



## Rare's Revised Management Response to the External Evaluation of “Accelerating Organic Cotton in China by Replicating Behavioral Change”

### Introduction - Context, background and findings (overarching narrative)

Rare takes this opportunity to sincerely thank C&A Foundation for supporting its work in China and the willingness to take risks. The role of a foundation and philanthropy is to explore new paths, test innovative approaches, and be willing to shift with learning – with the ultimate goal of social and environmental impacts. Rare is proud to have partnered with C&A Foundation on this project and together we have made great progress. We have learned a great deal about growing organic cotton, and there is much left to learn.

Rare welcomes C&A Foundation's transparent evaluation process. That said, the timing between July and September 2018 was not an ideal time to conduct the evaluation because it was mid-way through the third growing season. At that time, that year's harvest had not been completed, yield and cost data were not available, and cotton purchases had not been finalized. Now that the 2018 harvest is completed, Rare is in a better position to articulate the progress made and are submitting this REVISED management response for your kind consideration.

As of now, we continue to disagree with many of the characterizations of the evaluation report (which we believe were based on insufficient data and context of the evaluators), or many of the conclusions. We appreciate the opportunity to incorporate our feedback into the C&A Foundation's evaluation. Thanks to C&A Foundation's commitment and investment, Rare has done much to create new energy in service of organic cotton in China and is now widely recognized as the expert in the country on this topic.

Below are specific responses to particular points in the evaluation:

#### 1. *Target setting:*

- The evaluation is overly focused on the original targets of the grant, which were officially revised on August 17, 2016. C&A Foundation's new team determined that the project would be more productive and more successful with these mutually-agreed upon revised targets.
- The pilot project started in 2015 in the traditional cotton growing area of Hubei province because there was an interested partner with an existing cotton site with high biodiversity value threatened by agricultural runoff. Hubei was the best location choice given the short timeline available to search for a pilot site and to convince partners to transition towards organic growing methods. However, in July 2016, Hubei province was hit by catastrophic flooding. Twelve thousand farmers were evacuated, and our sites were completely flooded, decimating the crops. In addition, working with small-scale farmers brings additional challenges including small plot size,



complicated access to market, and risk-aversion that precipitates a rapid reversion to using chemicals at the first sign of pest infestation. A small-scale farmer simply cannot bear the potential of yield declines associated with the three-year transition process required to convert from conventional to organic.

After two years of focusing on smallholder cotton farmers, Rare expanded to Xinjiang province, the major cotton growing region in China. Here the previously envisioned hub-and-spoke approach is less applicable due to the large distance between the farms and the need and use of farm labor is negligible due to mechanization. In Xinjiang, the farms are mostly centrally managed, and farmers are hired and paid according to the acreage of land managed. Therefore, in this situation a more direct approach was used where Rare trained the farm management and farmers of each farm. Expanding in Xinjiang is not an easy or straightforward task due to the political sensitivity, and time is required to invest in building trust and relationships with local partners. Additionally, securing purchase agreements for organic cotton was more difficult than expected due to the higher price of cotton in China compared to India. Therefore, we revised the targets downwards to adjust to these realities, which C&A Foundation approved.

- We believe that the evaluation should have focused far more on the mutually agreed upon revised targets, rather than on those that were originally set and which both parties viewed to be unrealistic without pre-purchase agreements, price premiums and a stronger involvement from brands. We have made significant progress with regard to the revised targets below, progress that we intend to build upon.

