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Reconsidering the middleman: asymmetries in a direct-contact producer-buyer alpaca fiber roundtable in Peru

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Disintermediation is often presented as a means of improving producer welfare by “cutting out the middleman” and allowing producers and buyers to transact directly. However, from the perspective of transaction cost economics, information asymmetry, and market-access theory, removing intermediaries does not eliminate the functions they perform; rather, it reallocates search, verification, liquidity, risk-bearing, aggregation, and enforcement costs to other actors or infrastructures, often producers. This theory-informed qualitative case study examines a state-convened alpaca-fiber business roundtable held in Arequipa, Peru, where 17 producer associations from seven high-Andean regions met with 5 buyer firms in a structured direct-contact format. Drawing on observational field notes, analytic debriefings, thematic coding, and event documents, the study analyzes how disintermediation shaped bargaining power between alpaca-fiber producers and buyers. Findings show that the roundtable reduced buyer search costs and generated public reference prices above some traditional intermediary offers, but did not substantially redistribute bargaining power to producers. Instead, formerly intermediary functions reappeared as producer-side obligations organized through buyer-defined standards, sample comparability, laboratory verification, certification, minimum-volume requirements, delayed payment, logistics, and weak post-event enforceability. These dynamics were especially consequential in a pastoralist fiber economy where product value depends on technical grading, trusted classification, aggregation capacity, and culturally situated forms of exchange. The study argues that improving producer outcomes requires more than simply direct contact, but producer-centered transaction infrastructures, including independent sampling and testing, transparent price records, enforceable purchase-intention mechanisms, stronger producer coalitions, and digital or face-to-face intermediation designed around Indigenous data sovereignty and the practical knowledge, values, and way of life of traditional alpaca pastoralism.

KEYWORDS

alpaca, disintermediation, information asymmetry, Peru, reintermediation

Introduction

This study offers a theory-informed qualitative case analysis of how a time-bounded matchmaking meeting—specifically, a direct-contact roundtable between producers and buyers in Peru’s alpaca fiber sector—unfolded when conventional intermediaries were excluded from the encounter. The central focus is on how power asymmetries shape the negotiation of value and commitment under compressed meeting time, unequal technical resources between parties, and limited-to-no access to post-meeting verification, logistics, or deal enforceability.

Its most overarching finding logistically is that disintermediation—as the removal or exclusion of traditional intermediaries from negotiations—does not necessarily relocate or redistribute bargaining power to producers. Instead, it shifts bargaining power onto the standards, grading systems, and verification infrastructures that determine whether value will be recognized, priced, and made enforceable in the marketplace—a shift that disadvantages producers.

While these market logics are a significant part of this study’s picture, we are also currently in the midst of UNESCO’s Decade of Indigenous Languages (UNESCO, 2022). Domesticated alpaca pastoralism in Peru is not only a 6,000- to 7,000-year-old indigenous tradition; it has also endured in one of the most unforgiving ecologies and, at times, through tremendous and direct cultural violence (Aroni, 2020; Bello-Bravo et al., 2024; Wasson, 2014). Astacio (2022) suggests that Peruvian alpaca pastoralism and its Indigenous knowledges and practices have already become unsustainable under marketized pressures.

While many vanishing peoples, cultures, and traditional practices and outlooks exist around the world, if sustainability is not just a buzzword, we must prioritize the wellbeing and continued existence of traditional alpaca pastoralism. This follows from the founding formulation of sustainable development in the 1987 *Brundtland Report* (Brundtland et al., 1987; Choy, 2015), which states without ambiguity that the overriding priority should be to meet the needs of the world’s poor. This mandates making life for alpaca fiber producers not just possible but feasible; it requires, at a minimum, removing conditions that produce asymmetric bargaining power that prioritizes buyers’ values and frameworks at the expense of producers’. Accordingly, although the roundtable meeting in this study was convened within market-dominated logics, we cannot allow them to have the last word.

Literature review

Disintermediation

Disintermediation generally refers to shortening a value chain by removing or bypassing established intermediaries, enabling two market sides to transact more directly (for example, producers selling directly to processors or retailers rather than through traders and aggregators) (Feulner et al., 2025). In the classic account, disintermediation becomes feasible when transaction and information costs decrease significantly enough (often via new organizational or digital arrangements) that coordination, price formation, and trust no longer require the same or prior intermediary roles (Schaffer et al., 2009; Tseng and Shang, 2021).

For most of the human species’ existence, intermediaries have played key roles as “go-betweens” in countless contexts, solving coordination problems that would otherwise be hard or impossible to solve (Simmel, 1950). In this way, intermediaries connected distant parties, moved goods, and reduced search costs (finding counterparties), information costs (assessing and even warranting quality and reliability), and enforcement costs (making promises between distant actors credible). In modern, market-oriented terms, they provide liquidity and risk absorption (by advancing cash, warehousing, and smoothing price volatility). But, most fundamentally, they can “translate” between social worlds (across languages, cultural norms, reputations, and the tacit knowledge of what counts in different contexts as “acceptable”).

These mediating functions long predate industrialization and its market-logistical forms (Simmel, 1950), and historians have shown that they were already central to earlier global formations of exchange, knowledge, and authority via “go-betweens” and brokers (Schaffer et al., 2009). Classical accounts have emphasized the role played by intermediaries—whether strangers and itinerant traders, brokers, guilds, market elders, temple or state granaries, caravan networks, and diaspora merchant communities—as cultural translators across boundaries (Geertz, 1960; Simmel, 1950; Wolf, 1956). Modern industrial supply chains represent an intensification and formalization of these mediating functions under scale, standardization, and distance, while major shifts in communication infrastructure (such as the telegraph) reconfigured who could coordinate transactions and information at a distance, thereby changing the location and form of intermediation rather than eliminating mediation as such (Innis, 1949; Standage, 1998). This relocation of mediation is observed within this paper’s case study.

In this way, framing intermediation functionally makes the promise of disintermediation appear less as a removal and more as a redistribution of functions. Even when a broker disappears, the functions they fulfilled usually persist somewhere: measurement and grading shift into standards, laboratories, and verification regimes (Ponte and Gibbon, 2005), enforcement shifts toward contracts and institutionalized governance mechanisms (including the rule-setting and monitoring performed by platforms) (Doshi and Schmidt, 2024; Springer et al., 2025), liquidity provision is re-sited into credit and supply-chain finance arrangements (Tseng and Shang, 2021; Xue et al., 2025), and coordination migrates into producer organizations, lead-firm procurement systems, or platform-mediated matchmaking and monitoring (Giaglis et al., 1999; Tseng and Shang, 2021).

Theoretical framework

Given the focus of this paper on power asymmetries resulting from disintermediation, we apply the framework of transaction cost economics (TCE) as a foundational lens for understanding both the historical persistence and necessity of intermediaries and the limits and costs of removing them. In this framework, the transaction constitutes the basic unit of analysis, in which economic organization is shaped by the costs of coordinating exchange, including search, negotiation, monitoring, and enforcement (Williamson, 1981). These transaction costs extend beyond the price of the good itself and include the institutional and logistical efforts required to make exchange feasible between parties (Sarkis et al., 2011).

