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Better Cotton Initiative BCI CottonConnect CCChief Executive Officer CEO Chief Information Officer CIO Corporate Social Responsibility CSR Environmental Profit and Loss EP&L European Union EU Food and Agriculture Organization of the FAO United Nations FTC Federal Trade Commission of the United States GOTS Global Organic Textile Standard GNI Gross National Income GRI Global Reporting Initiative GWP Global Warming Potential Hectare Ha HIGG MSI Higg Materials Sustainability Index (referred to as the MSI or Higg) International Cotton Advisory Committee ICAC INEI The Peruvian Institute for Statistics ISC International Sericulture Commission **ISEAL** ISEAL Alliance Intergovernmental Panel on Climate Change IPCC

Key Performance Indicators

Organic Content Standard

Randomized Control Trial

Second-party Opinion

Textile Exchange

United Nations

United States

on Climate Change

Sustainable Apparel Coalition

Sustainable Development Goals

Product Environmental Footprint

People for the Ethical Treatment of Animals

Social and Economic Impact Assessment

Texas Organic Marketing Cooperative

United Nations Framework Convention

Responsible Environment Enhanced Livelihoods

Kilogram

Metric Tonne

Acquired Immunodeficiency Syndrome

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AIDS

Kg KPIs

MT

OCS PEF

PETA RCT

REEL

SAC

SDGs

SEIA

SPO

TOMC

ΤE

UN UNFCCC

US

EXECUTIVE SUMMARY

he sixth assessment of the Intergovernmental
Panel on Climate Change (IPCC)¹ was published
just as we were completing the present report.
It does not make for encouraging reading.²
Growing awareness of our planet's climate
emergency and accelerating global inequalities have moved
the fashion industry into an unfavorable spotlight. Beyond
the glitz and glam, the industry is considered to be a major
contributor to air, water, and soil pollution, as well as an
enabler of exploitative sweatshop conditions for garment
workers in production facilities around the world. This
unglamorous reputation is bad for business.

In response, fashion brands have created sustainability programs to assure governments, consumers, and investors that they are improving/addressing their social and environmental impact. Today, all major fashion brands claim to be engaged in sustainability efforts, but as this first paper and subsequent papers in this series will demonstrate, many are struggling and indeed failing, because they are using a flawed definition of sustainability, unscientific methods and selective implementation.

Fashion is not alone in this struggle. Claims of purported sustainability and corporate social responsibility (CSR) characterise all sectors. As Kenneth P. Pucker observes in the May/June 2021, issue of *The Harvard Business Review*: "The number of companies filing corporate social responsibility (CSR) reports that use the GRI (Global Reporting Initiative) standards – the most comprehensive ones available – has increased a hundredfold in the past two decades. Meanwhile, according to the Global Sustainable Investment Alliance, socially responsible investment has grown to more than \$30 trillion – one-third of all professionally managed assets. However, a closer look at the evidence suggests that the impact of the measurement and reporting movement has been oversold. During this same 20-year period of increased reporting and sustainable investing, carbon emissions

have continued to rise, and environmental damage has accelerated. Social inequity, too, is increasing. For example, in the United States the gap between median CEO compensation and median worker pay has widened, even though public companies are now required to disclose that ratio".

In fact there is a growing body of thought that challenges the notion that real transformation can be left to corporations alone, and that existing market forces will halt climate change and restore equality. These critics include Tariq Fancy, former Blackrock CIO for Sustainable Investing, and even Warren Buffett who both call for changes in mindsets and government regulation to alter corporate behaviour.⁴⁵

Pucker concludes that most company reporting in the context of sustainability is not a proxy for progress but often just, "fanciful greenwishing." Worse, he contends that this reporting: "May actually be an obstacle to progress – consuming bandwidth, exaggerating gains, and distracting from the very real need for changes in mindsets, regulation, and corporate behavior."

This white paper is the first of a series of publications in which we will build upon that body of thought. We will examine sustainable fashion – the claims, the measurement, the reporting. We will critically assess the extent to which fashion's efforts are contributing to meaningful change, and to what extent they are a distraction, and inhibiting genuine transformation. We will also suggest ways in which governments can change the rules, and so alter mindsets and corporate behaviour, to obtain the results that we all want – a halt to climate change and a more equitable world.

The fashion industry has the potential to create positive impacts for business and society. It can catalyse decent jobs and opportunities that support socio-economic development in the global south and it can innovate and align production and marketing with planetary boundaries. In this initial white paper, we start with the foundation from

which all sustainability initiatives must be derived.

In the first section, we take the definition of sustainability in fashion back to its roots, in the 1987 United Nations World Commission on Environment and Development – also known as the Brundtland Commission – that underpins the United Nations Sustainable Development Goals (UN SDGs) to this day.

We then critically assess how current sustainability claims in fashion deviate from that definition, which assigns overriding priority in sustainability efforts to meeting the essential needs of the world's poor.

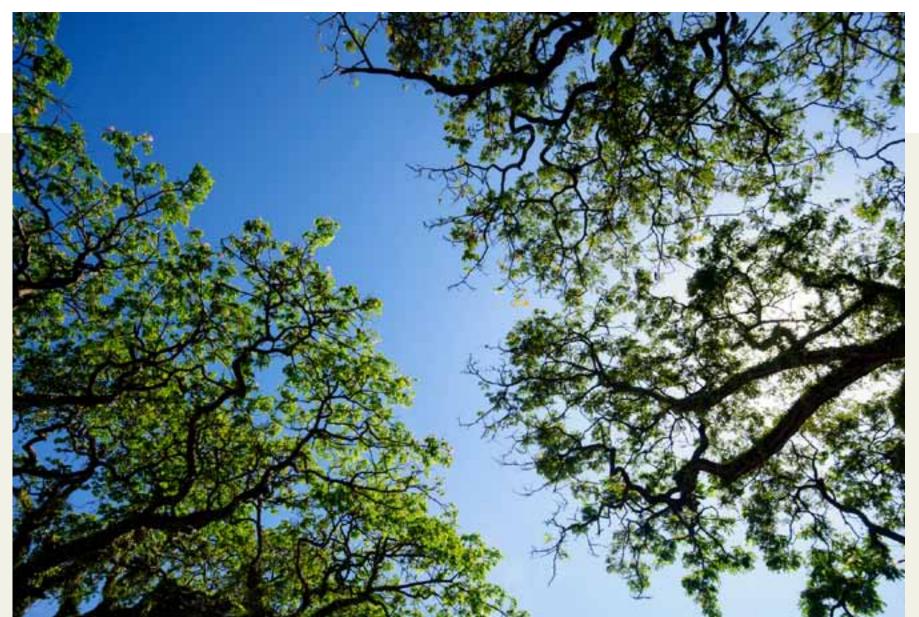
We follow with an outline of some of the harmful outcomes that result from fashion's failure to follow the Brundtland definition, by discussing three separate areas of concern:

- 1) the ethical requirements that need to be satisfied for public facing claims about the relative sustainability of different fibers and fabrics;
- 2) the need to go beyond environmental measurements and integrate wage and farm earnings in the world's poorest nations and regions into any and all sustainability ratings; and
- 3) the failure of existing programs to adopt a scientific approach at the farm level to defining, measuring and accounting for performance.

We then suggest two concrete measures, with three associated action points for policy-makers and corporations, to ensure that in meeting the needs of the present without compromising the ability of future generations to meet their own needs, overriding priority is given to meeting the essential needs of the world's poor.

"During this same 20-year period of increased reporting and sustainable investing, carbon emissions have continued to rise, and environmental damage has accelerated. Social inequity, too, is increasing."

Kenneth P. Pucker
The Harvard Business Review



1. HOW TO DEFINE SUSTAINABILITY - GOING BACK TO THE ROOTS



he concept of sustainability is ubiquitous in the fashion industry, 8,9,10 yet the use of the term 'sustainability' is neither protected nor controlled, nor does it have any legal significance. Globally, however, there is consensus on what sustainability is, and what impacts need to be measured. The aim and objective of this report is to remind all stakeholders in sustainable fashion of exactly what that globally agreed definition stipulates. As well as to demonstrate how this is inconsistent with current interpretations of sustainability in fashion, and to highlight what this means for corporations, initiatives, and government agencies that are attempting to measure sustainability, guide brands on sustainable sourcing, and/or advise consumers on 'sustainable' purchases.