### Performance Indicators

	KPIs (2018-19)	Actual (Average across different farm partners)
Number of hubs	7	6
Certified/IC Farmers	457	266
Land certified organic (acre)	3,295	3,055
Cotton area – certified (acre)	811	829

Cotton Lint certified/IC (MT)	481	346 <sup>1</sup>
Seed cotton yield (against conventional in Xinjiang)	Y1: -14% Y2: -10%	Y1: -11%* Y2: -24%*
Cost increase (against conventional in Xinjiang)	Y1: 13% Y2: 0%	Y1: 4% Y2: -4%

\*Overall, the farm partners in Xinjiang, especially the ones in their first year of transition, are satisfied with their progress. The yield and cost of in transition and conventional Extra Long Staple cotton at Jintian were within a 5% difference - cost of RMB1,984 per mu vs. RMB1,872 per mu for conventional, yield of 249 kg per mu vs. 260 kg per mu for conventional<sup>2</sup>. For their rotation crop, excitingly, Jintian saw higher yields using organic cultivation methods - 674 kg per mu compared to 636 kg per mu for conventional rice<sup>2</sup>. Unfortunately, in Zhongliang, their crop was affected by severe windstorms during the sowing period which blew away and damaged the cotton seedlings.

## 2. Initial strategy and pivots:

### Relevance

- Rare’s initial program objective was to promote sustainable behaviour change through Rare’s Pride methodology to accelerate farmer and government buy-in, improve attitudes towards organic methods, and willingness to adopt new, sustainable behaviours. According to the evaluators, the proposed behavioural change approaches were not relevant to the operating context, on the basis that hired farmers paid to work will only do what they are asked to do. Rare does not wholly agree with this statement. We believe that proposed behavioural change approaches are still relevant, even for hired labour. Most large commercial farms in China rely on hired (often migrant) labour. Individual farmers, even when they are hired, have different levels of commitment to the work to which they are assigned. Those who understand the reason and benefit of their assignment and are passionate about it, perform much better than those who do not. In working with commercial farms, Rare adapted its behaviour change approach to suit different circumstances, where the objective was to also engage the wider community in understanding the many benefits of practicing organic including to their own health and well-being. While it is true that some farms did not want an engaged and informed workforce and thus steadfastly

<sup>1</sup> Due to lower yield and ginning rate for Extra Long Staple cotton

<sup>2</sup> Source: based on farm data and records



refused to engage in any community mobilization, other farm managers saw community engagement as an opportunity to ensure higher farmer retention because farmers felt more respected and took pride in what they were doing. In Jintian, one of Rare's farm partners, Rare co-organized community engagement activities with Jintian's management for the locally hired Uyghur farmers including festivals, movie screenings, and kids' activities where information about organic farming were shared so that farmers could learn and have fun at the same time. As a result, in the post-harvest survey conducted in December 2018, Jintian's farm management shared that:

*“The activities we used to do were very simple. We just brought everyone together and did not integrate organic education into the activities. Rare's activities are creative and the farmers love them. The farmers are more cohesive now and everyone is more motivated to work. The relationship between the Uighur farmers and the farm management is also closer. They often joke with me. We are like a family. The farmers like to learn more and communicate about organic. The enthusiasm for learning organic agriculture has increased.”*

The improvement in the knowledge, attitude and practices (KAP) of the farmers in Jintian pre-sowing and post-harvest are highlighted below:<sup>3</sup>

- The percentage of farmers having a positive attitude towards organic farming increased from 15% to 67%;
- The percentage of farmers believing in the efficiency of composting increased from 4% to 93%;

The farm management also shared that they are willing to bear part of the cost of such activities in the future and dedicate more personnel to this matter. In comparison, Lutai, which is another one of Rare's farm partners located near Jintian, did not conduct community engagement activities and shared the following reflection:

*“We are in collaboration with Rare for the first year in 2018 but did not conduct community engagement activities in our organic farming project this year. Overall, the project went well, but we also noticed that the farmers did not have a good understanding of organic farming and did not fully accept organic farming from the bottom of their hearts. Although they follow the instructions from the technicians, the quality is not as high as we expected. In fact, even some staff from the management team have the same problem. We also visited our neighbouring farm, Jintian, which is Rare's farm partner and they have conducted a number of community*

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<sup>3</sup> Source: based on pre-sowing survey conducted at Jintian in February 2018 with 80 farmers and post-harvest survey conducted in December 2018 with 50 farmers



*engagement activities throughout the year. The farmers at Jintian are more committed and interested in organic farming and their output is better than us. After discussing with our management team, we would like to invite Rare to help us with community engagement activities next year and have factored this into our 2019 budget.”*

This represents a significant change in the attitude of Lutai’s farm management since the beginning of the year when they were very reluctant to engage farmers in organic farming.

