



# Alpacas and Vicuñas: Nature's Choice

*By Mike Safley*

In 1854 Chief Seattle spoke of the Sacred Web of Life, and his words still resonate today. He asked, **“How can one sell the air?”** in a speech responding to President Franklin Pierce’s offer to buy the Northwest Territories. Chief Seattle became an inspiration to generations of future conservationists as he continued with this promise: **“My words are like stars; they do not set. We are a part of the earth, and it is a part of us. The perfumed flow-**

**ers are our sisters; the deer, the horse, the great condor, these are our brothers.”**<sup>1</sup>

Chief Seattle’s words should be part of today’s Fashion Brands value statements. It’s one thing to sell clean air but quite another to create carbon dioxide emissions in the process of manufacturing a product to sell to consumers and then calling it “sustainable.”

<sup>1</sup> Michael J. Safley, *Vicuñas: Survival of the Finest* (Hillsboro, OR: Quechua Benefit, 2020), xvii.



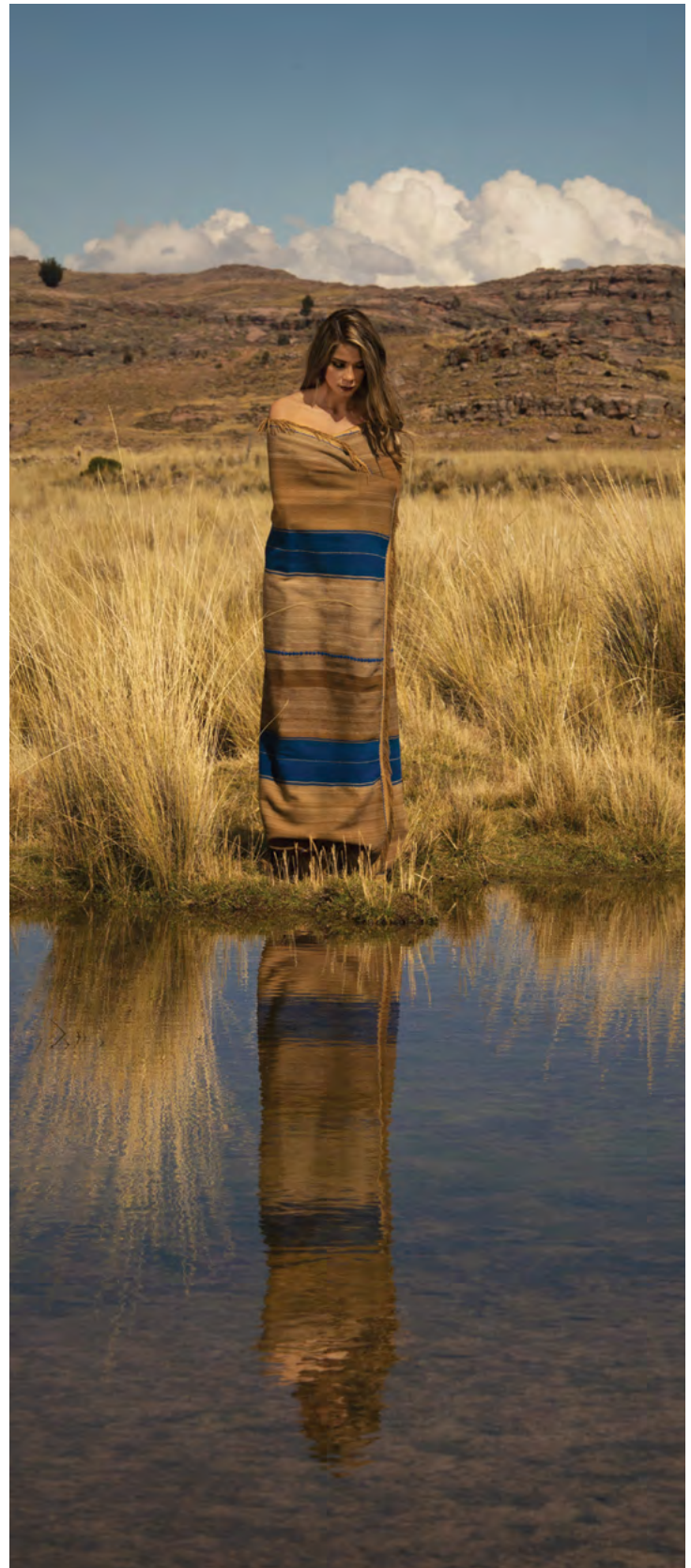
*Fashion joins countless other industries to play a role in global sustainability efforts, racing towards targets to slash greenhouse gas emissions within this decade and grappling with waste, water usage and the negative social outcomes of poorly traced supply chains... Brands must play a proactive role in the solution. Many fashion companies are setting up in-house sustainability and innovation teams and educating the wider organization on integrating sustainability into every stage of a product's lifecycle...<sup>2</sup>*