In 1987, "Our Common Future", the Report of the World Commission on Environment and Development, also known as the Brundtland Report, was published by the UN.¹² It was the result of three years of a 23-strong commission of environmental and political policy-makers, as well as experts in agriculture, science, and technology.

The Commission was chaired by Gro Harlem Brundtland, former Prime Minister of Norway, and "Our Common Future" provided the foundation for the UN SDGs.¹³

This means that any person, corporation, or country, claiming to adhere to the SDGs, is claiming to adhere to the Brundtland definition of sustainability. So, when the European Union (EU) states: "We are committed to implement the SDGs in all our policies and encourage EU countries in doing the same," they are saying that all EU policies – which by definition includes any proposed environmental footprints and labelling – must adhere to the Brundtland definition of sustainability.¹⁴ And when H&M and its foundation say that the SDGs are their "blueprint to achieve a better and more sustainable future for all," they are saying that they too, adhere to the Brundtland definition of sustainability.^{15,16}

As we demonstrate here, however, and in subsequent papers, nobody in sustainable fashion is actually following the Brundtland definition. All appear to equate sustainability with environmental impact alone. But, as Brundtland put it: "The environment does not exist as a sphere separate from human actions, ambitions, and needs... the "environment" is where we all live; and "development" is what we all do in attempting to improve our lot within that abode. The two are inseparable" (pg. 13). Moreover, as the Brundtland Report observes: "Even the narrow notion of physical sustainability implies a concern for social equity between generations, a concern that must logically be extended to equity within each generation" (pg. 54). 18

This is a vital notion, highlighting that sustainability encompasses environmental and social dimensions because they are inextricably linked. And it automatically follows that in aiming to meet the needs of the present without compromising the ability of future generations to meet their own needs, overriding priority must be given to meeting the essential needs of the world's poor.

HOW TO DEFINE SUSTAINABILITY - GOING BACK TO THE ROOTS

BOX 1

EXCERPT ON SUSTAINABLE DEVELOPMENT; BRUNDTLAND REPORT

IV Conclusion

- 1. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:
- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.
- 2. Thus the goals of economic and social development must be defined in terms of sustainability in all countries developed or developing, market-oriented or centrally planned. Interpretations will vary, but must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it.
- 3. Development involves a progressive transformation of economy and society. A development path that is sustainable in a physical sense could theoretically be pursued even in a rigid social and political setting. But physical sustainability cannot be secured unless development policies pay attention to such considerations as changes in access to resources and in distribution of costs and benefits. Even the narrow notion of physical sustainability implies a concern for social equity between generations, a concern that most logically be extended to equity within each generation.

Perhaps an easier way to envisage what is meant here, and what is missing from the current definition implicitly employed in fashion, is Kate Raworth's concept of Doughnut Economics. "A compass for human prosperity in the 21st century... it consists of two concentric rings: A social foundation – to ensure that no one is left falling short on life's essentials. An ecological ceiling – to ensure that humanity does not collectively overshoot planetary boundaries. Between these two boundaries lies a doughnut-shaped space that is both ecologically safe and socially just." ¹⁹

As Raworth points out "meeting the needs of all within the means of the living planet... must be done from both sides at the same time." And, as shown (right), the Doughnut's social foundation – below which lies critical human deprivation – derives its 12 dimensions from the SDGs.

Figure 1. The Concept of Doughnut Economics



Figure 2. The Social Foundation

The 12 dimensions of the social foundation are derived from the social priorities agreed in the Sustainable Development Goals (UN 2015).



[https://doughnuteconomics.org/tools-and-stories/11]

In this paper, we demonstrate that far from prioritising the needs of the global poor, in fashion, sustainability appears to have become an elitist, even imperialistic concept in which the interests of the global north define the conversation. These interests are both those of the present generation, whose right to purchase and discard clothing in volume the system seeks to preserve (by switching to 'circularity' and 'more sustainable' fibers), and the interests of future generations whose needs are to be secured at the sacrifice of producers whose fibers do not meet the global north's unilaterally declared 'sustainability' standards.

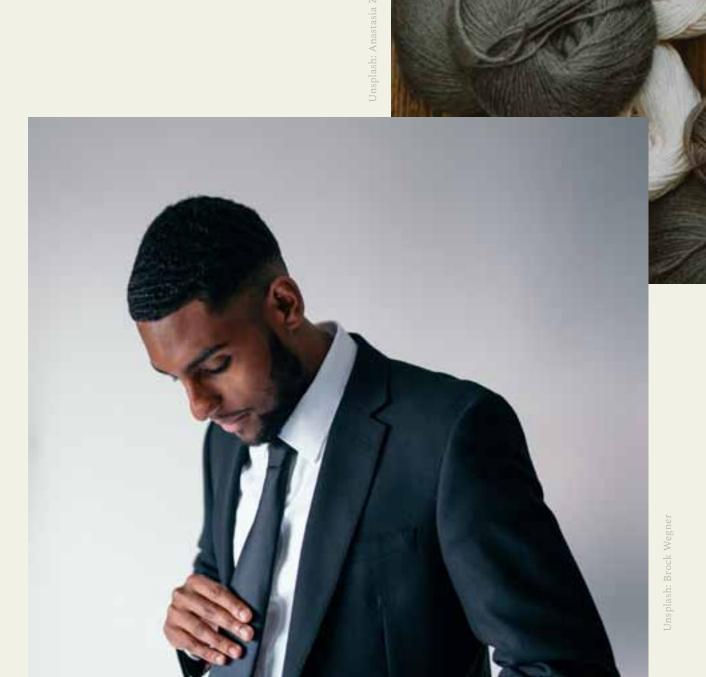
HOW TO DEFINE SUSTAINABILITY - GOING BACK TO THE ROOTS

The vast majority of those living below the social foundation are to be found in the global south. It is their needs that Brundtland asserts, must be given overriding priority. Yet, as this paper will demonstrate, not only are their needs not given priority, the global south does not even appear to be represented in any of the major sustainability initiatives and groups. Nor do Zambian or Burkinabe cotton farmers, Brazilian silk, or Peruvian alpaca farmers appear to be consulted at any of the major fashion weeks or conferences.

For example, not a single farmed fiber representative sits on any of the working groups of the United Nations Climate Change sectoral engagement for fashion.²¹ Even the UN Food and Agriculture Organization (FAO) is excluded. The sole participants in the UN Fashion Group are major corporations and their funded initiatives. It is obviously inappropriate to rely on industry players to solve our biggest social and environmental problems. To paraphrase Milton Friedman, corporate executives are experts in sourcing and producing a product, selling it, or financing it. But, nothing about their selection makes them experts on sustainability.²² And it is equally inappropriate to exclude those whose very livelihoods are at stake.

In this initial white paper, we focus upon the impact of 'sustainability' claims on the ability of the world's poorest to meet their needs, and we consider three vital concerns. The first concern addresses the ethical requirements for comparative sustainability claims (by comparative sustainability claims we mean assertions that one fiber, process, or system is more sustainable than another). The second, considers some of the repercussions and inevitable consequences of such comparative assertions, and the third focuses on the implications of farm programs that employ unscientific methods and selective implementation.

Through these examples, we illustrate the pitfalls that arise when corporations are allowed to make all the choices in solving the problems associated with run-away fashion, without careful consideration of the inevitable outcomes for the world's poor.





"Meeting the needs of all within the means of the living planet... must be done by both sides at the same time."

Kate Raworth



CONCERN 1: BRAND-DRIVEN SUSTAINABILITY INITIATIVES

rom the German Government's Green Button certification,²³ to the EU Product Environmental Footprint (PEF),²⁴ an increasing number of apparel labelling schemes are being rolled out with the aim of persuading brands and consumers not to purchase clothing, fabric, and fibers rated 'unsustainable' but to purchase those rated 'sustainable' instead.

