(Maydana, 2015)

SOCIAL SUSTAINABILITY:
A NECESSARY FOUNDATION

The case of Loro Piana and vicuña wool

Introduction

With growing awareness of the disconnect between business growth as an economic driver and planetary health, what (Edwards, 2021) calls the "growth paradox" sustainable supply chain management (SSCM) has become a priority for organizations (Fernando *et al.*, 2022). However, social sustainability, defined here as addressing human and social well-being through poverty alleviation, human rights and employee welfare within and outside supply chain communities (Krause, Vachon and Klassen, 2009; Lotfi, Walker and Rendon-Sanchez, 2021) is often secondary to environmental and economic sustainability (Govindan, Shaw and Majumdar, 2021; Lotfi, Walker and Rendon-Sanchez, 2021). We forget that we are saving the planet for humans (Pagell and Wilhelm, 2025).

This paper will demonstrate Lotfi, Walker and Rendon-Sanchez's (2021) statement that operating within a safe environmental space for humanity will not be possible until supply chains overcome shortfalls in social sustainability. To demonstrate this, we analyze Loro Piana's (LP) supply chain, focusing on raw materials sourcing of vicuña wool in Peru.

Vicuña is a wild animal, largely found in the Peruvian Andes known for its soft coat once reserved for Inca nobility (Encyclopedia Britannica Editors, no date). Due to poaching leading to their near extinction, trading vicuña wool was outlawed until an international treaty brought back legal trade, dictating income from the animal must benefit the Indigenous Andean peoples (Rochabrun, 2024a). Conservation and policy efforts from the Peruvian government have been successful in removing vicuña from the endangered species list, signing an exclusive ten-year deal with LP in 1994 to purchase only fibre sheared from live vicuña's according to international regulations (Fernando *et al.*, 2022). Despite these positive results, the communities that sell to LP continue to live in poverty (Rochabrun, 2024a). Per Rochabrun (2024), 41% of the village of Lucanas, a key supplier for LP live on less than $91 a month.

We begin by describing LP's business and supply chain, moving on to analyze social sustainability within a portion of the supply chain using the Donut Model Framework (Donut Economics Action Lab (DEAL), no date) (Figure 1). This framework visually depicts the "safe space" for humanity to operate, beginning with a solid social foundation where human needs are met (e.g. food and shelter) within the planet's ecological means (DEAL, no date). This analysis demonstrates how the lack of a solid social foundation within the supply chain is increasing long-term business risks for LP in sourcing vicuña wool.

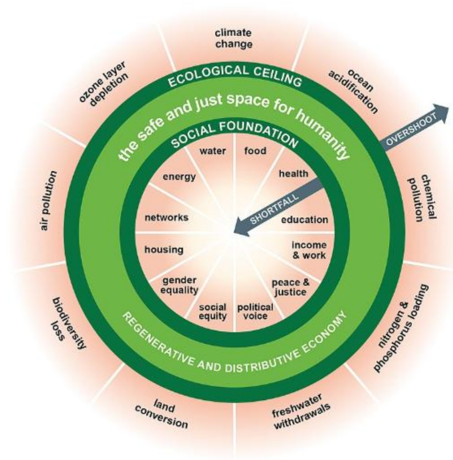

Figure 1: DEAL, no date

Utilizing the 4P Matrix of Corporate sustainability (CS) (van Marrewijk and Werre, 2003) we illustrate that LP's operating environment is changing due to a shaky social foundation, demonstrating the validity of Lotfi, Walker and Rendon-Sanchez's (2021) statement. We argue LP's commitment to CS needs to change in response to these circumstances to mitigate risks. Recommendations for LP are made to improve social CS commitment in line with changing circumstances.

Business and Supply Chain

LP started as a textile producer and transitioned to a luxury brand under the Piana brothers in the 1990's (Crompton, 2021; Arnault and Amiri, 2024). LP's business strategy focuses on sourcing rare fabrics, offering exclusivity through ultra-luxury garments made of rare material such as premium cashmere and vicuña (LVMH, no date; Crompton, 2021). Vicuña is one of the most expensive fabrics in the world (Jimison, 2024), with jackets made of vicuña costing up to $33,000 (Rochabrun, 2024b).