Luxury brands would do well to understand that alpaca and vicuña fiber and its manufacturing can provide a tremendous opportunity for them to produce products that have net zero emissions. Right now. All their sustainability objectives could be satisfied on the high-altitude grasslands of Peru.

The indigenous Quechua-speaking people of Peru manage an age-old system of holistic grazing and water conservation that grooms and preserves a vast grassland as if it were a garden. Their alpaca and vicuña pastures constitute one of the largest carbon sinks in the world, sequestering millions of tons of carbon by removing existing CO<sub>2</sub> emissions from the atmosphere. This model of holistic grazing used by Peru's alpaca shepherds is known as "regenerative agriculture." It can set the example for restoring the world's massive overgrazed, depleted, and destroyed grasslands.

*"The carbon sequestration potential of this model, when applied to billions of hectares of degraded grassland soils, worldwide, could return 10 or more gigatons of excess atmospheric carbon to the terrestrial sink annually thereby lowering greenhouse gas concentrations to pre-industrial levels in a matter of decades."<sup>3</sup>*

The second stage of the alpaca and vicuña supply chain is manufacturing, which is done primarily in Arequipa, Peru. The factories there are fueled by hydroelectric power. Alpaca fleece contains an average of 3.5% grease, whereas cashmere goats' fleece contains an average of 6.1%, and sheep 18.5%. This means alpaca manufacturing requires far fewer chemicals and less energy during the washing and scouring process to remove the grease from their fiber than sheep and cashmere goats.<sup>4</sup>



*Once upon a time the fairest princess in all the land, and the sun god's favorite daughter, walked close to the shore of Lake Titicaca. Photo by @loudscape.nef*

2 Rachel Deeley, "Fashion's Race for New Materials," *Business of Fashion* 31 January 2022. <https://www.businessoffashion.com/case-studies/sustainability/materials-innovation-textiles-recycling-production/>

3 Restoring the Climate through Capture and Storage of Soil Carbon through Holistic Planned Grazing. Savory Institute, 2013. <https://savory.global/wp-content/uploads/2017/02/restoring-the-climate.pdf>

4 *Why Alpaca?* Grupo Inca, Arequipa, Peru, 22





*This view creates the true perspective of the vast Altiplano which is the home of millions of indigenous Quechua people and their family members, the vicuñas, and alpacas. Photo by Wasim Muklashy*

Fashion designers should note that alpaca fiber comes in 22 natural colors from black to white,<sup>5</sup> requiring no dye, which is one of the largest pollutants of the world's water supply from manufacturing cotton. If designers desire jewel tones or pastels, they can be assured that the dye used by alpaca manufacturers complies with REACH norms for the European Union and are OEKOTEX certified. (Juan Pepper, Commercial Manager of Michell & Co., Arequipa, Peru)

All alpaca textile factories in Arequipa are run by hydropower, which is a zero emissions renewable energy source.