At the present time in fashion, these minimum ethical standards are categorically not met. To illustrate our case, we look at two fibers that have been given the worst sustainability ratings by the apparel sector, and particularly by luxury group Kering's Environmental Profit and Loss (EP&L) as well as the Sustainable Apparel Coalition's (SAC) Higg MSI.

BOX 2

THE GERMAN GREEN BUTTON

The German Green Button certification describes itself as a: "government-run certification label for sustainable textiles.

Everyone who aims to purchase socially, and environmentally sustainable clothes should look out for the Green Button." ²⁵

BOX 3

EU PRODUCT ENVIRONMENTAL FOOTPRINT (PEF)

The PEF is one component of the European Union Initiative on substantiating green claims.²⁶ Their website asserts: "The Product Environmental Footprint (PEF) method measures the life cycle environmental performance of products."²⁷

Consequently, producers of 'unsustainable' goods will lose sales and market share, and possibly go bankrupt. Indeed, entire sectors could be destroyed.

Minimum ethical standards for such claims would require that any corporation, initiative, or index making them, should be held accountable for ensuring that they are irrefutable. Any and all should be allowed to examine the basis upon which the claims are being made. And disputes should be transparently and equitably resolved.

BOX 4

THE SUSTAINABLE APPAREL COALITION (SAC)

The Sustainable Apparel Coalition (SAC) describes itself as: "a global multi-stakeholder nonprofit alliance for the consumer goods industry... To transform business for exponential impact through groundbreaking tools, collaborative partnerships, and trusted leadership for industry sustainability." ²⁸

The SAC was co-founded by Patagonia and Walmart in 2010. In 2011, the SAC released the first Higg Materials Sustainability Index (also known as the Higg, or the Higg MSI). Nike added their work to the Higg in 2012.²⁹

The SAC describes the Higg MSI as follows: "The Higg Index is a suite of tools for the standardized measurement of value chain sustainability, and it is central to the SAC's mission to transform businesses for exponential impact. It is comprised of a core set of five tools that together assess the social and environmental performance of the value chain and the environmental impacts of products, including the Higg Facility Environmental Module (FEM), Higg Facility Social & Labor Module (FSLM), Higg Brand & Retail Module (BRM), Higg Materials Sustainability Index (MSI), and Higg Product Module (PM)."³⁰

This white paper only considers the MSI. The other four Higg tools are behind a paywall and we have no comment.

In 2019, with \$11 million in Series A investment from Buckhill Capital LP ³¹ the "Higg was spun out of the Sustainable Apparel Coalition as a public-benefit technology company. As the exclusive licensee of the Higg Index, Higg develops digital tools and resources to scale its adoption across the world." ³²

Higg Co. is headquartered in California but it is registered in Delaware, and as a public-benefit, it is: "a specific type of Delaware General Corporation – owned by shareholders who expect the company to make a profit, and return some of that money to them as dividends… profit is the point – as is returning money to the shareholders." ³³

Incorporation as a Delaware Public Benefit Corporation appears to require nothing more than a clear statement that the entity is a public-benefit corporation, and a list of the company's benevolent objectives. Delaware Public Benefit Corporations are obligated to complete a biennial report to shareholders, which outlines the corporation's progress toward its public benefit purpose. However, they are not compelled to share the required biennial report publicly. Not every state offers a Benefit Company, and none are as private as Delaware's (in this respect)." State of the corporation appears to require the entity is a public benefit purpose. However, they are not compelled to share the required biennial report publicly.

In short, there is no public oversight as to whether Higg Co. is indeed working for global benefit; whether any of its purported objectives to "accurately measure the environmental and social impact of a given product" are in fact attained; or whether it really is enabling "businesses to accelerate transformation for a more sustainable future." ³⁶

CONCERN 1: BRAND-DRIVEN SUSTAINABILITY INITIATIVES

The two fibers concerned are silk – since at least 2017, and alpaca since 2018.³⁷ The International Sericulture Commission (ISC), a UN-affiliated intergovernmental agency created to support the overall development of the silk industry, claims that global annual silk production fell from 202,000 tonnes in 2015, to 92,000 tonnes in 2020.³⁸ Whilst, Peruvian alpaca exports totaled a ten-year high of US\$219 million in 2018, and only US\$120 million in 2020.³⁹ Indeed, judging from their Environmental Profit and Loss (EP&L) statement, the Kering Group alone reduced their alpaca consumption from, €671,235 Sum All Impact for 2018, to €352,850 Sum All Impact for 2019, and €332,048 for 2020.⁴⁰

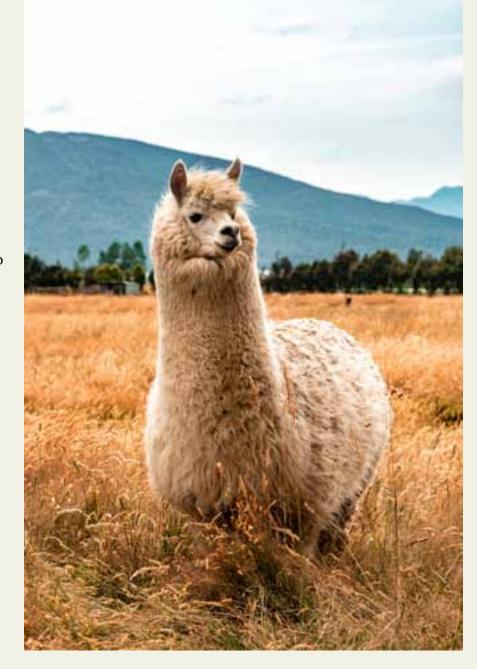
Given the role and objective of comparative sustainability assertions – by which we mean assertions that one fiber, process, or system is more sustainable than another and the evidence that they do indeed appear to have the impact intended, it seems obvious that before making any claims whatsoever, everyone, from initiatives to brands, has a binding moral obligation to be absolutely certain that whatever they are recommending is incontrovertible. As well as to deal with disputed claims promptly and impartially.

Whether the current comparative fiber sustainability recommendations are incontrovertible will be examined in a subsequent paper, which will demonstrate that in fact, they are not. Here however, we examine only whether sustainable fashion currently meets minimum ethical standards in dealing with disputed claims, and we use recent complaints filed against the Sustainable Apparel Coalition (SAC) as an illustration.

It would appear that prior to 2020, when they were approached by trade magazine *Apparel Insider*, with a trio of articles written by one of the authors of this paper, 41.42.43 silk and alpaca producers were largely unaware of the existence of the SAC's Higg MSI. In what seems an extraordinary lapse in due diligence and accountability, we understand that neither the funding corporations nor the SAC itself had approached any industry representatives. They were not asked if they had robust data on environmental impact, and they were unaware that their fibers were almost universally reviled for their allegedly poor sustainability.

When the silk and alpaca industries discovered the purported impact of their fibers, and how this was being calculated, their representatives, along with those of global leather, filed public protests with the SAC in October 2020. Mystifyingly, to this date it appears that neither fashion publications nor brands have reached out to silk or alpaca to obtain their side of the story. Instead, the sustainable fashion press, from bloggers to trade and fashion magazines, have contented themselves with quoting the SAC, and making the false and misleading claim that the issue was resolved by the January 2021 deletion of the so-called MSI 'single score,' as if this was some key feature of the Higg MSI rating methodology. 44,45,46,47

In reality, the single score was nothing more than the sum of the Higg MSI's five individual scores: Global Warming Potential (GWP), water scarcity, eutrophication, chemistry, and fossil fuel depletion. These individual scores were already clearly visible, and across all concerned fibers, these scores remained completely unchanged. Indeed, deleting the single score has simply made the preferential rating awarded by the MSI to plastic fibers less evident. The difference between the total average score per kilo of silk fabric of 1086, and that for polyester, of 36.2 per kilo, was jarring.



nsplash: Sebastien Goldberg



CONCERN 1: BRAND-DRIVEN SUSTAINABILITY INITIATIVES

The three fiber sectors concerned appear to have been unable to obtain any form of redress from either the SAC or the fashion behemoths who use it. In desperation, the International Sericulture Commission, ⁴⁸ filed a complaint with 1. There is no system of redress or accountability. the US Federal Trade Commission (FTC) in March 2021.