LP gained a reputation as a unique luxury brand, having a vertically integrated business model due to community relationships, specialized machinery and craftmanship required for the materials they work with (Crompton, 2021; Arnault and Amiri, 2024). The 1994 agreement with the Peruvian government allowed LP to work closely and exclusively with Andean communities, creating an oligopsony market for vicuña. LP remains the main vicuña buyer, giving them control over prices (Kasterine and Lichtenstein, 2018). These factors propelled their business success and maintained a competitive advantage (Crompton, 2021; Arnault and Amiri, 2024).

Vicuñas are located in isolated regions in Peru. People living in these regions often have little access to basic needs that make up the social foundation of the Donut Model, such as water, sewer systems and electricity (Lisung, 2008). Communities participating in legal vicuña trade must be part of an organization that coordinates those involved with vicuñas management to prioritize species protection. Communities fulfill this responsibility through designating villagers to aid in vicuña population management including monitoring population, tagging animals etc. This strategy was meant to protect the species while lifting the communities out of poverty (Lisung, 2008).

Supply Chain

The LP supply for vicuña garments is depicted below (Figure 2). Several reports have recently shed light on social supply chain issues for LP, including labour issues in Italian factories and poverty in Peruvian communities that source vicuña fibre (Rochabrun, 2024a; Baumann-Pauly, Anderson and Siers, 2025). Although prices for LP clothing keep rising, the people of Lucanas remain in poverty (Rochabrun, 2024a).

Despite multiple social supply chain issues, the scope of this analysis will focus on production, primary processing and trade in the vulnerable communities that source vicuña in Peru.

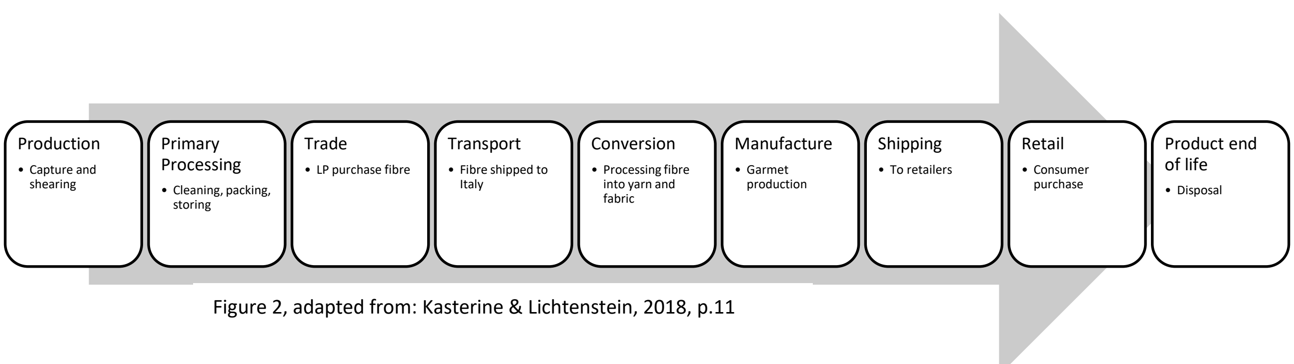

Figure 2, adapted from: Kasterine & Lichtenstein, 2018, p.11

Production and Primary Processing

Production begins with villagers participating in herding vicuña, putting up miles of fencing to move the animals towards a funnel to capture them for shearing, which is a physically difficult process completed at high altitudes (Rochabrun, 2024b). Due to the minimal amount received for the fiber, community members participating will be lucky to receive $21, if anything for this process (Rochabrun, 2024b). Income and work, meaning decent work for a proper income (Lotfi, Walker and Rendon-Sanchez, 2021) are within the social foundations of the Donut Model. This is not achieved when local workers are unable to be paid for their participation in the process.

Subsequently, fibre is sorted into categories based on quality (Kasterine and Lichtenstein, 2018; Rochabrun, 2024a). Fibre can be sold as dirty, pre-cleaned or clean. Cleaner fibre fetches a higher price, therefore most fibre is pre-cleaned by female workers women who manually clean it after sorting (Kasterine and Lichtenstein, 2018). Often working environments could provide more health and safety precautions such as masks and protective gear from the dust and debris of cleaning the wild animal fibre (Lisung, 2008). The above does not describe a work environment committed to the health component within the Donut Model.

Trade

Managing the vicuña population can include fence building and/or paying guards to protect from wildlife and poachers (De Roy, 2002). Many communities, due to poverty, can't afford to invest the upfront capital to develop an annual plan for vicuña fibre (Lisung et al., 2008, p.39).