Arequipa is home to the world's alpaca fiber exports, which account for a majority of their sales.<sup>6</sup> Hydropower is also the source of the small amount of electricity that the alpaca shepherds of the Andes use. (Personal observation and correspondence with Juan)

The Quechua herders do not heat their homes, and they have no home appliances. They only use one or two lightbulbs per family per day, which are powered by hydroelectric.



*Alpacas in silver, gray, white, black, fawn, brown. Not shown are mahogany, rose grey, chocolate brown, roans of several colors, and pintos. Each color has several distinct shades. Photo by Wasim Muklashy*

<sup>5</sup> Why Alpaca? 8.

<sup>6</sup> "Peru is the world's leading producer of alpaca fiber" 06/11/2019, [peru.info/en-us/foreign-trade/news/7/32/peru-is-the-world-s-leading-producer-of-alpaca-fiber](http://peru.info/en-us/foreign-trade/news/7/32/peru-is-the-world-s-leading-producer-of-alpaca-fiber)



The companies that process and manufacture clothing made from **alpaca and vicuña** are required by Peruvian law to

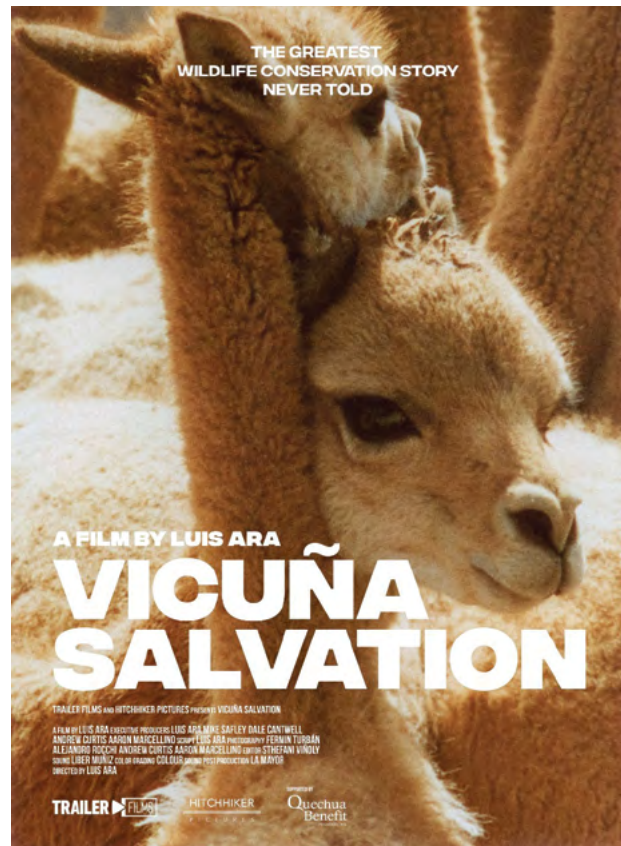
- 1) Pay living wages to factory workers and insure a safe workplace.
- 2) Fund healthcare for 100% of all Peruvian factory workers, which is managed by the government.
- 3) Fund a privately managed retirement account for each employee.

Polyester, in 55% of all clothing and textiles, is the mostly widely used fiber today. Polyester manufacturing pollutes the environment in many ways.<sup>7</sup> “A new report criticizes fashion’s heavy use of plastic in its clothing, in the form of synthetic fibers.”<sup>8</sup>

*“In 2015 a survey of 30,000 consumers in 60 countries found that 66% of consumers are willing to pay more for products or services from companies committed to positive social and environmental impact.”<sup>9</sup>*

Sustainability issues are also attracting increasing attention at executive level..., A rising number of asset and wealth managers have mandates that prioritize companies that pass sustainability thresholds.<sup>10</sup>

*“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 behavior. Pucker concludes that most company reporting in the context of sustainability is not a proxy for progress but often just, ‘fanciful greenwashing’.”<sup>11</sup>*