Almost without exception, neither fashion nor trade publications have paid any attention to this. Indeed, the SAC maintains that the ISC's filing is a myth: "Myth 6: The silk industry has now made an official complaint which is being reviewed by the Federal Trade Commission (FTC) over how silk is incorrectly scored by the Higg MSI."49 Unfortunately, neither brands nor journalists appear to have made any attempt to verify the SAC's assertion.

In reality, not only has the ISC filed a complaint against the SAC with the FTC, on June 16, 2021, the FTC replied: "While the FTC is not able to intervene in individual disputes, the information you have provided has been recorded in our secure online database which is used by thousands of civil and criminal law enforcement authorities worldwide. This database enables law enforcement agencies to identify questionable business practices that may lead to investigations and prosecutions. In addition, our attorneys and investigators regularly review the complaint database to look for law enforcement targets, evaluate the need for consumer education, and make policy recommendations. Your letter has been added to our database for that purpose."

The FTC further advised the ISC to file with the relevant State Attorney General's Office. We are told that they have done so.

All of this highlights two serious concerns with the current approach to comparative sustainability ratings in fashion:

- Moreover, the design of the SAC raises ethical questions about how an initiative can be created, funded and governed by fashion's largest corporations and allow a privately held company in Delaware to rule arbitrarily, without oversight, accountability, avenues of redress, or recourse, on the comparative sustainability of different fibers?
- Corporations such as H&M and Zalando are rolling out consumer-facing programs extolling the merits of the SAC/Higg without, as far as we are aware, having made any attempt to contact either the alpaca or silk sectors, and without warning consumers that the Higg MSI scores are contested. 50,51

Against this background, we believe that anyone supporting the Higg MSI is running a serious reputational risk. Given its addition to the online database used by global law enforcement agencies to investigate and prosecute questionable business practices, the trustworthiness of the SAC is irrevocably tarnished.



CONCERN 2:GOING BEYOND GREEN

e have examined numerous
sustainability initiatives – including
the most influential of those created
for and by the leading conglomerates:
The Sustainable Apparel Coalition and

Textile Exchange (TE). The odd piece of anecdotal evidence aside, none make any attempt to measure sustainability in terms of meeting the needs of the world's poor. The only area upon which there is any focus is environmental impact, and almost without exception brands and initiatives – even government-run initiatives like Germany's Green Button that are supposed to certify sustainable textiles – conflate sustainability with environmental impact.

BOX 5 TEXTILE EXCHANGE

TE describes itself as: "A global nonprofit. With a robust membership representing leading brands, retailers, and suppliers, Textile Exchange is positively impacting the climate through accelerating the use of preferred materials across the global textile industry." 52 TE further elaborates that it: "creates leaders in the preferred fiber and materials industry... We develop, manage, and promote a suite of leading industry standards, as well as collect and publish critical industry data and insights that enable brands and retailers to measure, manage and track their use of preferred fiber and materials." 53

Textile Exchange started life as the Organic Exchange and was co-founded by Patagonia: "Patagonia was a founding member of the Organic Exchange, a nonprofit group formed in 2002 to increase global sales of organic cotton apparel and home-textile products. Renamed in 2010, The Textile Exchange continues to promote organic cotton (an estimated \$4.3 billion worth last year) but has expanded its role to include all bio-based, organic and recycled fibers." ⁵⁴

As a result, Green Button's motto: "Good for People, Good for Nature" appears to refer only to the German People and their fellows in the global north. The impact of Green Button's recommendations on those in the global south does not seem to be considered.⁵⁵

Indeed, the Green Button awards its seal of approval to garments, as long as the brand concerned ensures wages are at least equivalent to the national minimum wage or industrial standard (where higher), and wages are paid on time.⁵⁶

Ensuring that suppliers pay wages correctly and on time for their workers is a start. But to meet sustainability commitments in the true sense, it remains completely inadequate. As discussed, our fundamental premise is that the definition of sustainability underpinning the SDGs – to which every major government and indeed, every fashion behemoth, has subscribed – is that overriding priority must be given to meeting the needs of the world's poor. The poor in the global fashion chain are fiber farmers and wage earners, primarily in manufacturing. The interests of both groups must be front and center in any purported sustainability claims. And against this background, sustainability in fashion requires living wages.

To quote Jessica Simor, leading human rights lawyer and author of both reports, "Fashion Focus: The Fundamental Right to a Living Wage" and "Fashion Focus: A Proposal for New EU Legislation on a Living Wage": "A "living wage" is a basic and fundamental human right, recognised in international law since 1919, and is an essential component of a just and peaceful society. A minimum wage cannot be less than a living wage."⁵⁷

Yet, as analysed and evaluated in those two reports, in 2017 and still in 2021: "The statutory minimum wage in the largest garment producing countries comes nowhere close to a living wage, with most countries providing for minimum wage levels at less than 50% of that necessary to secure a decent life." 58

As Simor explains, this failing is the result of a perverse incentive created by the brands themselves. Massive fashion retailers can negotiate aggressively with supplier factories on price. This automatically drives down workers' wages. The fact that brands can quickly and easily source their product from lower wage economies, increases their negotiating leverage with factory owners. Factory owners, in turn, pressure their governments not to increase the statutory minimum wage, so as to ensure that their country and their manufacturers do not lose business to other states with lower minimum wages.

Given these incentives for a regulatory 'race to the bottom' for many garment-producing countries, clothes made by workers who were not paid a living wage cannot be considered sustainable. It seems odd that a public sector initiative does not put greater emphasis on living wages. By advising consumers that garments with the Green Button label are responsible choices, Green Button are actually making it harder to establish living wages as the norm.

And it is not just the impact on wage earners in manufacturing that is currently incorrectly evaluated. Neither Green Button, nor any other initiative, nor any corporation, includes the impact that different fibers can have on the ability of the global poor to meet their needs, in their sustainability evaluations. This is an indefensible omission. As Bill Gates pointed out in 2013: "Most of the poor people of the world are farmers." Which means that farmed fibers can play a crucial and pivotal role in achieving Brundtland's objective of sustainable production that prioritises meeting the needs of the global poor. Such fibers provide a cash crop with which farmers can supplement their subsistence incomes. Cash that farmers desperately need to pay for vital goods and services such as healthcare, education, and technology.

CONCERN 2:GOING BEYOND GREEN

For farmers poorly connected to urban areas, and for entire countries with limited natural resource endowments that are also poorly located with respect to transport access to global markets, farmed fibers and grains are effectively the only major cash crops and export opportunities. Entire regions and economies in the global south depend upon farmed fibers. Benin, for example, with a 2019 Gross National Income (GNI) per capita, Atlas method, of only (current) US\$1,250.00, is one of the poorest countries in the world. Forty percent of the population lives below the poverty line and agriculture generates 70% of Benin's employment. Cotton is both the primary cash crop and Benin's primary export, providing roughly 50% of total export revenues.

Similarly, whilst for gold-rich Mali and Burkina Faso, cotton is the second most important source of export income, it remains the primary cash crop of both Burkinabe and Malian farmers, and land-locked Mali is even poorer than Benin, with a 2019 GNI per capita, Atlas method, of only US\$870.00. Mali's extreme poverty rate rose to 47.3% in 2020, due to health, security, social, and political crises, compounded by the decline in cotton production, and the poor performance of the agricultural sector, which provides employment for 80% of the labor force. 65,66.67

Land-locked, Burkina Faso is even poorer than Mali. The 2019 GNI per capita was only US\$780, and 40.1% of the Burkinabe population lives below the national poverty line. Furthermore, the deteriorating security conditions caused by terrorist attacks have created an unprecedented humanitarian crisis. Despite the fact that gold exports have increased, the Burkinabe economy remains largely based on agriculture, which employs 80% of the workforce. 68,69,70

Even when the fiber is not a major export for the country as a whole, production may constitute a vital source of income for one or more regions. Worth US\$176 million in 2019, alpaca exports are not one of Peru's major sources of export revenue, that honour goes to copper and gold, respectively. And as a nation, with a 2019 GNI per capita of \$6,740.00, Peru is considerably richer than Benin, Mali, and Burkina Faso. However, alpaca fiber sales are the sole cash crop of some of the country's poorest residents.