From this perspective, intermediaries are not redundant actors but organizational solutions to high transaction costs, particularly in contexts characterized by geographic dispersion, uncertainty, and limited verification capacity (Sen and King, 2003). Disintermediation, therefore, does not eliminate these costs but redistributes them across other actors and infrastructures (Sarker, 2021; Spulber, 1996; Williamson, 1981). As such, when transaction-making functions shift toward producers, buyers, or institutional mechanisms, the relative capacity of each actor to absorb and manage transaction costs becomes a central determinant of bargaining outcomes and market participation (Barrett, 2008; Key et al., 2000). Inability or incapacity to bear these costs then appears as power asymmetry during transactions (Lukacs de Pereny et al., 2020; Ponte and Gibbon, 2005).

The notion of *information asymmetry* further explains persistent imbalances in market exchange and transactions (Stiglitz, 2002). Information asymmetry occurs when economic actors have unequal access to information relevant to a transaction, leading to distortions in price formation, quality assessment, and negotiation outcomes (Stiglitz, 2002). While the prospect of ideal (or even comparatively optimal) information may be rare in real-world situations—such that knowledge differences about product attributes, standards, and valuation criteria remain pervasive—knowledge inequalities between parties to a transaction are of primary concern (Akerlof, 1978), especially when those knowledge inequalities result from social dynamics that prevent more disadvantaged populations from accessing information (Bello-Bravo et al., 2025c).

In agricultural and livestock markets, these asymmetries often favor buyers, who typically have greater technical capacity to evaluate quality and interpret market signals (Lukacs de Pereny et al., 2020; Ponte and Gibbon, 2005; Wurzinger and Gutiérrez, 2022). In the case of alpaca fiber, valuation depends not only on measurable fineness, color, and fiber type but also on producer-side shifts in (international) demand, which are not necessarily transparent, easily verifiable, or predictable for small producers (Bello-Bravo et al., 2024; Lukacs de Pereny et al., 2020; Wurzinger and Gutiérrez, 2022). As a result, producers may be unable to credibly signal quality or contest buyer assessments, limiting their bargaining power (Lukacs de Pereny et al., 2020; Ponte and Gibbon, 2005). Even in disintermediated settings, where direct contact is established, informational advantages tend to persist, shaping negotiation dynamics and reinforcing unequal outcomes (Akerlof, 1978; Barrett, 2008; Lukacs de Pereny et al., 2020; Stiglitz, 2002).

Along with transactional and information constraints, *market access* must be understood as a structurally conditioned process rather than a simple matter of physical or relational proximity (Chamberlin and Jayne, 2013). Specifically, market access refers to the capacity of economic agents to participate effectively in exchange, which depends on a combination of economic, geographic, institutional, and organizational conditions (Chamberlin and Jayne, 2013). From a neo-institutional perspective, markets are not frictionless mechanisms but are shaped by the rules, infrastructures, and constraints that govern participation (Salazar Silva et al., 2017).

For small-scale producers, these structural conditions often generate persistent barriers, including limited access to logistics, finance, standardization systems, and reliable market information

(Barrett, 2008; Chamberlin and Jayne, 2013; Poulton et al., 2010). In this sense, direct interaction with buyers does not automatically translate into effective market participation or improved outcomes (Barrett, 2008; Key et al., 2000; Markelova et al., 2009). Even under disintermediation, producers may remain constrained by the same underlying factors that previously necessitated intermediary involvement, suggesting that access must be understood as a multidimensional and unevenly distributed capability (Chamberlin and Jayne, 2013; Poulton et al., 2010). Market structure further conditions these dynamics, particularly in contexts characterized by oligopsony, defined as a market with many sellers but only a few buyers (Rogers and Sexton, 1994; Sexton, 2013). In this way, many agricultural markets feature many dispersed producers interacting with a relatively small number of buyers, resulting in a concentration of purchasing power (Rogers and Sexton, 1994; Sexton, 2013). This configuration allows buyers to exert a significant, if not disproportionate, influence over price formation and transaction conditions (Barrett, 2008; Sexton, 2013).

Summarizing the above, transaction costs, information asymmetries, and uneven market access help explain why disintermediation does not necessarily improve producers' bargaining position and can produce power asymmetries. Even when direct market access is facilitated, producers may remain constrained by limited commercialization alternatives. Concentrated and internationally linked demand can interact with existing informational and logistical asymmetries, reinforcing buyers' ability to unilaterally define standards, control quality verification, and impose minimum-volume requirements. As a result, disintermediation does not necessarily alter the underlying structure of market power but may instead expose it more directly in buyer-producer interactions.

Affordances and limitations of digital reintermediation through the automation of transaction functions

These asymmetries can be exacerbated because, in contemporary value chains, the functions redistributed by disintermediation are increasingly absorbed into digital infrastructures, including platformized logistics, digitally mediated coordination, and AI-supported decision systems (Chircu and Kauffman, 1999; Heinbach et al., 2022; Springer et al., 2025; Suthar and Kumar, 2025). Within markets, there are already opacities and tacit assumptions around valuation devices and rule systems that shape behavior, including grading, pricing, and platform rule-setting (Bowker and Star, 2000; Espeland and Stevens, 2008; Gillespie, 2014). Adding an additional layer of AI-mediated decision-making risks compounding non-transparency while potentially shifting disputes over value and access from contestable conventions into black-boxed classifications that are difficult to audit, contest, or even specify, thereby stabilizing existing asymmetries if countervailing audit, explanation, and accountability regimes are not instituted (Ananny and Crawford, 2018; Burrell, 2016; Kroll, 2015; Pasquale, 2015; Sandvig et al., 2014).

At the same time, the affordances of vastly expanded digital information networks, when properly configured for indigenous data sovereignty (Kukutai and Taylor, 2016; Rainie et al., 2019), can

radically reorganize the links in value chains while also introducing new links (Bello-Bravo et al., 2025b; Kukutai and Taylor, 2016; Ray, 2024). These digital potentials have invited long-standing discussions about the competitive advantages and roles of intermediaries generally, the losses and gains resulting from disintermediation, and potentials in their reintroduction in digital and non-digital forms (Chircu and Kauffman, 1999; Kukutai and Taylor, 2016; Rainie et al., 2019; Sen and King, 2003; Shatagin, 2018; Wigand, 2020).

Caution is warranted, as digital enthusiasm often raises familiar concerns about the creation of digital divides (Fang et al., 2019; Gupta and Kiran, 2023; Ohemeng and Ofosu-Adarkwa, 2014; Pick and Sarkar, 2020). In this instance, however, the issue is more pointed, not simply because it is a question of whether individual people are able to exercise their right to digital knowledge (Bello-Bravo et al., 2025a) but whether and how one would equitably level typically steep power asymmetries in play when national and international sector stakeholders directly access local agriculturalists, pastoralists, or traditional artisans (Chae et al., 2024; Glavee-Geo et al., 2022; Lutomia, 2019; Lutomia et al., 2020). While a significant literature addresses the challenges, prospects, and possible means for equalizing such power dynamics, this can depend on the willingness of the more powerful partner to cede or share power, the ability of the less powerful partner to genuinely demand equalization, or relying on previous trust relationships that allow less powerful partners to set agendas or rely on their own institutional practices (Bello-Bravo, Medendorp and Pittendrigh, 2022; Gerlak et al., 2023; Lutomia et al., 2020; Meyer and Naicker, 2023; Ros-Tonen et al., 2019). As such, centering discussions on indigenous data sovereignty and the potential of digital tools for alpaca pastoralism in Peru is essential.