*Vicuña Salvation is a full-length documentary, coming to a screen near you, that chronicles the miraculous journey of the Vicuña as they recover from their endangered species status. This was a victory for all of Peru, with the community of Picotani being at the center of the movement, deeming them the true “Heroes of the Andes.”*

*“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.”<sup>12</sup>*

**The fashion industry needs to realize they will not have any material impact on Global Warming without attacking CO<sub>2</sub> emissions.** Oil and gas, which are used extensively in almost every industry, are responsible for 46% of total CO<sub>2</sub> emissions and oil drilling is responsible for 30% of the methane gas and around 8% carbon dioxide pollution.<sup>13</sup>

7 See Mike Safley, “Is the Alpaca and Vicuña Industrial Process Sustainable?”

8 Rachel Cernansky, “Is there space in a sustainable global climate for synthetic fabrics?” *Vogue* 8 July 2021

9 “Sustainable Selections: How Socially Responsible Companies are Turning a Profit,” *www.nielsen.com*, October 12, 2015.

10 McKinsey & Co., “Fashion on Climate.”

11 Veronica Bates Kassatly and Dorothee Baumann-Pauly, “The Great Green Washing Machine Part 1: Back to the Roots of Sustainability.” Geneva Center for Business & Human Rights. 15/09/2021 [https://eco-age.com/wp-content/uploads/2021/09/REPORT\\_Final\\_72dpi2.pdf](https://eco-age.com/wp-content/uploads/2021/09/REPORT_Final_72dpi2.pdf)

12 Kenneth P. Pucker, “Overselling Sustainability Reporting.” *Harvard Business Review*. May-June 2021 <https://hbr.org/2021/05/overselling-sustainability-reporting>

13 Berry, India, “Top 10 Causes of Global Warming.” Sustainability, 8 October 2021, [sustainabilitymag.com/top10/top-10-causes-global-warming](https://sustainabilitymag.com/top10/top-10-causes-global-warming)

The fashion industry should also consider that the grasslands, alpacas, vicuña, and the pastoralists who are managing their seasonal grazing are sequestering far more carbon than they are emitting. These are the people at the base of the supply chain who cry out for equity.

*It's worth repeating,  
that the UN Sustainable Development Goals  
number one priority is poverty alleviation.  
"It's not more recycled plastic  
in your collections."<sup>14</sup>*

The indigenous Andean population has steadily declined since the Spanish Conquistadors arrived, and in recent years the decline has accelerated. Today there are about 1,000,000 alpaca and vicuña shepherds left from the multi millions that preceded AD 1492.

This is confirmed by the Peruvian government's demographic statistics and 30 years of the author's personal observations and multiple conversations with Peruvian textile executives.

There is no doubt that textile producers are concerned about the future of alpacas in Peru. One owner of a very large textile firm said, "We are afraid that there will no longer be an adequate supply of alpaca fleece in the next 10 to 20 years." Another said, "The alpaca breeders do not want to raise alpacas anymore. They want to move to the big cities or work in the mines."

The owners' opinions are easy to understand when you consider that at the current price of fleece at \$4.50 per pound. Each alpaca produces about \$65 worth of fleece every year. The average herding family consists of two adults and three children. Alpacas are their primary cash income. Most families living in tiny remote alpaca breeding communities own between 25 and 100 alpacas with an income between \$1,625 and \$6500 per year. Not exactly what you would call a living wage for a family of five.



*This couple has lived in Picotani their entire lives in the same house where they grew up. Photo by Ana Caroline de Lima*

14 Elizabeth Cline, director of advocacy and policy at the nonprofit Remake, in Rachel Cernansky, "Sustainability: Where fashion is heading in 2022." *Vogue*. 5 January 2022.