To the right is a partial screenshot of a chart that was compiled for one of the authors of this report, by INEI, the Peruvian Institute for Statistics. Peru has a total of 196 provinces, but this chart considers only the 46 provinces with the highest number of alpacas, covering 97.5% of the total alpaca population in Peru. Together, INEI found that weighted by respective alpaca populations, the average Monetary Poverty Incidence for those 46 provinces in 2018, was 35.3%. Monetary poverty considers people poor, who reside in homes where the monthly per capita expenditure does not cover a basic basket of food and does not permit the satisfaction of minimum needs. For 2018, the Poverty Line in Peru was US \$104.20 per month per habitant.

It should be noted that this applied in 2018 – a bumper year for alpaca sales – since then, we have had Covid-19, whilst the alpaca sector itself has been hit by a targeted decline in orders, not only on 'sustainability' grounds (i.e. the poor rating given to alpaca by the Higg MSI and Kering's EP&L) but also from all those brands who signed up to a 2020 demand by PETA, the animal rights organization, that they cease purchasing alpaca wool based upon a video of a rogue shearer at just one Peruvian alpaca farm amongst almost 100,000.^{73,74}

Under the circumstances it seems likely that the percentage of alpaca farmers living below the poverty line, and unable to meet their basic needs in 2021, is closer to 40% or even higher.

Figure 3. Peru Provincial Property and Alpaca Population in 2018

PROVINCE /	ALPACA POPULATION	MPI*
CAYLLOMA	312,525	17.2%
LAMPA	263,201	47.6%
CARABAYA	206,281	49.3%
EL COLLAO	181,259	41.1%
CANCHIS	147,700	28.8%
MELGAR	154,990	41.5%
PUNO	139,339	27.2%
HUANCAVELICA	129,737	33.7%
ESPINAR	124,418	30.9%
QUISPICANCHI	114,821	41.3%
СНИСИІТО	112,494	48.6%
SAN ANTONIO DE P	PUTINA 110,819	39.2%
ANTABAMBA	108,497	32.9%
HUANCANÉ	107,603	43.1%
PASCO	100,283	30.0%
AZÁNGARO	95,332	41.4%
LUCANAS	81,168	40.7%
GENERAL SANCHE	Z CERRO 74,983	20.5%
AYMARAES	73,327	36.6%
HUAYTARA	71,386	28.7%
CASTROVIRREYNA	57,827	33.9%
PARINACOCHAS	55,092	38.3%
CASTILLA	54,918	18.5%
MARISCAL NIETO	54,267	8.1%
SAN ROMÁN	47,941	23.1%
ANGARES	46,580	47.6%
CHUMBIVILCAS	45,607	48.1%
DANIEL ALCIDES CA	ARRIÓN 45,398	60.3%
CONDESUYOS	40,312	21.2%

[Source: INEI]

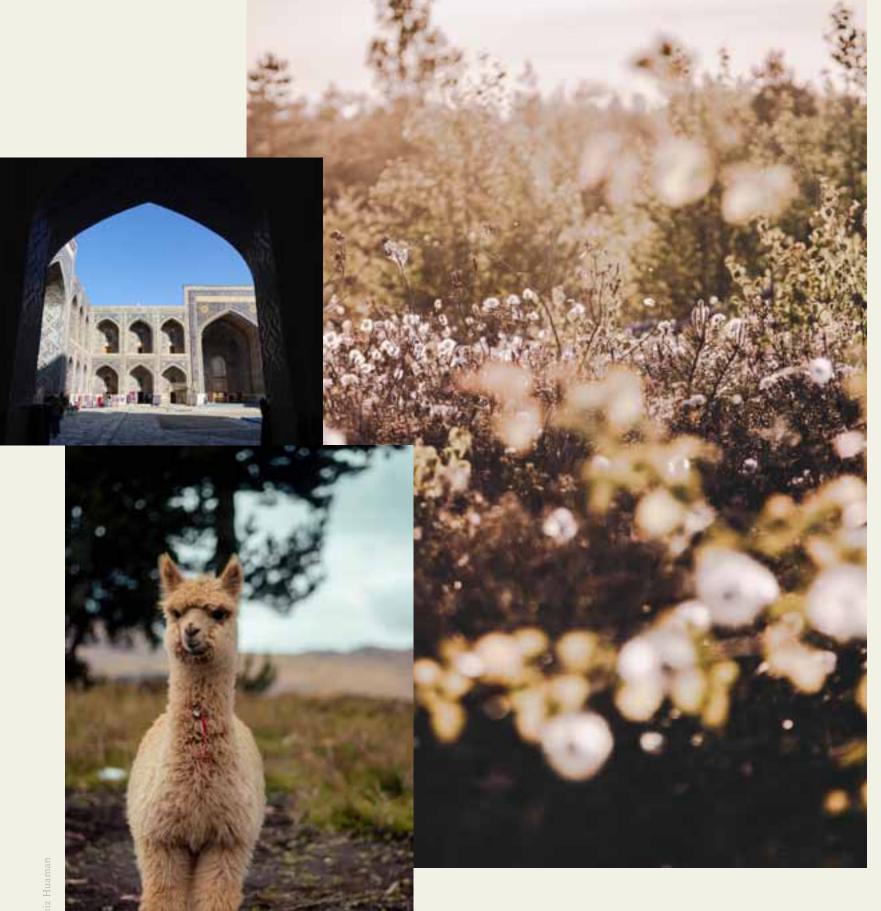
*Monetary Poverty Incidence

CONCERN 2: GOING BEYOND GREEN

None of these impacts are considered by any brand or sustainability initiative that we have been able to identify. All reduce their evaluation of the sustainability of farmed fibers to nothing more than their purported environmental impacts in terms of GWP, water use, etc.

There is moreover, another aspect to sustainability that is not even captured by the Brundtland definition: the cultural dimension to farmed fibers. Stylised cotton plants and flowers are standard on many Uzbek bowls. The national emblems of Uzbekistan, Kyrgyzstan, Turkmenistan, and Tajikistan, all include cotton flowers or plants as a symbol of those nations' reliance on cotton for their wealth and national pride.⁷⁵

More importantly, alpacas play a central role in the mythology of the indigenous farmers of the Peruvian Sierra, as do Churro sheep in the mythology of the Navajo. The gift that these animals bring to their people is an integral part of many indigenous cultures. PETA may declare that animal agriculture is never sustainable, but western cultural supremacy has no place in this discussion. For indigenous populations, animals play a vital role in the cosmos, and it is self-evident that sustainability means preserving cultural identity, not destroying it. 77,78,79,80,81



splash: Ralfs Bluml



"Most of the poor people of the world are farmers."