Disintermediation in pastoralism/livestock

Disintermediation in animal-product value chains can involve additional complications beyond those encountered in many crop markets because the intermediary functions at stake are often not limited to information transfer or buyer-seller matching. In many crop markets, direct-contact interventions may reduce search and coordination costs by making prices, buyers, and delivery options more visible. In livestock and animal-product markets, however, exchange may also depend on physical inspection of condition and quality, aggregation of dispersed supply, transport and holding logistics, compliance with animal-health or traceability requirements, and the capacity to absorb timing and liquidity risks. Removing intermediaries, therefore, does not remove these functions; it redistributes them to producers, buyers, producer organizations, public agencies, or verification infrastructures that may be unevenly equipped to perform them. For this reason, direct contact may improve market visibility while leaving bargaining power largely unchanged.

These dynamics are especially visible in pastoralist and livestock systems, where intermediaries often perform functions that are difficult to virtualize or standardize away. Transactions commonly require embodied inspection and appraisal, including weight, condition, age, and quality, as well as nontrivial transport and holding logistics and risk-bearing under recurring shocks. Recent evidence from Kenyan arid and semi-arid lands shows

that drought exposure and conflict materially shape whether, where, and through which channels pastoralists sell livestock, with urgent liquidity needs and insecurity directly affecting market participation (Ndiritu and Gichuki, 2025). Relatedly, participation in higher-value markets often implies compliance with animal-health, food-safety, and traceability requirements, which sector briefs explicitly note are difficult to fulfill in pastoralist settings because mobility and dispersed production make verification and control costly (Jenet et al., 2016).

Digital connectivity can improve access to timely market information in both sectors, but information more often passes through additional constraints before it becomes bargaining power in livestock systems (Acheke and Eilu, 2024; Debsu et al., 2016; Makokha et al., 2022; Parlasca, 2021). For example, studies of pastoralists and livestock traders document substantial uptake of mobile phones for price discovery, information exchange, and coordination, while also showing that infrastructural limits, uneven digital capability, and dependence on intermediaries continue to shape whether such information can be acted on effectively (Acheke and Eilu, 2024; Debsu et al., 2016). A recent scoping review of innovations for pastoralists in fragile and conflict-affected areas likewise notes that market-access and supply-chain management innovations have rarely been wide-reaching or sustained, and that literacy and other barriers limit broad uptake of app-based tools, even where mobile penetration is high (Makokha et al., 2022). At the same time, livestock market information systems illustrate what “digitally enabled” livestock exchange often entails in practice: not only for prices but also for reported body condition and traded volumes, paired with local verification roles that help make data usable (Onyango and Shikuku, 2024).

Evidence from the Peruvian Andes further illustrates that improvements in access to information, although consequential for adaptive decision-making, do not automatically translate into symmetrical bargaining power within livestock value chains (Cáceres Cabana, 2012; Fairfield, 2006). Alpaca producers face high exposure to climatic shocks such as frosts and droughts, and radio-based dissemination of locally intelligible meteorological information strengthened herd management and adaptive responses. Nonetheless, while such communication infrastructures reduce productive uncertainty, they do not by themselves alter downstream market structures or rebalance buyer-facing asymmetries in price formation and verification (Cáceres Cabana, 2012; Fairfield, 2006; Lukacs de Pereny et al., 2020). Parallel dynamics are observable in other segments of the alpaca economy, where valuation outcomes depend not only on intrinsic product attributes but on socially recognized signals of quality and market positioning (Bello-Bravo et al., 2024; Lukacs de Pereny et al., 2020).

In general, even when producers gain “direct contact,” the buyer-facing regime of standards, verification capacity, minimum volumes, and logistics infrastructure remains a steep structural asymmetry. In pastoralist commodities and animal-based value chains, those infrastructures can be especially decisive because quality and compliance are harder to stabilize at a distance, and because shock exposure can intensify time pressure and liquidity constraint at the moment of sale (Jenet et al., 2016; Ndiritu, 2020; Ndiritu and Gichuki, 2025).

Practice-oriented analyses of Andean camelid systems document that improvements in herd management, classification,

and associative organization are necessary but insufficient conditions for market upgrading (Bello-Bravo et al., 2024; Lukacs de Pereny et al., 2020; Quispe et al., 2009; Wurzinger and Gutiérrez, 2022). Despite capacity-building interventions, producers frequently remain positioned at the first commercialization tier, where transactions are characterized by low value addition, weak standardization, limited technological adoption, and fragile associative consolidation (Lukacs de Pereny et al., 2020; Quispe et al., 2009; Wurzinger and Gutiérrez, 2022). In this sense, even where productive indicators show measurable advances, commercialization patterns often reproduce structural constraints that confine producers to minimally differentiated markets. Productive strengthening, therefore, does not automatically translate into bargaining parity within buyer-dominant procurement systems, where control over grading, aggregation, and verification infrastructures continues to shape price realization and deal enforceability (Lukacs de Pereny et al., 2020; Ponte and Gibbon, 2005; Wurzinger and Gutiérrez, 2022).

For disintermediation in the alpaca fiber sector in Peru, little research exists examining that specific construct. More typically, research examines alpaca fiber value-chain governance, standardization, and market-structure dynamics without treating “cutting out the middleman” as a distinct analytic object. Lukacs de Pereny et al. (2020) analyze how state-sponsored standardization between 1997 and 2013 shaped governance arrangements in a chain characterized by fragmented production and concentrated downstream demand. Their argument closely aligns with this study’s findings: that direct contact with buyers does not necessarily produce greater bargaining power for producers; instead, bargaining power often shifts into the standards, grading systems, and verification infrastructures that determine whether quality is recognized, priced, and enforceable in the marketplace.

There is also alpaca-chain literature in more applied formats that foregrounds intermediary structure, coordination problems, and the constraints small producers face in accessing higher-value channels. For example, Maquera Sosa (2015) situates the competitiveness of Peru’s alpaca production chain in terms of chain organization and coordination, providing relevant background for why direct-contact interventions can reproduce unequal outcomes without complementary supports. Relatedly, Novoa (2024) frames the competitiveness of camelid fiber value chains in the Andes in terms of market volatility, infrastructure deficits, and constraints on producer participation, proposing broader contextual support for treating measurement and logistics capacity as governance levers.

Lastly, a practice-oriented literature describes interventions that functionally resemble disintermediation, even if the term is not used. The World Council of Credit Unions’ *Value Chain Finance Manual* reports that Peruvian alpaca farmers sort and weigh fiber using a scale purchased with a credit-union loan, illustrating the kind of enabling finance and measurement infrastructure that becomes decisive when intermediary functions are bypassed (Galarza and Jones, 2009).

Methods

This theory-informed qualitative case study of a state-convened alpaca fiber market-linkage roundtable, held on 31 October 2025 in

Arequipa, Peru, analyzes how disintermediation affects direct buyer-producer contact. Its research question is, “How does disintermediation—‘cutting out the middleman’—relocate asymmetries in bargaining power between producers and buyers?”