I founded Quechua Benefit in 1996, and shortly thereafter we began working with the Picotani community. Quechua Benefit is currently producing a documentary entitled *Vicuña Salvation*, which focuses on Picotani, which raises alpacas and was instrumental in saving the wild vicuña from extinction beginning in the 1960s. Their efforts contributed to the vicuña being removed from the endangered species list. When Sarita, the head of the women's community association, was asked, "What is it like to live in Picotani?" she replied,

*"It is sad, we don't have enough of anything. Our men are leaving to work in the mines and the kids are leaving for the big cities. It has been a little better since the sale of the wild vicuña's fiber has been made legal. The younger ones are staying in the community."*

The idea that the alpaca breeders want to leave the mountains for the mines or cities is simply not true; they inherit their alpacas just as they have inherited their culture and the way they manage the grasslands where they have lived for 8,000 years. For their culture, the grasslands, and their alpacas to survive they need to make more income from their fleece sales. Like Sarita says, "My dream is to keep going, no matter what."

*"If Peru becomes known as the origin of the vicuña, there is a whole branding platform that comes from the stories we can tell."*

—Andrew Michell, Director of Michell CIA

The most direct way for the pastoralists of the Andes to earn an equitable price for their fleece is by adding value to the supply chain. Simple things really. All things the fleece buyers, the Peruvian government, the textile manufacturers, and the Fashion Brands can easily support.



*Alpacas are cared for by shepherdesses like these ladies who take their herds from the corrals and return them at dusk.  
Photo by Wasim Muklashy*

1. Provide electric shears and generators, instead of the hand shears used today.
2. Teach pattern shearing to allow for separation of the various qualities at the point of shearing. This also saves the textile companies that purchase the fleece additional time and money for hand sorting.
3. Create veterinarian programs organized by the government and the textile industry and universities to provide education, vaccines, antibiotics, and husbandry training.
4. Create Fashion Brand partnerships to attract environmentally motivated fashion consumers, who will gladly pay more for ethically sourced fashion that contributes to the fight against global warming.
5. Reform the collection system to eliminate the middlemen who add little value, live in large cities, and take high fees for the fleece purchases that should go directly to the Quechua pastoralists.
6. Develop carbon credits on behalf of alpaca and vicuña communities for sale to Brands to offset their carbon footprints on world financial exchanges. This will ensure that pastoralists continue to practice seasonal grazing, water conservation, and care for the alpacas, without whom the vast grasslands will die and no longer sequester carbon.

These are small inexpensive programs for the government, Fashion Brands, textile manufacturers, and universities to underwrite if they support the global warming and poverty alleviation, or **sustainable development** goals as articulated by the United Nations and the COP26 climate conference. And even more importantly supporting these initiatives can create wonderful branding opportunities for the brands.

*“I think that Peru must get out of its industrial mindset. I think that in general we are stuck there, we haven’t been able to create brands and we haven’t been able to create value for our products. I think that in general we need new ideas to create brand stories for our products; not how we process the fiber. Then we need to bring the consumer into these stories and bring them to the countryside. If the vicuna for instance would have a wider market, there would be more protection and more vicuñas.”*

— Andrew Michell, Director of Michell CIA.

Alpaca fiber is currently sold based on technical specs and price. It is treated as a commodity. The Peruvian textile companies and fashion brands would do well to “humanize” alpacas. Show the world their story in human, ecological and global warming terms.



*The women of Picotani are stoic, tough, and most will live their entire lives never even leaving to go to a town of any size. Photo by Ana Caroline de Lima*





*This vicuña shawl is sold in high fashion boutiques around the world for \$3,000 dollars and is made from a few ounces of vicuña fiber. But few people know the vicuña's story, its salvation from endangered species status and the people who manage their future growth as a species. Photo by @loudscape.nef*

**Before brands and consumers make their next fashion decision, they may want to consider that the 1,000,000 indigenous people who graze alpacas and vicuña on the vast Altiplano of Peru are among the few people on earth who haven't**

**screwed up the environment. And consumers will want to buy their products from Brands that insist that the producers are paid a fair price for their goods and simultaneously protect the environment.**