Bill Gates AG Web, May 9 2013

ven those initiatives whose purpose and intent are focused on farmers do not actually measure their impact in terms of benefits to the farmers concerned. To illustrate this, we examine claims made by two major schemes specifically focused on cotton. The Better Cotton Initiative, which appears to be the largest player in the sustainable cotton space with total revenues of €20.9 million in 2019, and €21.5 million in 2020.82

BOX 6

THE BETTER COTTON INITIATIVE (BCI)

BCI describes itself as: "a global not-for-profit organisation and the largest cotton sustainability programme in the world. BCI exists to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future."⁸³

BCI was co-created in 2005, by Pan UK and WWF. "As part of a 'round table' initiative led by WWF (which convened world experts on different commodities)... with the goal of finding more sustainable solutions for farmers, for the environment, and for the future of each sector. The Better Cotton Initiative is one of them, initially supported by a collective of major organisations including Adidas, Gap Inc., H&M, ICCO, IFAP, IFC, IKEA, Organic Exchange (now Textile Exchange), Oxfam, PAN UK and WWF."⁸⁴

Cotton producing countries in the Global South do not appear to have been included, and we cannot find any "world experts" in cotton production listed as participants. ⁸⁵

And Textile Exchange (TE). TE states: "We work closely with our members and leaders across the textile sector to accomplish five principal goals." Their Goal Number 5 is: "Use the Sustainable Development Goals as a common vocabulary and reporting framework."⁸⁶

BCI, on the other hand claims: "The 17 Sustainable Development Goals (SDGs) are central to the 2030 Agenda for Sustainable Development... BCI's efforts to make Better Cotton a mainstream sustainable commodity are intrinsically aligned to the SDGs. Through the Better Cotton Standard System, we aim to embed social, environmental and economic sustainability into cotton production around the globe. BCI embraces the SDGs holistically and is inspired to be part of a global community working to make the world a better place." ⁸⁷

Yet both Textile Exchange and BCI declare that organic cotton and BCI cotton are more 'sustainable' without ever having provided any robust, independent, studies showing that joining the organic or BCI system actually generated higher incomes for the farmers concerned, and so met the fundamental requirement underpinning the SDGs – that of giving overriding priority to meeting the essential needs of the world's poor.

Growing organically, takes more work, and entails higher risk, and lower yields. Carl Pepper of The Texas Organic Marketing Cooperative (TOMC) has been farming organic cotton for over 20 years. He claims that the only fair price for organic cotton is roughly double the conventional price. But as he also observes, the TOMC seem to be almost the only farmers obtaining that fair price.⁸⁸

Despite repeated claims by the leading corporations and their initiatives, that organic cotton is 'more sustainable' there is, in fact, not a single robust, independent study anywhere, that shows that organic farmers end up better off than their conventional neighbours. Indeed, the few studies that do exist show the opposite. There are similarly no studies that show that BCI farmers, or indeed any other kind of cotton initiative farmers, are better off, their needs more securely met, by their participation in the programs concerned. 89,90,91

Instead of focusing on the most important objective: enabling farmers to meet their needs, maximising their income whilst minimising their families' exposure to toxicity, both BCI and the various organic initiatives expend considerable effort on vague and ill-defined objectives such as implementing SDG 5 on Gender Equality.

An excellent aim in and of itself, the UN's SDG 5 targets and indicators have little to do with cotton. 92

It is, for example, difficult to see how an agricultural program can be expected to alter government policy, introduce legislation, secure seats in parliament, or supply mobile phones. It seems obvious that if the apparel sector wishes to contribute to SDG 5, since women in managerial positions is in fact a key indicator, the place to start is with factory fibers. Instead, it is only farmed fibers in general, and cotton in particular, that are required to demonstrate female empowerment, resulting in unproductive and even absurd outcomes, as detailed below. 93,94,95

The second caveat of the Brundtland report is that sustainability is constrained by "the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs." Or in short, by human failure to ensure that the very latest technology reaches those who need it most.

In general, brands and initiatives prefer to tout investment in alternative fibers as the panacea for global warming. The very obvious solution of investing in ensuring that maximum yields, with minimal environmental impact, are obtained from farmed fibers, seems to not be considered, despite the fact that this would also do far more to meet the essential needs of the world's poor, than the construction of a factory in California or Oxford.

To the extent that the apparel sector invests in farmed fibers at all, it invests in cotton – specifically, in the Better Cotton Initiative and in organic cotton through such media as The Organic Cotton Accelerator, Textile Exchange, and CottonConnect.

In 2019, Esther Duflo, Michael Kremer, and Abhijit Banerjee won the Nobel prize for Economics for their experimental approach to alleviating global poverty through the use of Randomised Controlled Trials (RCTs). The objective of RCTs is to prevent well-intentioned but misguided interventions, and to ensure that initiatives provide a real return on investment to those that they are designed to help. Kremer and Duflo's earliest work in the agricultural sector dates back to the year 2000, 6 but it appears that no RCTs were ever conducted to evaluate whether either the BCI system, or organic production, actually benefited the farmers. Instead, leading corporations like C&A and H&M, and institutions such as Cofra Industries' Laudes Foundation, have sunk millions into developing and promoting schemes which purport to make cotton production more 'sustainable'. But none have provided any robust evidence to demonstrate that the initiatives these funds support even benefit the farmers that they claim to help, let alone provide a reasonable return on investment.

Based on the little information that is publicly available, the data are far from reassuring.

a) It appears that in 2006, as a precursor to establishing CottonConnect with C&A in 2010, Shell Oil (through its foundation) paid Textile Exchange (which was called Organic Exchange at the time) \$100,000 to assist in developing a 'Trading Up' program to promote organic cotton production in India."

In 2007, there appear to have been further payments to Shell's implementing partners in India – Agrocel (\$150,000) – as well as to Organic Exchange. How much went to the latter is not clear. In 2008, Shell granted Organic Exchange a further \$300,000 to create a partnership with C&A to "improve the lives of poor Indian farmers." **

Just how much such grants and a switch to organic cultivation improved the lives of poor Indian farmers is illustrated by a 2008, follow-up study to the Agrocel program. This study found an extremely high rate of attrition, due largely to the farmers' failure to earn more money than their conventional cotton farming neighbours. In the Surendranagar Area, after training 800 farmers, at the end of the 6th year only 460 remained – an attrition rate of 42% – after "large scale conversion of farmers to BT Cotton cultivation for immediate economic benefits." 99,100

- b) A 2018 Social and Economic Impact Assessment (SEIA) of Madhya Pradesh Cotton farmers found organic farmers had 1.6 times the debt of their conventional colleagues, and a lower net income. As a result, some 30% of the 1200 organic farmers studied were not actually producing organic cotton anymore.¹⁰¹
- c) A small 2013 study in Benin and Zambia found that conventional cotton farmers earned 13% more than organic farmers, and that when the cost of their own labour was factored in, conventional farmers earned 57% more. 102

We have been unable to find any independent studies showing an increase in farmers' net income as a result of switching to organic cotton production. Indeed, it is interesting to note that Textile Exchange's 2021, Organic Cotton Market Report, states that for the 2019/20 harvest, 40% of the organic cotton farmers in China, ceased to produce organic cotton.

Since organic cotton fiber production in China fell by only 26%, and land area under organic cultivation by an even smaller 19%, we are clearly talking about predominantly small farmers. Why small farmers in China found organic cotton production no longer attractive is not explained. For 2019/20, Chinese production of cotton in general fell by only 1.8% or 49,000 MT. The fall in organic production accounted for 10,700 MT, or 22% of this, despite the fact that in 2018/19, organic cotton accounted for only 0.68% of China's total cotton output. 403,104

The concern then appears specific to the organic system, rather than to Chinese cotton in general. Perhaps like their Indian and African colleagues before them, small Chinese farmers found that organic production simply didn't pay?

As for BCI cotton, the sole randomized control trial in the sector was published by ISEAL for BCI in 2019. This found that after 3 years of BCI intervention, the project had engendered no statistically discernible impact on fiber yield, production costs or profits. 105, 106, 107, 108, 109

Moreover, only 20% of treatment farmers i.e. those enrolled in the BCI project, actually reported BCI to be their main source of agricultural information (pg. 63), so even if a significant difference between control and treatment groups had been found, we could not have reliably attributed the outcome to BCI.