The event brought together 17 producer associations from seven high-Andean regions and 5 major buyer firms; however, not all producers were able to participate equally, as some lacked samples (since the shearing season had not yet occurred) or had samples that did not meet buyers’ criteria. The roundtable used a structured rotation format: producers moved between stationary buyer tables and sat with buyers for approximately 10- to 15-min intervals, in total generating 68 meetings.

Initial data were collected as observational field notes by non-participant researchers seated at the buyers’ tables. Researchers were tasked with attending not only to the substantive content of discussions—about volume, quality, certification, prices, logistics, payment terms, and other topics—but also to the interactional dynamics between buyers and producers. Field notes were handwritten (Atkinson and Hammersley, 1994; Emerson et al., 2011) because privacy and ethical considerations, as well as prohibitions by the event organizers, precluded recording the event (Phillippi and Lauderdale, 2018); for this reason, speech excerpts reported in the analysis should be understood as observer-recorded field-note fragments rather than audio-verified direct quotations.

Immediately following the event, the entire research team conducted an analytic debriefing of the collected data (Emerson et al., 2011; Miles et al., 2018) to review, compare, and contrast observations made by the five volunteer researchers (Denzin, 1978; Lincoln and Guba, 1985). The post-event discussion served as an initial consolidation and analytic debrief of the field notes (Phillippi and Lauderdale, 2018), allowing the research team to clarify observations, compare interactions across tables, and identify recurring issues for subsequent formal coding. Subsequent analytical debriefings further refined these insights.

Identified patterns observed at the buyers’ tables included who introduced topics, who controlled price disclosure, how technical criteria were invoked, how samples and volumes were discussed, and how uncertainty or delay entered the negotiation process. Other observations included agenda control, price withholding, the invocation of technical criteria, communicative delegation, quality assessment, the handling of samples, references to certification, logistical constraints, and the practical conditions under which purchase interest was expressed.

A second stage of data collection and analysis, formally conducted by the authors, consisted of thematic coding of the observational data (Braun and Clarke, 2021; Tavory and Timmermans, 2022) and documentary analysis of materials and data from the roundtable (Bowen, 2009; Prior, 2003). Data analysis moved inductively and iteratively between concepts from value-chain and market-governance research and recurring patterns in the empirical materials, lensed through the analytic framework described in the Literature Review. Emergent codes—including (1) quality measurement and grading, (2) standardization of samples, (3) minimum volumes and aggregation, (4) logistics and payment terms, (5) reference pricing and price dispersion, (6) issues concerning post-event follow-up and enforceability, and (7) interactional asymmetries and communicative delegation—were

then compared against the volunteer researchers' observations as a form of researcher triangulation (Olsen, 2004). All data were originally produced in Spanish and translated into English by the researcher, a native Spanish speaker.

Findings and discussion

Because this study is a theory-informed qualitative case analysis of event-based observational field notes, collaborative analytic debriefings, and documentary materials, its empirical findings are not best presented as discrete outcome measures separated from interpretation. Consistent with O'Brien et al. (2014), the findings and discussion are thematically integrated, with each subsection identifying and interpreting a recurring empirical pattern from the roundtable through the study's analytical lens of power asymmetries arising from transaction costs, information asymmetries, and uneven market access.

Case overview and the problem of direct contact

In general, the data analysis disclosed several mechanisms that limited producer benefits in the disintermediated setting. Consistent with other disintermediation and market linkage research (Barrett, 2008; Barrett et al., 2012), bargaining did not become level merely by placing producers and buyers in direct contact, because buyers and industry lead firms typically retain structural advantages in information, grading and standards, contracting experience, and logistics coordination, while smallholders face persistent transaction costs and scale constraints that shape effective market access (Ponte and Gibbon, 2005; Reardon et al., 2003). Moreover, buyers reported greater satisfaction with the roundtable event than producers. This, in part, reflects the buyer-side benefits of producer-side disintermediation.

For example, roundtable buyers framed the direct-purchase situation through a strategic moral lens, promising to bypass exploitative middlemen to buy “directamente en la chacra de la chacra a la olla, un precio justo y lo más importante el precio justo” [“directly in the field, from the field straight to the pot, at a fair price, and the most important thing is the fair price.”] This rhetoric is grounded in a legitimate technical critique of traditional intermediaries, who sometimes manipulate the “romana” [spring-operated, rather than digital, scale] to skim “unos 2-3 libras por pesada” [“about 2-3 pounds per weighing.”] This results, according to buyers, in a hierarchy where the “intermediario que hace tremendas casas” [“intermediary builds tremendous houses”], while the producer remains “en el campo detrás de las alpacas” [“in the field behind the alpacas.”]

However, while these claims address weighing abuses, they also mask a shift, as one non-participant observer noted, where “la desintermediación... no necesariamente traslada ni redistribuye el poder de negociación hacia los productores” [“disintermediation... does not necessarily relocate or redistribute bargaining power to producers.”] Instead, by removing a go-between who once provided immediate liquidity, “la autoridad para clasificar la fibra... se traslada unilateralmente a los compradores” [“authority to classify fiber against micron

thresholds shifts unilaterally to buyers”], effectively relocating power into the standards, grading systems, and verification infrastructures that determine value. Ultimately, although buyers stated they wanted to stop fiber from “filtrando mediante las manos de los intermediarios” [“filtering through the hands of intermediaries”], the resulting direct encounter functioned as a procedural gatekeeping exercise that imposed new compliance burdens and technical prerequisites on producers.

In buyer-dominant settings, shifting from previously intermediary exchanges to direct contact with buyers without shifting the underlying distribution of power creates asymmetries. Complementary institutions are needed to actively reduce information asymmetries, strengthen producer organizations, and constrain the opportunistic use of standards and logistics requirements (Glavee-Geo et al., 2022; Hellin et al., 2009).

Quality measurement and grading

Consistent with patterns in other fiber markets, e.g., mohair and wool (McGregor and Butler, 2004; Zenda et al., 2024), alpaca fiber quality is not an abstract attribute but a negotiated technical regime, with fineness (microns) positioned as the dominant determinant of value. Hence, the event exhibited a formalized and characteristic pricing gradient in which baby alpaca fiber ($\leq 22.5 \mu\text{m}$) receives a premium of roughly 15%–20%, while coarser categories are discounted, sometimes sharply.

Buyers could frame their participation through an in-principle rigorous set of technical and relational expectations, asserting that the “factores consideran más importantes al comprar la fibra de alpaca [son] precio, color, la homogeneidad del producto, el origen, el cumplimiento de la entrega, la relación de la confianza con el proveedor, la certificación” [“most important factors when buying alpaca fiber are the price, color, product homogeneity, origin, fulfillment of delivery, the relationship of trust with the supplier, and certification.”] To align with industrial standards, buyers mandated that the “fibra esté seca y limpia... de una misma calidad claro porque va con categorizado...” [“fiber should be dry and clean... of the same quality, of course, because it goes categorized...”], and specifically ruled out “zonas que tienen es pésima calidad” [“zones where the quality is very poor.”] They also expected producers to separate the fiber types; “el cuerpo venga aparte y las bragas en otra bolsa” [“the fleece come separately and the bragas (i.e., coarser, lower-uniformity parts of the fleece) in another bag.”]