Even when communities do invest the capital, the monopoly on pricing LP holds keeps prices low and communities continue to live in poverty (De Roy, 2002; Rochabrun, 2024a), reducing the ability to make a proper income. Most homes do not have plumbing and are made of mud (Rochabrun, 2024a), creating a social foundation gap for health. Poverty puts communities at risk of not having enough food, education or equal access to opportunities (social equity) which all contribute to fulfilling the Donut Model social foundation.

Although LP's prices keep rising, the rate paid to the people of Lucanas for vicuña raw materials has fallen by 36% (Rochabrun, 2024a). It continues to fall due to the government's change in mandate, allowing LP to purchase land and shear vicuña without benefitting Andean communities (Rochabrun, 2024a). This further exacerbates the ability of the community to escape poverty. Additionally, when wool is sold to LP, the community receives 2-6% of the of the final price of a garment (Kasterine and Lichtenstein, 2018). This is a low percentage compared to other fabrics like cotton, for which raw materials make up 15% of a final garment price (Ibanez and Townsend, 2015). By continuing to drive down the price of vicuña wool, LP is working against creating a solid social foundation by creating a situation that keeps communities in poverty.

Business Case

Van Marrewijk and Werre (2003) developed the 4P Matrix of Corporate Sustainability (CS). This model has six progressing levels of CS, emphasizing that the level or CS which is essentially the organizational commitment to sustainability, varies with operating circumstances that create motivation to move throughout the levels (Table 1).

Table 1, adapted from van Marrewijk and Werre, 2003, p.113.

Level	Definition
Pre-CS	No ambition for CS
Compliance-Driven	Following regulations
Profit-Driven	CS is integrated into business decisions if initiatives help the bottom line.
Caring	Balances economic, social and environmental considerations as equally important business impact considerations. Stakeholders are consulted in decisions. Personal management values often shape this level.
Synergistic	Creating value in social, economic and ecological business decisions. Decisions are made considering long-term impacts and win-win value creation with stakeholders. Management views social, economic and ecological considerations as inevitable to business.
Holistic	Decisions aim to contribute to betterment of life and environment with the view that all things are interconnected.

LP's actions to preserve the vicuña, touting their environmental commitments while increasingly leaving behind the communities that helped propel their business points towards profit-driven CS.

However, with communities continuing to live in poverty and receiving such a small amount of the final purchase price of luxury garments, poaching is on the rise (Nuwer, 2015). As the problem continues, this could pose significant endogenous risks to LP. Risks include international policy risk of limiting legal fiber trade in the long-term and consumer demand, as social issues top consumer concerns when purchasing luxury goods (Jaegler and Goessling, 2020). With supply chain issues for LP rising in visibility (Jimison, 2024), reduced sales may result from reputational risk. Per Slack, Brandon-Jones and Johnson (2016) the end consumer must ultimately be satisfied.

These changing operating circumstances will require a shift towards synergistic CS, as without adequate compensation and treatment of workers in Andean communities, long-term business risks to LP's prized fabric will rise. Van Marrewijk and Werre (2003) indicate that unexpected externalities such as those resulting from poaching can motivate a company to move into the synergistic level of CS.

The above exemplifies Lotfi, Walker and Rendon-Sanchez's (2021, p.11) comment "until supply chains are successful in overcoming shortfalls across all elements of the social foundation, moving to the next layer of the doughnut framework is impossible."

Recommendations

Within synergistic CS, stakeholder interests are considered in business decisions, creating strategic partnerships for win-win situations (van Marrewijk and Werre, 2003). Executive sponsorship of sustainability initiatives is a key driver of action (Hermano and Martín-Cruz, 2016). Therefore, it is recommended to add specific incentive measures relating to betterment of the Andean communities to executive pay within LP. These measures will then cascade throughout the organization. Incentives to create win-win situations can include long-term commitments to fair compensation, profit sharing with Andean communities and community development initiatives.

For example, LP should commit to align total annual compensation for the community pertaining to vicuña wool garments with estimated standard industry percentages of final garment costs that raw fibre makes up.

In addition, introducing a profit-sharing plan where a percentage of profits can be earmarked for Andean community development projects to meet basic needs currently lacking such as water, sewage systems and electricity projects. LP could partner with social enterprise organizations like Bechtel.org, which delivers infrastructure projects to underserved communities including the Peruvian Andes (Bechtel, no date; Schmidt and Case, 2023).