So why are cotton initiatives in the apparel sector failing to deliver benefits to the poor farmers who need them most? As already mentioned, neither the organic cotton sector, nor BCI engaged in robust testing of their programs and methodology before rolling them out. So, it is unclear whether either system could ever have been expected to yield the benefits intended. Moreover, project implementation appears always to be subcontracted. Both BCI and various organic initiatives appear to use a number of different implementing agencies. Here we examine just one: CottonConnect (CC). 110

As mentioned earlier, C&A and Shell formed CottonConnect, which many seem to mistake for a global notfor-profit, but which was actually registered as a UK Private Limited Company, in 2010. CC files as a Small Company, and ownership was ceded to TE and the C&A Foundation – now the Laudes Foundation – on December 15, 2016.¹¹¹

CottonConnect has subsidiaries in China and India. Those subsidiaries, in turn, seem to subcontract implementation of their cotton programs to various local enterprises. Some of the parties concerned have no obvious cotton expertise. Yoganjali Ashram in Gujarat, India, for example, describes itself as a Public Charitable Trust working for the upliftment of humanity.¹¹²

It runs two schools and a boy's hostel; AIDs and maternal health programs; a yoga and meditation center; a number of gender and female empowerment programs, including a shelter for scorned women; and a number of 'social development activities' – one of which is a BCI/CottonConnect program covering 99 villages and some 9,000 farmers. 113,114,115,116

Yoganjali has no obvious agricultural proficiency, let alone experience and expertise in cotton production. This is extremely concerning. Cotton is a difficult crop to grow successfully. As a perennial, cultivated as an annual, excessive application of fertiliser and water will reduce, not increase the plants' yield. Whilst integrated pest management is a science

in itself. The CC homepage claims: "In the last ten years, our agronomic programmes have Boosted profits by 36%, Increased yields by 11%, Cut water use by 13%, and Reduced pesticide use by 26%."¹¹⁷

But CC does not provide any data to substantiate these claims. They do not produce detailed reports on the success or otherwise of their interventions, and they did not respond to a request to see actual studies.

A leaked 2019, Flocert audit of one of CottonConnect's REEL programs, on the other hand, identified a number of fundamental shortcomings in the program's implementation, and suggests serious cause for disquiet.¹¹⁸

REEL is a 3-year program, described by CC as: "Run by CottonConnect in partnership with leading brands and retailers, the programme is proven to increase yields and farm profits; while reducing environmental impacts. REEL Cotton can be fully traced from farmer to store." The Flocert audit however, casts doubts on all of these claims.

As might be expected, if organisations with no cotton proficiency are being contracted as implementers, the Flocert audit found that the facilitators' ability to communicate the technical aspects of cotton farming was deficient. It also found that in more than a quarter of the treatment farms, the women were not actively involved in cotton farming at all. And for two-thirds the women were only involved in sowing, weeding, cotton picking and rarely, irrigating. As a result, in the light of the program's woman centric focus - which as already mentioned is a common feature of all 'sustainable' cotton programs - Flocert found that the most crucial information covering scientific fertiliser dosing and integrated pest management, had, after three years of the REEL program, not been passed to most of the interviewed members and "the project has not made much progress in all the 3+ years of its implementation."

Furthermore, both the REEL and BCI programs (as noted CC is an implementing partner for both) document progress by requiring farmers, many of whom are illiterate, to fill out field books to record their practices and outcomes. Both the BCI RCT, and the Flocert REEL audit, found that, unsurprisingly, these field books are simply not filled out by the majority of participants, and so any reporting of KPIs by CottonConnect or any other implementing agency using this system, is, by definition, completely unreliable. So, when Primark claims: "The data shows that female farmers saw an average profit increase of 247% in the third year of the programme,"120 we would be well-advised to be skeptical. Or as one CC ex-employee (who does not wish to be named) put it: "Various NGOs are working, slogging to increase the farmer income by at least 10% but here CottonConnect gives a cookedup data of 200% increase in income with an understanding with Primark. Nobody questions this?"

Finally, both the Flocert audit and the Madhya Pradesh SEIA found that the local cotton gins did not appear to be reliably documenting the source of their cotton. Or as the 2018 SEIA put it (pg. 75): "Farmers do not receive a premium for growing organic cotton. Rather, the cotton is valued by objective measures of quality such as its length, colour, and strength. The sourcing (organic vs conventional) does not appear to factor into buyers' valuation of the cotton. According to one conventional farmer, "it depends on the quality of the cotton... if it has impurities or dirt, it'll get less value. The price depends on the quality of the cotton". The cotton is then sorted by quality, and farmers expressed that this sorting is irrespective of how the cotton was grown. In other words, if an organic farmer and a conventional farmer both sell cotton that is determined to be of high quality, they are sorted and cleaned together. When asked if the implementing partner – a major purchaser of organic cotton – tries to verify that their cotton is actually organic, one farmer responded, "No, they don't look at anything. They only buy cotton of good quality. Other than the quality they don't care about anything."121

These inconsistencies between claims and reality are further aggravated through certification schemes. The most widely adopted organic certification system appears to be the Global Organic Textile Standard or GOTS. GOTS themselves state: "As a processing standard, certification according to GOTS begins with the first processing stage of textile fibres. For example, for cotton, ginning is the first processing stage." 122

Another frequently cited source of certification for organic cotton is the Global Organic Content Standard (OCS).¹²³

In a July 2020 email to one of the authors of this study, Textile Exchange specifically stated: "Textile Exchange does not certify cotton, and there is no such thing as "TE certified organic cotton." However, Textile Exchange does own the Organic Content Standard (OCS), which addresses chain of custody for tracking and labeling organic cotton post-harvest stages (gin-onwards). The OCS does not apply to the production (growing) of organic cotton."¹²⁴



Whether cotton is actually organic or not is determined well before its first processing. Specifically, it is determined in the field, where and how the cotton is grown. So, if the cotton gins are not accurately collecting/recording where the cotton came from, let alone verifying if the farmer concerned was indeed farming organically, this leaves a major loophole in both the GOTS and OCS certifications. Indeed, we have been told by more than one sourcing professional that globally, considerably more cotton is sold as organic, than is produced.

Primark aside, CC claims to have been working with the Kering Group, which includes Gucci, since 2015. As mentioned, CC was co-founded by C&A and is not surprisingly a regular implementer of C&A's own cotton sustainability programs. Presumably, these and all the other corporations funding the various CC projects ask for and receive the project audits. There is no reason to believe that the outcomes of the project audited by Flocert, of which we received a copy, were radically different from those of any other CC project. Indeed, Flocert appears to audit quite a few of them. Those major corporations then, must be aware of the implementation failings.

These failings are not a question of a lack of funds. In 2020, BCI had total revenues of €21.5 million. ¹²⁶ Whilst Cofra Holdings' Laudes Foundation has granted €3.7 million to the Organic Cotton Accelerator; €7.5 million to CottonConnect, and €2.1 million to BCI, as well as multiple smaller amounts to other cotton initiatives.

nspiasn: 11jana Drngars



And of course, as co-founders, Shell Oil itself, poured millions more into CottonConnect, through its foundation. In 2009, for example, Shell Foundation gave \$291,000 to CottonConnect Ltd, and another \$855,000 to CottonConnect South Asia Pvt Ltd (plus another \$190,000 to Organic Exchange). In 2010, CottonConnect Ltd. received another \$1.1 million from Shell. And in 2011, Shell granted \$1.1 million to CottonConnect Hong Kong Ltd. The value of CC's other co-founder, C&A's, grants to CottonConnect is not documented.

It is hard not to conclude that transferring technology to the world's poorest to increase their incomes whilst minimising their environmental impact, is not the primary objective here. If that is the case, then the primary objective is not to make cotton production more sustainable. Rather, the aim appears to be to provide cotton that can be labelled more sustainable, thus ensuring that brands need not alter their production models.