While buyers imposed these criteria as neutral market necessities, the disintermediated setting exposed fraught interactional asymmetries, evidenced in an encounter between a producer and a buyer's (female) representative. The buyer's aggressive posture—challenging the producer's claims of quality by stating she might find “fibra pobre cuando se supone que es royal” [“poor fiber when it is supposed to be royal”] and continuously refusing to commit to a specific price—finally resulted in the producer concluding the meeting by declaring: “No quiero volver a ver a esa señora” [“I do not want to see that woman again.”]

Here, the power asymmetry—specifically around refusing to commit to a price—is staged as a technical dispute about measuring, verifying, and translating fiber characteristics into recognized grades, along with who can or should do so (Lukacs de Pereny

et al., 2020; Ponte and Gibbon, 2005). At the roundtable, nine producer associations reported not working with technical criteria at all, including micron or fiber length, even when they had fiber-measurement equipment, because they did not know how to use it.

That the buyer's refusal to operate in good faith (and commit to a price) is masked in a technical disagreement about quality precisely illustrates how power dynamics can shift (in a disintermediated setting); it also tends to move the authority to measure and assess fiber outside the producer organizations (whether or not they have the material means to do so). One buyer's remark implies that producers must trust the buyer's technical assessments: "Cada entrega que usted hace pasa por laboratorio y nosotros entregamos el resultado de su rendimiento para que usted sepa en qué calidad está." ["Each delivery you make goes through the laboratory, and we give you the result of your yield so that you know what quality your fiber is."]

Under these direct contact conditions, a unilateral shift of the authority to classify fiber against micron thresholds to buyers (and their associated testing and grading infrastructures) leaves producers with limited-to-no capacity to verify or contest fiber categorization during price negotiation (Gereffi et al., 2005; Ponte and Gibbon, 2005).

Standardization of samples

A second transaction-making constraint involves buyers' varying expectations around standardized samples. Peru's alpaca-fiber standardization infrastructure (Peruvian Technical Standard NTP 231.302 for categorization and NTP 231.301 for classification) explicitly formalizes classification regimes (e.g., fineness in microns; length; color) and sampling/verification procedures, including a dedicated procedure for "categorización y muestreo" [categorization and sampling] in alpaca fleece and linked test methods for fineness and related attributes (INDECOPI, 2014). In practice, fiber "acopio" [the collection-and-aggregation process] is generally based on these categorizations because it involves evaluating the fleece as a whole and assigning it a quality category without dismantling it (INDECOPI, 2014). In contrast, fiber clasificación ["classification"] requires opening and separating the fleece into different quality fractions, a process typically carried out by larger companies as part of their industrial processing and value-added margin. Despite these technical standards, categorization remains somewhat subjective. During commercialization, both companies and producer groups often relied on their own trained "maestras" [expert fiber graders/classifiers], leading to common discrepancies in category assignment (Aguilar Call, 2012; Huayllani et al., 2026).

Twelve of the seventeen associations could not provide samples prepared according to the roundtable's specified format (primarily because the shearing season had not yet occurred), and several of the samples presented were not readily comparable across sellers. Because of these shortfalls, the buyer-side remarks were more often about the lack of samples (rather than their perceived failure to meet the buyer's desired quality), or that samples should be presented in a certain way: for example, "fibra esté seca y limpia... de una misma calidad claro" ["fiber should be dry and clean... of the same quality, of course"] with fleece and rougher fiber separated and "no esté al medio porque si no ya se ve

feo pues cuando metes bragas al medio con el cuerpo" ["not be mixed in the middle, because it looks bad when you put bragas in the middle with the body."]

Although producer associations generally handle all fiber categories—*extrafina*, *fin*, *semifina*, and *gruesa* [extra-fine, fine, semi-fine, and coarse]—accurately estimating the volume for each category remains a significant challenge. Based on field experience, a typical distribution may approximate 20% extra-fine, 30% fine, 40% semi-fine, and 10% coarse fiber (Aguilar Call, 2012). In commercialization processes, buyers usually show interest primarily in the extra-fine and fine categories, while applying substantial price penalties to semi-fine and coarse fiber. This is frequently justified with statements such as "your fiber is not of good quality," which can negatively influence producers' bargaining power and market perception.

In time-bounded buyer-producer encounters, standardized samples function as a bargaining technology because they stabilize what "the product" is for purposes of comparison across buyers, compress information into an inspectable artifact, and reduce the discretionary space for on-the-spot reclassification. Where such standardized samples are absent or non-comparable, valuation tends to revert to buyer-led assessment, because buyers can default to their own grading conventions and to downstream laboratory/testing infrastructures that producers cannot readily replicate or audit (Lukacs de Pereny et al., 2020; Ponte and Gibbon, 2005). This dynamic is consistent with other animal-fiber markets where "sale by sample" and pre-sale objective testing are institutionalized precisely to make lots comparable quickly and remotely, shifting negotiation onto standardized descriptors and test-house results rather than *ad hoc* inspection alone (Nolan et al., 2014).

While buyers' desire to obtain inputs that meet their technical and commercial requirements is reasonable, standardized comparability also serves as procedural gatekeeping. It offloads the work of commensuration onto producers and treats noncompliance as grounds for exclusion. Moreover, although public and sector standards provided shared reference points at the roundtable—most visibly fineness in microns (including categories such as the Baby Alpaca threshold) and certification, color, and breed as price-relevant differentiators—buyers appear to have retained firm-specific procurement specifications and enforcement practices. Consequently, in direct-contact scenarios, "standardization" can require producers to align with multiple buyer-specific procedural formats for evaluation rather than adhere to a single unified standard. This multiplicity of buyer-specific formats unreasonably adds "overhead" to producers' desire to find buyers for their product.

Under these conditions, direct contact does not neutralize or level power asymmetries but relocates them as compliance burdens and technical prerequisites that producer organizations may be unable to meet. It transforms the short-duration, direct-contact encounter from an idealized matching of buyer criteria and producer fiber quality into a form of certification regime (Sanya, 2017; Taylor, 1978), a procedural test of whether a product will be recognized by the buyer within buyer-defined formats, regardless of underlying quality.

In the present case, only three producers presented current quality certifications. For one producer association, its active RAS

(Responsible Alpaca Standard) certification secured a reference price of 26.00 soles (S/) per libra, breaking the S/22.00–S/23.50 ceiling that otherwise excluded uncertified communities offering fiber similar to theirs. This type of certification often makes a commodity harder to undervalue (Auriol and Schilizzi, 2003), effectively reducing the buyer's ability to set prices arbitrarily based solely on visual inspection. For example, not only did a buyer acknowledge, “Con certificado RAS se paga 26 soles, según el contrato el precio de compra y el precio venta” [“With RAS certification, 26 soles are paid, according to the contract, the purchase price, and the sale price”], but also that buyers will “pagan más si tienen el certificado RAS” [“pay more if they have the RAS certificate.”] Even here, however, the price is not automatically set; as another buyer said, “23 con RASs, pero no están certificados por RAS” [“23 with RAS, but they are not RAS certified.”]

By substituting the social trust of an intermediary with the technical trust of an RAS certificate, one producer achieved a quantifiable premium that other groups, lacking “verifiable attributes,” could not access. The same logic extends beyond RAS: systematic price differentiation varies by color and breed (for example, white fiber priced above other colors, with Suri commanding a sizable premium over Huacaya fiber type). What matters analytically is that this adds mediation by third-party or arbitrary standards and a capacity for producers' evidence compliance. Here again, this echoes research showing how disintermediation can re-situate power in those who control the definition of a standard and its verification infrastructures (Busch, 2013; Ponte and Gibbon, 2005).