In Zhongliang, where Rare’s farm partner works closely with smallholder farmers, Rare’s social marketing approach was used to mobilize the local community to understand organic practices and how they could benefit from them. The following table shows the results in changes in Knowledge, Attitude, and Interpersonal Communication from 2017 to 2018.<sup>4</sup> The following year, Zhongliang increased the amount of land in-transition by 85%.<sup>5</sup>

	<b>BASELINE n = 36</b>	<b>ACHIEVED n = 24</b>
<b>BEHAVIOR/ EXPOSURE</b>		
Reported trying one or more organic methods learned from a farm visit, such as organic pest control and/or soil improvement techniques	0%	25%
Reported signing up to cultivate organic crops including cotton	6%	29%
Reported visiting the demonstration plot at least once	0%	63%
Reported participating in at least 2 project activities	0%	42%
<b>KNOWLEDGE</b>		
Can define organic farming	25%	83%
Understand the harmful effect of conventional farming on the soils, health and food safety	90%	88%
Knows of the program’s activities including the 2 demonstration plots	0%	83%

<sup>4</sup> Source: based on pre-sowing survey conducted at Zhongliang in February 2017 with 36 farmers and post-harvest survey conducted in January 2018 with 24 farmers

<sup>5</sup> Source: based on the total amount of land certified at Zhongliang, 347.5 mu in 2017 and 648 mu in 2018

Knows how many years it takes to transition from conventional to organic	4%	38%
<b>ATTITUDE</b>		
Has a positive attitude towards organic farming	14%	46%
Is excited to participate in the project activities	0%	63%
Believes that the demonstration plots illustrate a new, viable approach to farming	0%	33%
<b>INTERPERSONAL COMMUNICATION</b>		
Have discussed the difference between organic farming and conventional farming with their peers	0%	63%
Have discussed the benefits of organic farming with their peers	0%	54%
Have discussed the farming techniques used on the two demonstration plots	0%	29%

As a result of Rare’s efforts in collaborating with Zhongliang, Organic Cotton Awareness, a local Chinese brand signed a multi-year purchase agreement with this farm and agreed to include a Community Fund (RMB 100,000 in total) as part of the contract to contribute to the community welfare.

That said, Rare’s work in community outreach was impeded by a lack of a dedicated, local campaign manager. In over 300 campaigns implemented in 57 countries, Rare has worked (and trained) a campaign manager from our local partners. Whether it was due to a lack of human resources or a reticence in engaging in community mobilization in the politicized world of Xinjiang, no partner was willing to allocate (or pay for) a full-time campaign manager. This meant that many activities and materials typically associated with a Rare behaviour change campaign were often lacking. Rare worked to address this by using its own staff and empowering others such as farmers and farm management but we acknowledge that some aspects of the campaign were less successful than we would have anticipated (see section below on operating in China).

The evaluator also mentioned that there was insufficient initial understanding of value chain coordination. We respectfully disagree. Rare worked tirelessly to try (perhaps for the first time) to coordinate the upstream and downstream actors in the organic value chain in China. Value chain coordination starts from helping brands trace their supply chain and finding like-minded supply chain partners. To facilitate market linkage, brands first need to trace their supply chain up to tier three (spinning) and then connect to a