Or as Milton Friedman put it so eloquently in 1970, talking about corporate social responsibility (CSR) in general: "In the present climate of opinion, with its widespread aversion to "capitalism," "profits," the "soulless corporation" and so on, [CSR] is one way for a corporation to generate goodwill as a by-product of expenditures that are entirely justified in its own self-interest." ¹³⁰

As Friedman also notes, however, we are in no position to demand that corporate executives refrain from this 'hypocritical window dressing': "If our institutions, and the attitudes of the public make it in their self-interest to cloak their actions in this way, we cannot summon much indignation to denounce them." 131

Compounding the problems with prevailing incentives, these shibboleths are picked up by other players in the CSR space without query or question. For example, as part of its business model, Sustainalytics provides second-party opinions on green, social, or sustainability bonds. "A second-party opinion (SPO) from Sustainalytics provides investors with assurance that the bond framework is aligned to accepted market principles (e.g. the Green Bond Principles or the Green Loan Principles) and that the proceeds of the bond or loan, as set out in the framework, are aligned to market practices and expectations from the investment community."¹³²

Sustainalytics is a subsidiary of Morningstar (a Chicago-based investment research firm that compiles and analyzes fund, stock, and general market data). Morningstar ratings are reputed to have unique power to affect asset flow, and so one would imagine that Sustainalytics second-party opinions would be data-based and rigorous. 134

Examination of such an opinion produced by Sustainalytics for a February 2020, €493 million Green Bond Issue by VF Corporation, however, reveals that a significant component of the Sustainable Products & Materials category, is VF's intended procurement of organic and BCI cotton. ^{135,136}

As we have already seen, there is no evidence that BCI or organic cottons are more sustainable than conventional cotton production. In reality, 2.3 million MT of cotton, produced by 360 Brazilian farmers, constituted 37% of certified BCI cotton in 2019/20 (by comparison it took 19,515 farmers to produce 23,000 MT of BCI cotton in Mali).¹³⁷

As a minor crop in rotation with soy, Brazilian cotton is automatically associated with all the criticisms of illegal deforestation in both the Amazon and the Cerrado, that are levied against Brazilian soy production. In addition, in 2019/20, despite accounting for just 5% of the world cotton area and 11% of world production, Brazil also accounted for 25% of all pesticides used on global cotton. ¹³⁸



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That such cotton is not more sustainable than cotton produced by desperately poor smallholders in Benin or Zambia, with no access to irrigation and very limited use of chemical pesticides and fertilisers, is obvious.

It seems odd that Sustainalytics made no attempt to ask for data to substantiate any of VF Corp's cotton claims. And it is astounding that when so many companies, particularly in the automotive sector, have been found to have been misrepresenting/falsifying their sustainability, that in the apparel sector, Morningstar are happy to allow the brands themselves to declare and verify the sustainability of their own programs. 139,140,141

2. TOWARDS MEANINGFUL CRITERIA FOR SUSTAINABLE FASHION



o halt climate change, the world, particularly the Western World, must act. But, as this paper has demonstrated, in fashion, sustainability is currently misunderstood, misinterpreted, and misevaluated. To act on this would be ill-advised to say the least, and very likely, counterproductive. A sea of change is required, beginning with mindsets.

Everyone from fashion conglomerates to bloggers must stop conflating environmental impact with sustainability and put impact on the poorest and most vulnerable where it belongs – at the heart of every sustainability undertaking, evaluation, measurement, and recommendation.

We are not offering a general exhortation to view sustainability holistically, or to treat socio-economic outcomes as another, currently largely forgotten, vital dimension.

We are saying that in the development and acceptance, first of the Brundtland report, and then of the SDGs that are based upon it, the global north has made a commitment to the global south. Fashion must honor that commitment, and any and all sustainability endeavors, must assign overriding priority to meeting the needs of the global poor.

To that end, we make two initial recommendations with 3 associated action points. Further recommendations and actions will be added to this list in subsequent papers.

TOWARDS MEANINGFUL CRITERIA FOR SUSTAINABLE FASHION RECOMMENDATION 1

Fashion corporations and global policy-makers must assess the socio-economic impacts of fiber production in producer countries and place these front and center in any and all sustainability, claims, rankings, and labelling.

Alternative fibers contribute to mitigating climate change, only to the extent that they replace production that is then discontinued. Many farmers have to farm – particularly in the global south where there are few or no other options. If we stop farmers from growing cotton or other fibers, or from raising alpaca, sheep, or silk worms, they have to grow/raise something else.

The key to halting climate change in the case of farmed fibers is not to force farmers into cultivating other crops, whose environmental impact may well be greater than that of cotton/alpaca/hides/wool. The solution is investment. At present, fashion demonstrates its sustainability credentials by investing in the development of alternative fibers, or fiber recycling, or some other aspect of purported circularity. Brands must invest in farmers.

Investment in increasing the yield from given inputs reduces environmental impact and enhances farmer income. For cotton, global average yield (kg/ha) in 2020 was 761 kg of lint per hectare. That average has persisted for the past 15 years. Yet eleven African countries have yields of less than 400 kg/ha, when the average yield in Bangladesh is almost double that (772 kg/ha). And for Mexico and Brazil, yield is more than double again (1,584 kg/ha, and 1,743 kg/ha). ¹⁴²

There is clearly a huge wasted opportunity to bring consumption below the safe ecological ceiling, whilst simultaneously lifting poor rural populations, particularly in Africa, above the social foundation through investing in cotton farmers.¹⁴³

Indeed, opportunities to raise yields and develop co-products exist for almost all farmed fibers.

Actions for Implementation:

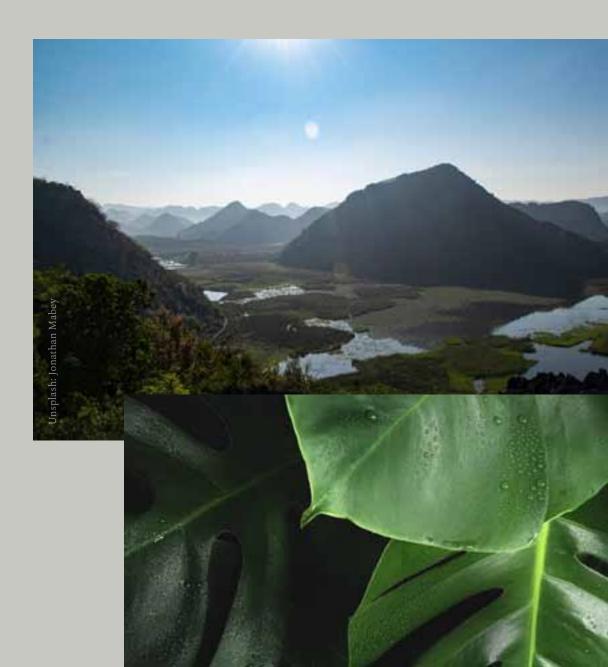
- i) The socio-economic impact of fiber production must be evaluated and included in any and all sustainability assertions.
 - As we have established, such evaluation cannot, ethically and reliably, be left to major corporations and their funded initiatives. Policy-makers in countries committed to the SDGs must step in and determine who is going to undertake such studies, how they will be funded, and how oversight and accountability will be factored in.
- ii) <u>Fashion must invest in farmers, particularly in</u> the Global South.

The EU is funding a project with the International Trade Centre, in collaboration with the International Cotton Advisory Committee, to double cotton yields in Zambia, within three years. 144

This is a great example of what is required:

a) Fashion brands and producers can and should engage in these kinds of projects directly, and as soon as possible. The objective would be to join farmers with scientists from leading multinational organisations and academic institutions, to increase yields, expand co-products, and minimise waste. Scientifically implemented, such projects will provide a reservoir of data from which the most effective approaches, methodologies, and systems can be identified and developed.

b) Policy-makers and multilateral organisations should evaluate production of farmed fibers to identify shortcomings, devise and promote schemes to maximise co-products, and fund the requisite technical transfers at a global and regional scale. As in the first action, who is going to undertake such studies, how they will be funded, and how oversight and accountability will be factored in, will need to be established in collaboration with all interested/affected parties.



TOWARDS MEANINGFUL CRITERIA FOR SUSTAINABLE FASHION RECOMMENDATION 2

Regulatory frameworks must include living wages.

No garment or piece of apparel can be declared or labelled as sustainable, by the EU PEF, Green Button or any other scheme, unless and until it can be demonstrated that the item concerned was manufactured by workers who were paid a living wage.

Actions for Implementation:

Policy-makers must establish an agreed mechanism for establishing, monitoring, and updating an index of the living wage in major apparel producing countries/regions. We would recommend Simor's "A Proposal for New EU Legislation on a Living Wage" as a basis. 145

Brands wishing to use such labelling will have to demonstrate that all their manufacturing meets this stipulation – not just a small, select line that can be heavily advertised, and so mislead the less attentive into believing that the corporation pays a living wage universally.





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