Such a situation risks creating market inefficiencies (Akerlof, 1978). If high-quality producers are excluded or discounted because they cannot (or will not) meet procedural and measurement requirements—even when their fiber would satisfy buyers' underlying technical needs, or because they have sufficient bargaining power to demand higher prices—this represents a misallocation, where mutually beneficial trades fail to occur (or occur on worse terms) because information and verification frictions distort matching and price formation (Akerlof, 1978). In basic terms, this inefficiency is driven by transaction cost economics and asymmetric information, taking the form of either adverse selection or signaling and screening dynamics; the “good” or “better” product cannot credibly separate itself, and so it is pooled with “unknown” products and priced down or screened out (Akerlof, 1978).

Normally, standardized samples and verifiable measurements are intended to serve as a governance response to such risks because they reduce costly exchanges by shifting assessment and enforcement into specified procedures (Williamson, 1979). The inefficiency question then turns on whether the allocation of the compliance burden needlessly excludes value-creating trades—specifically, whether the screening/measurement technology is too costly for producers relative to the gains from trade, or whether it is close to the least-cost method of achieving reliable quality in that market (Barzel, 1982). As in other sectors (Bello-Bravo and Amoa-Mensa, 2019), the power asymmetry becomes more pronounced even when factoring out any disproportionate or prohibitive compliance overheads on producers, because even producer-side classification does not

fully settle value. One buyer warns that producers should find a good fiber classifier to avoid “mucho porcentaje de variación” [“a high percentage of variation”], but also notes that “la planta pasa por un reclasificado y después ya se te hace la liquidación” [“at the plant, the fiber goes through reclassification, and afterward the settlement is made for you.”] In other words, even after producers bear the cost of classification, the buyer-side plant can reclassify the fiber before final payment. This is a key asymmetry: standardization is intended to reduce uncertainty, but the residual authority to verify and revalue the product remains with the buyer.

Minimum volumes and aggregation

The roundtable's direct-contact format also made visible how minimum-volume requirements sort sellers into those who can viably participate versus those who cannot. Some buyers established minimum purchase volumes of roughly 80–100 quintales, which explicitly excluded eight of the smaller producer communities; “50 quintales de blanco/30 quintales de Suri/ dice casi 100 quintales” [“50 quintals of white fiber/30 quintals of Suri/says almost 100 quintals.”] Others opened at a minimum of 60 but clearly expected more; “nosotros mínimamente nos podemos mover por 60 quintales para arriba si es más mucho mejor porque logística de traslado es fuerte para nosotros en el hotel personal y todo eso” [“We can move for a minimum of 60 quintals and above; if it is more, much better, because transport logistics are significant for us, including hotel, personnel, and all that.”]

Territorial offer summaries also showed recurring volume constraints and inconsistencies—including instances in which the same group offered substantially different volumes to different firms or projected future supply as if it represented current capacity. The disintermediation attempt therefore relocated a previous brokerage function into association-building and aggregation; however, without credible consolidation, direct market access remains structurally limited by logistics and continuity requirements otherwise common in formal procurement scenarios (Barrett, 2008; Hellin et al., 2009; Poulton et al., 2010).

Beyond these participation thresholds, the direct-contact format also revealed significant internal challenges regarding the credibility of producer aggregation. The official event reports highlight multiple instances of inconsistency and risk where producer associations—lacking the administrative capacity of intermediaries—struggled to accurately estimate their own supply. For instance, one association offered one buyer 500 quintals monthly (6,000 annually), a figure the report flagged as an “inconsistency” because it “exceeded real capacity.” Also, a “monthly fiber supply” is not feasible, as alpaca shearing typically occurs between November and March. After this period, the frost season begins in high-Andean regions, and shearing animals during this time significantly increases the risk of cold-related mortality. Similarly, one community offered a “projected” 150 quintals against a current reality of only 30, which buyers classified as a risk because it was “una oferta futura no concreta” [“a future offer not concrete.”] Other groups showed a wide variance in volume, depending on whom they were speaking to (claiming 300 quintals to one firm versus 80 to another).

While these differences may have been strategic, they created a credibility problem if buyers interpreted them as errors or as

attempts at misrepresentation. This dynamic is consistent with smallholder-market research showing that direct access to formal or higher-value markets often depends on producer organizations' ability to reduce transaction costs, aggregate supply, coordinate delivery, and provide buyers with reliable information about quantity and quality (Hellin et al., 2009; Markelova et al., 2009). In this sense, disintermediation exposed a logistical verification function that intermediaries had previously absorbed: without a trusted actor consolidating and verifying supply, buyers were left to evaluate producer estimates themselves and could treat them with skepticism. This is especially relevant in transformed agrifood value chains, where smallholders may be included through direct or organized procurement but also excluded when they cannot meet buyers' requirements for scale, consistency, assets, or coordination capacity (Poulton et al., 2010; Reardon et al., 2009).

However, producers may also prioritize immediate liquidity and prefer to sell their fiber for cash, even at lower prices. This pattern is consistent with evidence that liquidity-constrained smallholders often sell sooner than they otherwise would, even when later prices are expected to be higher (Albuquerque et al., 2024). In this context, intermediaries can play a functional role by providing immediate payment, input provision, or relational support where formal enforcement and complete input/credit markets are limited (Bulte et al., 2024). The relationship between the parties, and thus the perceived trustworthiness of these interactions, is paramount, especially where advance payment or delayed delivery is involved; agricultural-market research shows that personal relationships and trader networks support information exchange, contract enforcement, regularity of trade, and risk management when formal institutions are weak (Fafchamps and Minten, 1999; 2001; Macchiavello and Morjaria, 2021). In scenarios where producers have invested greater trust in intermediaries than in newly introduced direct-market actors, disintermediation may therefore reduce the perceived trustworthiness of the transaction environment, often to the disadvantage of producers unless equivalent mechanisms for liquidity, enforcement, and repeated dealing are put in place (Bulte et al., 2024; Fafchamps and Minten, 1999; 2001).

Logistics and payment terms

Although the logistics of the event required it to be held before the shearing season, specific, tangible shifts in strategy for some participants did result. Because the roundtable was scheduled before the "esquila" (shearing), the negotiations were structurally limited to "statements of purchase intention" rather than immediate sales, since the fiber remained on the animals. Field notes highlight the fundamental friction this caused: "Si no hay producto, no hay precio" ["if there is no product, there is no price"]; without shorn fiber, producers could not present the standardized sample kits required to prove quality.

However, many associations lacked the capacity to provide differentiated volumes by fiber category (extra-fine, fine, semi-fine, or coarse), by color (white, brown, or black), or by type (Huacaya or Suri). Formal categorization also entails additional costs, including payment for trained graders, storage, and logistics. Due to these financial and organizational constraints, producers often preferred to sell fiber in bulk, differentiating only by color and

type. This practice may have negative implications for genetic improvement, as it does not create clear incentives to produce higher-quality fiber but rather encourages a focus on volume over fine fiber (Bello-Bravo et al., 2024).