ginners. The reality is that most brands have not yet achieved this level of traceability and it takes time for them to do so. Engaging brands' existing supply chain partners is also very important so that these suppliers understand the “why” and “what” it takes to truly support organic cotton. Rare has engaged close to 30 local and international brands, as well as their suppliers through meetings, trainings, trade expos, organic fairs, sustainability events, and word of mouth. Rare has hosted several successful brand site visits to our farm partners, which in 2017, resulted in a multi-year purchase agreement with Organic Cotton Awareness, a local Chinese brand and an additional five agreements under negotiation from the 2018 site visit. For example, a local Chinese brand and manufacturer for towels who came to the Rare site visit is looking to increase their organic collection to 30% of their business by 2020. To do that, they need to source about 1,000 tons of organic colour cotton and Rare is supporting them and our farm partners to plan and make this deal happen. Collectively, these interactions have enabled Rare to segment the market into the brands that use organic and are able to trace their supply chain to tier one, two or three in China; as well as those that source organic cotton from other countries like India, and those that do not use organic but potentially might. This segmentation, trust, and interest being built helps Rare understand the factors that enable these brands to overcome the barriers to sourcing more organic cotton from China over time.

- A key lesson learned from our work is the importance of finding like-minded supply chain partners who can offer different organic cotton products and blends, especially at the fabric level to provide brands with more options while expediting the market linkage process. Thus, Rare's partnership with Shokay, a social enterprise in China developing new applications around unconventional materials like yak wool and organic cotton, is seen by Rare and its local farm partners as an important step in the process because the company offers blends and products that are new to the market. Shokay just produced its first summer collection from Jintian's Extra Long Staple cotton in collaboration with Yitiao, one of the most popular lifestyle platforms in China, running a great crowdfunding campaign to get Chinese consumers to support in transition cotton. The campaign reached its goals of raising RMB135,850 in just three days. Yarns & Colors, a Chinese spinner, sourced Jintian's in transition cotton to produce fabric samples to show and educate their clients on in transition cotton after attending the brand site visit. We believe these are all key steps towards establishing demand for organic cotton in China. Prior to 2015, most of the organic cotton transactions in China were the result of a single manufacturer with a handful of brands. In the past, most brands have shied away from Chinese organic cotton due to a lack of trust and credibility. Rare is striving and will continue to build this nascent industry and is quickly becoming the go-to resource for organic cotton farming in China. For example, we were approached by local and international brands to train their staff and suppliers to build a deeper understanding of organic cotton and the supply chain requirements, with the goal of helping them trace their existing supply chain, as well as to recommend organic cotton suppliers from farms up to garment manufacturers.

## Efficiency

- The evaluation correctly stated that most of Rare’s current farm partners are in Xinjiang Province, and that Rare’s main office is in Hubei. However, the evaluator did not fully grasp the relevant legal context. In January 2017, a new foreign NGO law was promulgated whereby all foreign NGOs are required to be re-registered with the Ministry of Public Security and seek a government sponsor in every province within which they operate. Given the pilot project was in Hubei, Rare managed to re-register in Hubei with the Agriculture Bureau as our government sponsor – indeed Rare was the first foreign environmental NGO registered in Hubei. However, the situation in Xinjiang is much more challenging. Due to the political sensitivity, foreign NGOs are unable to register in Xinjiang, and physically relocating to that Province was not an option.

Due to Rare’s existing registration in Hubei and our good relationship with the local authorities in Xinjiang, Rare was permitted to continue the project in Xinjiang but not to open an office there. That said, Rare does have a full-time staff member and a consultant located in Xinjiang, while a junior agronomist spends at least 50% of his time in Xinjiang, and Rare’s Senior Technical Director as well as other staff visit frequently during the peak growing season. We recognize that this is costly, however, relocating the office from Hubei to Xinjiang is not a legal option at this time.

## Sustainability

The evaluator stated that most of the initiative’s interventions are not sustainable at the time of evaluation. We understand their concern though of course achieving sustainability takes time. Rare has been explicitly working towards this goal by:

- Meeting international and domestic needs: Due to the rising price of upland cotton in China, local spinners are importing organic upland cotton from India. As a result, and to fill a niche, in 2018 Rare began working with its farm partners to cultivate Extra Long Staple cotton, which is competitive from both a quality and price standpoint. Additionally, due to the restrictions in dyeing under the China National Organic Product Standard, Rare successfully negotiated a pre-purchase agreement between Sanli, a Chinese brand and manufacturer of towels, and Zhongliang to grow organic color cotton. The multi-year agreement which is worth RMB1,000,000 with a 30% deposit already paid, was signed in March 2019. Sanli also contracted Rare to continue providing technical support to Zhongliang. This is great incentive for the farms to continue organic cotton as they see evidence of market demand.
- Grounding organic in impact: While organic and BCI cotton are theoretically better for the environment, it is not necessarily the case. Farmers who are operating with the same mentality of feeding the plants rather than feeding the soil will not see environmental improvements nor their yield match conventional systems. Knowing this to be true, farmers tend to do the bare minimum to receive their organic cultivation certificates. This is the type of behaviour Rare has been working diligently to change.



The situation is worsened in Xinjiang due to its semi-arid area environment, where the province is losing 5.5 gigatons of terrestrial water storage each year due to cotton irrigation<sup>6</sup>, which accounts for 40% of Xinjiang’s arable land cover. Xinjiang’s farms all show clear signs of secondary salinization and soil degradation due to unsustainable farming practices, even on existing organic cotton farms that have transitioned for over a decade. Certification and standards should not be mistaken as proxies for environmental improvement.

One lesson learned is that the focus should be on supporting farmers to adopt practices that improve the soil. Soil is the largest carbon sink after the ocean, and there is a major opportunity to sequester carbon in soil through climate-smart agricultural practices while delivering on both sustainable materials and climate goals for brands. Rare is currently developing the next phase of its sustainable cotton strategy in Xinjiang focusing on soil improvement for both organic and BCI-cultivated land, with the aim of delivering sustainable cotton and carbon credits. Rare is working with a climate project developer that will serve as a technical advisor on the carbon impacts of farm practices and which will lead the monitoring process to enable brands to make carbon claims. With the release of the most recent Intergovernmental Panel on Climate Change (IPCC) report and more and more brands setting Science Based Targets, supporting farmers to adopt soil regenerative practices that can sequester carbon offers a win-win solution to help brands reduce their Scope 3 emissions (which for the apparel sector will be a big component of their carbon footprint), while securing a reliable supply of sustainable cotton. This effectively helps share the risks and rewards with farmers through a carbon price from the beginning rather than an arbitrary price premium once the cotton is organically certified. Currently, the adoption rate of regenerative practices like composting, improved residue management, cover cropping and reduced tillage - all core to soil improvement – is nearly non-existent in Xinjiang. The fact that Rare has managed to work with one of its farm partners to utilize resources close to their farm to produce compost – which is now being applied to their land *and* has produced acceptable yields, *together with* measurable soil improvements (15% increase in soil organic matter and soil organic carbon, with three times more beneficial insects than conventional land and a 17% decrease in water used)<sup>7</sup> – has resulted in a new bright-spot for organic and climate-smart agriculture. The farm has now agreed to expand on these efforts, tripling the amount of compost produced in 2019 compared to 2018 by the next sowing season. The farm also shared that they are forming a plan now to turn all of their land which is close to 5,000 acres into organic in 10 years, starting with composting. Encouraged by the results, another one of Rare’s farm partners has also started producing ~500 tons of compost this year.

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<sup>6</sup> May 17, 2018, NASA satellites reveal major shifts in global freshwater, <https://sealevel.nasa.gov/news/125/nasa-satellites-reveal-major-shifts-in-global-freshwater>

<sup>7</sup> Source: Soil organic matter and soil organic carbon increase is based on baseline and post-harvest soil test results from QAL lab, beneficial insects is based on field observations throughout the growing season and water use decrease is based on data from farmers



Rare is now actively forming a brand coalition to pioneer the fashion industry's first carbon insetting project. The next steps are to conduct a six-month feasibility study and pilot some of the climate-smart agriculture practices in more farms and at a larger scale. One brand has verbally committed to be involved.