To prevent target manipulation, governance measures must be added for tracking these types of projects at the executive level (Li and Thibodeau, 2019). As a public company LVMH, parent company of LP, already has an independent board compensation committee in place to monitor performance which can be utilized for these initiatives (MarketScreener, no date).

The above will significantly increase community compensation and satisfaction, increasing the motivation for communities to continue protecting the species from poaching.

Conclusion

With the growing disconnect between business growth as an economic driver and planetary health (Edwards, 2021), this paper demonstrated Lotfi, Walker and Rendon-Sanchez's (2021) point that achieving a social foundation per the Donut Model is essential before moving into operating withing the safe space for humanity.

This was demonstrated by highlighting the prioritization of environmental issues in SSCM and examining increasing business risks withing LP's supply chain pertaining to raw materials sourcing of vicuña wool in Peru that are manifesting from a lacking commitment to social foundations.

Recommendations to mitigate these risks were made by considering the level of CS LP currently operates at while considering that level is insufficient for the rising complexities in their vicuña wool supply chain.

By focusing on social performance through executive target setting, LP can mitigate these future risks.

In conclusion, this paper has demonstrated a clear business case for improving social performance and business risks that accompany ignoring it.

References

Arnault, L. and Amiri, R. (2024) ‘Yes, Loro Piana is Owned by LVMH and Here’s How and Why’, *The Vou Men’s Styling Guides* [blog], 13 July. Available at: https://thevou.com/blog/loro-piana-lvmh-company-merger/ (Accessed: September 28, 2025).

Baumann-Pauly, D., Anderson, V. and Siers, L. (2025) *A Troubling Pattern in Luxury: What the Loro Piana Case Reveals*, *NYU Stern Center for Business and Human Rights*. Available at: https://bhr.stern.nyu.edu/quick-take/a-troubling-pattern-in-luxury-what-the-loro-piana-case-reveals/ (Accessed: October 19, 2025).

Bechtel (no date) *Impact Infrastructure*. Available at: https://www.bechtel.com/people/bechtel-org/ (Accessed: October 22, 2025).

Crompton, S. (2021) *Behind the scenes at the Loro Piana factory*, *Permanent Style*. Available at: https://www.permanentstyle.com/2021/02/behind-the-scenes-at-the-loro-piana-factory.html (Accessed: September 28, 2025).

Donut Economics Action Lab (DEAL) (no date) *About Doughnut Economics*. Available at: https://doughnuteconomics.org/about-doughnut-economics (Accessed: October 3, 2025).

Edwards, M.G. (2021) ‘The growth paradox, sustainable development, and business strategy’, *Business Strategy and the Environment*, 30(7), pp. 3079–3094. Available at: https://doi.org/10.1002/bse.2790.

Encyclopedia Britannica Editors (no date) *Vicuna - Habitat, Diet, Lifespan, & Facts*, *Encyclopedia Britannica*. Available at: https://www.britannica.com/animal/vicuna (Accessed: October 1, 2025).

Fernando, Y., Halili, M., Tseng, M.L., Tseng, J.W. and Lim, M.K. (2022) ‘Sustainable social supply chain practices and firm social performance: Framework and empirical evidence’, *Sustainable Production and Consumption*, 32, pp. 160–172. Available at: https://doi.org/10.1016/j.spc.2022.04.020.

Govindan, K., Shaw, M. and Majumdar, A. (2021) ‘Social sustainability tensions in multi-tier supply chain: A systematic literature review towards conceptual framework development’, *Journal of Cleaner Production*, 279, article 123075. Available at: https://doi.org/10.1016/j.jclepro.2020.123075.

Hermano, V. and Martín-Cruz, N. (2016) ‘The role of top management involvement in firms performing projects: A dynamic capabilities approach’, *Journal of Business Research*, 69(9), pp. 3447–3458. Available at: https://doi.org/10.1016/j.jbusres.2016.01.041.

Ibanez, P. and Townsend, E. (2015) *Sewing up lower costs from falling commodity prices*. Available at: https://www.mckinsey.com/capabilities/operations/our-insights/sewing-up-lower-costs-from-falling-commodity-prices#/ (Accessed: October 22, 2025).

Jaegler, A. and Goessling, T. (2020) ‘Sustainability concerns in luxury supply chains: European brand strategies and French consumer expectations’, *Business Strategy and the Environment*, 29(6), pp. 2715–2733. Available at: https://doi.org/10.1002/bse.2531.