This "timing" issue also underscores an important but now-missing function of intermediation. Intermediaries can function on flexible timeframes, even when buyers have hard deadlines to meet, and delays may affect availability in different fiber sectors (Jenet et al., 2016; Merrett and Ville, 2015; Richardson, 2001). Here, disintermediation is not merely "removing a middle actor"; it requires substituting the intermediary's financial and logistical functions (Ponte and Gibbon, 2005; Tseng and Shang, 2021), so that producers are not pressured by liquidity needs or local buyers offering low spot prices (Ndiritu and Gichuki, 2025).

Despite these timing constraints, the event also successfully disrupted some specifically exploitative norms of the traditional market. By bringing buyers and producers into a formal setting, the roundtable established new reference prices that were 15%–25% above local intermediary offers. For instance, one community secured a reference price of S/21–22 compared to the S/18.50 historically offered by middlemen.

The event also catalyzed a shift toward formalization of logistics: one major buyer announced plans to close its offices in intermediary-dominated zones to prioritize direct purchasing, to eliminate the abusive spring-weighing system (which can cost producers 2–3 pounds per weighing) in favor of digital scales, to make immediate payment on delivery, and provide formal receipts as mechanisms to increase transparency and reduce dependence on intermediary credit. "nuestro sistema de trabajo es balanza digital peso exacto el pago se paga en libras el pago es inmediato" ["Our work system is a digital scale, exact weight; payment is made in pounds, and payment is immediate."]; however, the motivation for this is not expressed in terms of the producers' advantage: "siempre pasa lo mismo: pactamos un precio y, el día del acopio, aparece el intermediario y sube el precio" ["the same thing always happens: we agree on a price, and on the day of collection the intermediary appears and raises the price."]

General discussions also addressed the enabling conditions for such reforms, especially the need for credit to finance collection and the institutional work required to formalize associations. Lastly, while the event inspired four communities to access the formal market with tax receipts (RUC) for the first time, moving them away from the informal economy, to the best of the authors' knowledge, the major buyer has not, at the time of this writing, moved their offices.

Reference pricing and price dispersion

Price dispersion in the documents indicates where pricing power actually lies. The Final Report explicitly interprets variation in offers for "the same" fiber as evidence that buyers retain unilateral price-setting capacity unless producers can strengthen and differentiate the offer. One example can be treated as diagnostic: offers ranged from S/18.50 to S/22.00 for the same product, exposing that weakly evidenced quality and limited differentiation leave producers open to buyer discretion not only on price but on logistics and timing.

Relatedly, meeting notes document stark differentials by color and breed in producers' own reported reference prices, alongside the claim that the alpaca value chain is fragile because prices can (or are simply said to) shift sharply; "elcito puede llegar hasta 13 el sur en 30, pero ya señores se hace la fecha ya ese día ya conversaremos y veremos la cantidad de quintales que se va a salir" ["It can reach up to 13, the Suri at 30, but gentlemen, once the date is set, that day we will talk and see the number of quintals that will come out."] Similarly:

"no se sabe cómo se manipula el precio de la fibra en Acapul ahorita yo me imagino que me imagino no no no no ando mucho la zona me lo imagino que ahorita el precio debe estar volando por sobre 23" ["One does not know how the price of fiber is being manipulated in Acapul right now; I imagine, though I do not know the area well, that right now the price must be flying above 23."]

Under disintermediation, the key issue is less whether buyers and producers meet and more whether there exists a shared and enforceable reference frame that reduces the buyer's capacity to re-price opportunistically in short, time-bounded encounters.

Furthermore, this observed price dispersion serves as a diagnostic tool for identifying bargaining power in a disintermediated market (Akerlof, 1978; Ponte and Gibbon, 2005). Consistent with other research (Barrett, 2008; Barrett et al., 2012), the data reveal that direct contact does not guarantee a uniform market price; rather, the wide variation in offers to the diagnostic community case noted above, ranging from S/18.50 to S/22.00 for the identical product, demonstrates that without the technical trust of certification, producers remain vulnerable to the buyer's unilateral discretion. This vulnerability is sharply contrasted with the case of one producer association, where its verifiable RAS certification enabled it to break the prevailing price ceiling of S/22.00–S/23.50 and secure a reference price of S/26.00.

These valuation dynamics may constitute the roundtable's most significant function as a "market signaling" device. By requiring buyers to state public reference prices—up to 15%–25% above informal market prices or those offered by intermediaries—the event disrupted the information monopoly traditionally held by local middlemen and established a provisional price floor, even where logistical barriers prevented immediate execution. This is consistent with agricultural-market research showing that price information can alter the balance of bargaining power between farmers and traders, reduce price dispersion, and improve producer prices by making market values more visible and harder for intermediaries or other actors to manipulate (Aker, 2010; Courtois and Subervie, 2015; Goyal, 2010; Jensen, 2007). However, it is also not an automatically reliable mechanism, since the higher signaled market price did not obligate all buyers to accept it or all producers to insist on it; in several instances, buyers simply refused to commit to a price.

Post-event follow-up and enforceability

In the absence of an intermediary who traditionally bridges the gap between negotiation and transaction by providing immediate

cash or credit, the state attempted to fill this role through a formalized surveillance architecture. The intervention did not conclude with the roundtable's closure; rather, the "Follow-up on the alpaca fiber business roundtable" plan established a tight bureaucratic timeline to simulate the monitoring function of a market chain. The methodology prescribed verification at specific intervals: 1 week to confirm contact, 1 month to verify preliminary quotations or purchase intentions, and three to 6 months to identify finalized deals and amounts. To facilitate this tracking, the state proposed digital tools, such as using QR codes on negotiation forms to link to digital tracking systems—it was not clear whether all participants, "alpaqueros," had phones that could access these, while creating a geographic map of producers and negotiation flows. This apparatus represented an attempt to replace the "social capital" of the middleman—who knows the producer's reliability through repeated interaction—with state-administered administrative legitimacy.

While the event succeeded in generating high levels of potential connectivity, the data reveal a critical distinction between matching and transacting. Reports indicate that 85% of the meetings generated interest in follow-up, with aggregate commercial expectations ranging from S/6.8 million to S/7.5 million. However, because the roundtable was held prior to the esquila [the shearing season], the prices discussed were legally fragile statements of purchase intention rather than contractually binding agreements. For example, as noted above, "Ya señores, se hace la fecha; ese día ya conversaremos y veremos la cantidad de quintales que se va a salir" ["Gentlemen, once the date is set, that day we will talk and see the number of quintals that will come out."]; similarly,

"Ahora el tema es: cuando ustedes van a clasificar, ahí sí van a tener que comprarles, darles su plata, un adelanto, ¿cierto? En ese caso, nosotros no hemos trabajado; realmente no sé. Tendríamos que verlo." ["Now the issue is that when you are going to classify, then you would have to buy from them and give them money, an advance, right? In that case, we have not really worked that way; I do not know, we would have to see it."]

This re-exposes the structural challenge (or flaw) that disintermediation reflects: while a middleman provides liquidity immediately (Ndiritu and Gichuki, 2025), the direct market's promises about the future rely on the producer's ability to wait for the shearing season to realize any revenue.