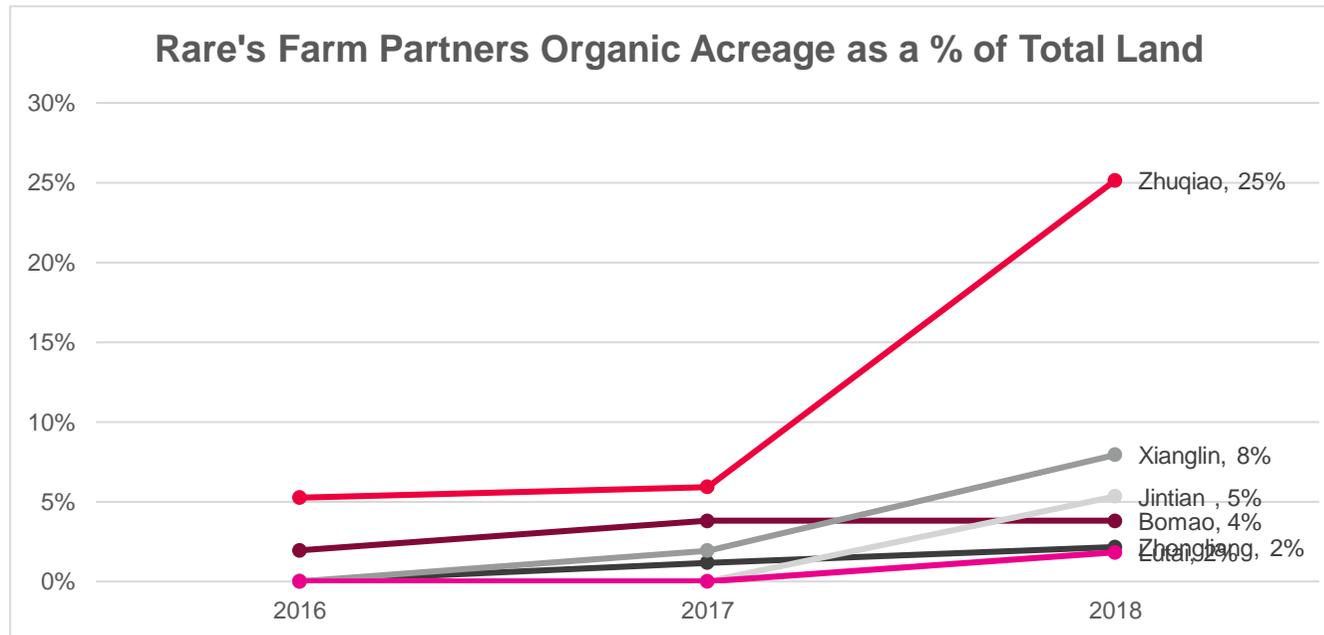
### **3. Agreement on key lessons learned**

- The evaluators suggested a vision that builds on solid knowledge, expertise, and networks in the targeted sector or industry is crucial to formulating a workable intervention strategy. Rare agrees with this statement. From this project, it is clear that it is essential that interventions on the path to organic certification are sequenced over time: to understand the demand of the brands that are sourcing from the region before expanding organic acreage; to find the competitive advantage of organic cotton from China; to find the best farming partners and structures that are the least risky in the transition towards organic; to understand the scale involved before certain interventions can kick in; and to prove the technical feasibility of organic cotton in the transition years before scaling.

### **4. Accomplishments not highlighted**

- Once new challenges became apparent, in addition to revising the targets, Rare pivoted many of its planned interventions significantly. Rather than focusing on achieving immediate scale, Rare strived to focus on creating a number of bright-spots, or success stories that might be used to show that organic farming can be profitable and scalable. In addition, rather than striving to move from conventional to organic in a single step, Rare began a stepwise approach, spreading risk through poly-cropping, while working in regions where farmers had a better track record with cotton and large acreages upon which it can be grown. Rare has also expended extensive efforts in vetting farm partners based on farmer-land arrangements and risk tolerance. The evaluation noted that the initiative worked primarily with commercial farms using farm labor, rather than working with cooperatives of smallholder farmers. In China, farm management structures can be complicated where even within the same organization, there can be different legal structures which are not indicative of the reality of farmers' involvement, even if they are legally referred to as "cooperatives". This is why it is important to understand the arrangement between the farm management and farmers instead i.e. who is renting or managing the land and how they are being compensated. As a result, Rare developed a comprehensive multi-level partner vetting process to understand these arrangements. Of the six farm partners that Rare is currently supporting, three are part of the Better Cotton Initiative, which have exposure to sustainable cotton and are thus more receptive to the concept of organic cotton. Even at these sites, making the case for growing organic is difficult in the absence of agreed price premiums. However, each of the farm partners is now transitioning a small amount of their larger acreage towards organic in anticipation of market demand. These farms on average have a minimum of 5,000 acres. As can be seen from the chart below, we are beginning