Jimison, R. (2024) *Lawmaker Presses Loro Piana on Reports of Exploiting Indigenous Workers in Peru*, *New York Times*. Available at: https://www.nytimes.com/2024/04/13/us/politics/garcia-loro-piana-vuitton-indigenous-peru.html (Accessed: October 1, 2025).

Kasterine, A. and Lichtenstein, G. (2018) *Trade in Vicuna Fibre: Implications for Conservation and Rural Livelihoods*. Geneva, Switzerland: International Trade Centre. Available at: https://www.researchgate.net/publication/326439898.

Krause, D.R., Vachon, S. and Klassen, R.D. (2009) 'Special topic forum on Sustainable Supply Chain Management: Introduction and reflections on the role of purchasing management', *Journal of Supply Chain Management*, 45(4), pp. 18–25. Available at: https://doi.org/10.1111/j.1745-493X.2009.03173.x.

Li, Z. and Thibodeau, C. (2019) 'CSR-contingent executive compensation incentive and earnings management', *Sustainability*, 11(12), article 3421. Available at: https://doi.org/10.3390/su11123421.

Lisung, L.L.L. (2008) *Peasant communities, the first link of the commodity chain of vicuña fiber*. Unpublished Master of Science Thesis. Iowa State University.

Lotfi, M., Walker, H. and Rendon-Sanchez, J. (2021) 'Supply chains' failure in workers' rights with regards to the SDG compass: A doughnut theory perspective', *Sustainability*, 13(22), article 12526. Available at: https://doi.org/10.3390/su132212526.

LVMH (no date) *Our Maisons - Loro Piana*, *Louis Vuitton Moet Hennessey*. Available at: https://www.lvmh.com/en/our-maisons/fashion-leather-good/loro-piana (Accessed: September 27, 2025).

MarketScreener (no date) *LVMH: Governance, Directors and Executives & Committees*. Available at: https://ca.marketscreener.com/quote/stock/LVMH-69084/company-governance/ (Accessed: October 15, 2025).

van Marrewijk, M. and Werre, M. (2003) 'Multiple Levels of Corporate Sustainability', *Journal of Business Ethics*, 44(2/3), pp. 107–119. Available at: https://www.jstor.org/stable/25075021 (Accessed: October 16, 2025).

Maydana, D. (2015*) Vicuñas awaiting a haircut at Pulario in Bolivia* [photograph]. In: *Smithsonian Magazine*, 24 November. Available at: https://www.smithsonianmag.com/science-nature/poaching-upsurge-threatens-south-americas-iconic-vicuna-180957376/ (Accessed: October 20, 2025).

Nuwer, R. (2015) 'Poaching Upsurge Threatens South America's Iconic Vicuña', *Smithsonian Magazine*, 24 November. Available at: https://www.smithsonianmag.com/science-nature/poaching-upsurge-threatens-south-americas-iconic-vicuna-180957376/ (Accessed: October 12, 2025).

Pagell, M. and Wilhelm, M. (2025) 'Putting the S in Sustainable Supply Chain Management: A People-Centric Research Agenda', *Journal of Supply Chain Management*, 61(1), pp. 83–95. Available at: https://doi.org/10.1111/jscm.12337.

Rochabrun, M. (2024a) 'The Vicuñas and the $9,000 Sweater'*, Bloomberg Businessweek -The Big Take,* 13 March. Available at: https://www.bloomberg.com/features/2024-lvmh-loro-piana-vicuna-sweater-labor/ (Accessed: October 1, 2025).

Rochabrun, M. (2024b) *Inside Peru's Secret Luxury Supply Chain* [video]. *Bloomberg*, 13 March. Available at: https://www.bloomberg.com/news/videos/2024-03-13/inside-peru-s-secret-luxury-supply-chain-video (Accessed: October 5, 2025).

De Roy, T. (2002) ‘Return of the Golden Fleece’, *National Wildlife*, 1 January. Available at: https://www.nwf.org/Magazines/National-Wildlife/2002/Return-of-the-Golden-Fleece (Accessed: October 10, 2025).

Schmidt, H. and Case, M. (2023) *Sumaq Wasi Housing: Beating the Cold*, *Bechtel*. Available at: https://www.bechtel.com/blog/sumaq-wasi-housing-beating-the-cold/ (Accessed: October 22, 2025).

Slack, N., Brandon-Jones, A. and Johnson, R. (2016) *Operations Management*. Harlow: Pearson Education Limited.