed actions should be put in place. At this point, the extent to which some of the Roundtable participants followed through on the commitments they made at the Roundtable is unknown, thus significantly diluting the perceived success of the Roundtable.
- 7) The Evaluation Team also recommends that a detailed impact evaluation / or ex-post performance evaluation of the Drip Pool programme in Gujarat be conducted. The drip pool programme, over the years, appears to have generated a wealth of benefits to the programme beneficiaries. Both C&A Foundation and CottonConnect can use the outcomes from this assessment to design similar drip pool support to the OCFTP and BCI cotton farmers in other regions and to other, new farmers in future projects or programmes.
- 8) The Foundation should require CottonConnect, as part of the CottonConnect overall exit and closeout activities, to provide a complete, organized archive of all programme reports prepared by themselves and/or their implementing partners, other documents, and data files. Such an archive would be in sharp contrast to the completely unorganized trove of reports made available for this evaluation and would be an invaluable resource for both the Foundation (and CottonConnect) going forward.

Finally, the evaluation team’s overarching recommendation is that the C&A Foundation must design and implement a sustainable exit strategy for the Multi Country Sustainable Cotton Programme. This strategy must take into account the mechanisms for covering programmatic costs (e.g., organic certification/ BCI licensing costs) and for facilitating market linkages of the programme farmers so that they are incentivized for their association with sustainable cotton farming and can continue the same after the project funding is over.