the diffusion and there is an increasing adoption curve. As market demand picks up, the capacity of these farms to transition more land is high.



- In 2018, Rare partnered with a European soil and climate consultancy, Soil & More Impacts, to identify viable and regionally-adapted, low-carbon emission organic farming practices, such as composting, improving residual management, cover cropping and reducing tillage to restore soil health. Rare has since supported farms to adopt many of these practices, providing training, technical support, and greenhouse gas (GHG) reduction assessments. The soil organic matter increased from 0.57% to 0.66% in the first year based on soil tests, which helps soil hold 2,430 gallons more water per acre and an estimated carbon reduction of 1.82 to 3.50 tons of CO<sub>2</sub>e per hectare per year<sup>8</sup>. With these interventions, the project can be useful to achieve Scope 3 carbon emission reduction targets with textile brands, contributing to the sustainability of this initiative.

<sup>8</sup> Source: Carbon reduction is measured using the [Cool Farm Tool](#)

Again, we thank C&A Foundation for their continued support. After nearly four years of partnership, we feel we have made significant progress and have started a movement that can lead to real change over time towards the adoption of a more sustainable textile supply chain in China, starting at the farm level. Improved soil, water, climate, biodiversity and livelihoods for the people of China are important goals that we are on the path to achieving and we look forward to continuing that effort with a growing base of partners and supporters.

## Recommendations and Action Plans

Recommendation	Management Response: (Accepted, Partially Accepted, Not accepted)	Action Planned	Expected Completion Date
Jointly identify initiative elements that can be used for learning activities	<b>Agreed</b>	We will summarize the learnings into the end of project self-evaluation report.	June 2019
Engage in new areas after a substantial learning process is embedded	<p><b>Partially agreed.</b> During the past year, both Jintian and Lutai farms have shown the potential of organic cotton in China to deliver on measurable impact when integrated with climate-smart agriculture components and strong community engagement. Rare will continue supporting Jintian and Lutai since they are at a critical stage and reaching a tipping point in the behaviour change process. For example, Lutai has indicated an interest in cultivating an additional 400 hectares of organic cotton based on the positive achievements this year. Without continued support, our momentum may be disrupted and learnings we are garnering may not translate into scale.</p> <p>Furthermore, we will build on the achievements and learnings from this project and expand its scope to support both organic cotton and BCI farms to adopt climate-smart agriculture practices that are rooted in soil improvement;</p>	We plan to continue supporting Jintian and Lutai, as well expand the climate-smart agriculture practices to other surrounding sustainable cotton farms in Xinjiang, with the support of a consortium of brands.	First phase by the end of 2020



Recommendation	Management Response: (Accepted, Partially Accepted, Not accepted)	Action Planned	Expected Completion Date
	<p>thereby demonstrating a more sustainable and realistic path towards organic cotton. In addition, we will continue to build on the strong brand relations that we have developed during this project and support them to meet both their sustainable materials and climate goals.</p>		
<p>Cultivate long-lasting and sustainable partnerships with other organizations working towards similar goals</p>	<p><b>Agreed</b></p>	<p>Building on the above, we are forming long-term partnerships with a consortium of brands, supply chain players, technical partners and the local government on growing climate-smart sustainable cotton; while also building up a value chain for sustainable cotton production in Xinjiang.</p>	<p>First phase by the end of 2020</p>