This "enforceability void" is the most significant finding regarding post-event dynamics (once the state withdraws as a facilitator). The Final Report explicitly notes the absence of state mechanisms to verify agreements after the event or to monitor final prices. No consolidated national system exists to record these transactions or certify quality at the point of origin, meaning that "reference prices" achieved at the roundtable, such as the S/26.00 secured by a major producer association, are unenforceable if the buyer decides to re-grade the fiber upon delivery. The state acted as a "facilitator of the encounter" but admitted it could not balance pre-existing market dynamics once the parties left the venue. Without an intermediary to physically take the fiber and pay cash, the producer is left

holding a purchase intent subject to the buyer's unilateral final verification.

"Hay que cumplirlo; eso es lo más importante. Nosotros cumplimos; nosotros facilitamos muchas cosas, pero también los hermanos que se han comprometido un poquito más con lo que vamos a hacer" ["It has to be fulfilled; that is the most important thing. We fulfill our part, we facilitate many things, but the brothers also have to be a little more committed to what we are going to do."]

This structural uncertainty is reflected in the divergence of post-event satisfaction data. While 78% of participants expressed a willingness to attend future events, perceptions of the event's value were asymmetrical. Buyers rated the organization and commercial potential highly (average 4.5/5), citing efficient market intelligence gathering, reduced search costs, and multiple encounters with producers. Producers were more skeptical, with 30% rating items like "clarity of rules" and "balance in negotiation" as medium-low. This divergence confirms that while disintermediation effectively reduced search costs for buyers, it did not eliminate transaction risks for producers, who continued to face asymmetries even after negotiations concluded.

Interactional asymmetries and communicative delegation

Outside of the strictly technical frictions of grading and logistics, the roundtable revealed that direct contact is also a social performance conditioned by deep interactional asymmetries (Champion and Fearn, 2001; van der Westhuisen, 2005). Consistent with other research, the meetings were characterized by dynamics of implicit and symbolic power (Çalışkan, 2007; Champion and Fearn, 2001), with buyers primarily exercising tacit and, at times, direct control over the agenda, the pace of discussion and the technical criteria used to evaluate offers. The fact that buyers could remain in place and be approached by producers underscores this.

Culturally, many alpaca producers tend to adopt a reserved attitude during initial interactions, particularly when engaging with external actors. This should not be read as a lack of knowledge or interest, but as part of a broader interactional problem common in agricultural extension, where externally organized encounters often reproduce differences in power, place, language, and institutional confidence between technical agents and rural producers (Chambers, 1994; Cook et al., 2021). In the Peruvian Andes, community-based extension models such as the Kamayoc system have specifically addressed these barriers by relying on locally embedded technical intermediaries, since conventional public or private extension services often struggle to reach remote communities and provide locally appropriate support (Coupe, 2010). Over time, as trust and repeated contact build, producers may become more open in expressing their perspectives and concerns; this is consistent with Latin American rural-market research showing that social, cultural, and human capital are central to how rural territories connect to dynamic markets (Escobar et al., 2015).

This pattern is also consistent with findings from other fiber markets in which "market access" and "price formation" are organized through interactional control over evaluation devices and communicative channels, rather than through neutral exchange alone (e.g., alpaca standardization and governance; cotton trading as a socially organized pricing process; wool supply-chain communication asymmetries) (Çalışkan, 2007; Jordaan and Kirsten, 2008). This resembles a broader feature of several fiber markets (notably wool and mohair), where product meaning, classification, and salability are routinely mediated by specialized representatives and institutional channels that "translate" producer output into buyer-recognizable categories (Zenda et al., 2024). Intermediaries, as such specialized representatives, can be viewed suspiciously by buyers (as noted above) and producers alike; nonetheless, the data show that buyers direct the same kinds of suspicions toward producers (about sample quality, availability, and presentation) that they might otherwise have directed at intermediaries. This, again, shows how disintermediation shifts, rather than removes, power dynamics characteristic of such negotiations.

Power asymmetries also appeared in other ways. Observers captured a distinct imbalance in time: buyers took up to 8 min to intervene, leaving producers only 2 min to present their products and ask questions. In other fiber sectors, the same basic asymmetry often appears institutionally as representation-by-proxy (Champion and Fearn, 2001), through brokers, auction arrangements, or buyer-facing chain governance, where producers' "voices" are structurally displaced into intermediary talk, standardized descriptions, or buyer-managed evaluation protocols (Keneley, 2001). This structural asymmetry was also visually reinforced through symbolic hierarchies in personal presentation (Luna, 2019), specifically that buyers adopted formal, urban styles, while producers appeared in traditional attire.

A gendered pattern of "communicative delegation" also emerged (Champion and Fearn, 2001). As noted in other research (Altenbuchner et al., 2017; Luna, 2019), female producers frequently delegated the explanation of their proposals to companions, family members, or association representatives, effectively sidelining their own voices during negotiations despite the mastery of their craft. As found elsewhere (Luna, 2019), the notes captured that in mixed-gender producer groups, male producers typically dominated the discussion, with women often remaining entirely silent or speaking only after the male producer had finished. This dynamic was also accompanied by producer-exhibited nervousness and caution, in contrast to the buyers' confidence and command of the setting, consistent with other research (Luna, 2019), which often stems from the fact that decision-making within the producer's organization does not rest solely with its on-site representative. Similarly, cotton-based value chains and contract-farming contexts show that market participation and benefits are often shaped by gendered constraints on voice, representation, and access to the resources needed to comply with buyer-facing requirements (Engels, 2023).

In these ways, disintermediation did not open a space for unmediated communication; rather, the direct encounter reproduced local and gendered inequalities that constrained who

could credibly speak and negotiate, alongside the technical asymmetries already documented for alpaca fiber governance through standards and classification regimes.

Summary

Through the analytical lens of this study, the most apparent asymmetries produced by the direct-contact format were more infrastructural than relational. Although the roundtable addressed some transaction-cost issues—by reducing search costs and bringing producers and buyers together in the same room—it did not redistribute the capacities needed to make exchange effective, especially for producers. Buyers moderated their transaction costs by imposing control over quality recognition, sample comparability, grading, laboratory verification, and price disclosure, while producers were required to absorb new transaction costs associated with sample preparation, classification, aggregation, delayed enforceability, logistics, and minimum volumes, or else simply be excluded from participation and denied market access. In this regard, the disadvantageous cost of 2–3 pounds per sample skimmed by intermediaries may be a more rational cost to alternatively absorb.

Direct contact converted several intermediary functions into producer-side obligations without empowering them with the technical, financial, or institutional capacity to perform them. The result was a set of linked asymmetries: information asymmetry around quality and pricing, transaction-cost asymmetry around logistics and aggregation, market-access asymmetry around minimum volumes and certification, and interactional asymmetry around who controlled the agenda and terms of negotiation. The roundtable's strongest corrective effect was its role as a market-signaling device, since public reference prices partially disrupted intermediary information monopolies; however, this did not eliminate buyer discretion or resolve the post-event enforceability problem.

Less emphasized by the event is its cultural asymmetry, symbolized most visibly by the contrast between the uniformly urban, corporate business attire of buyers and the producers' mixed rural attire, including suited representatives, people wearing their city clothes, and traditional Indigenous attire, most often worn by women. This marked not only the radically dissimilar social worlds brought into the room and the different stakes attached to the negotiation, but also the historical and continuing deprecation of the rural by the urban, of the periphery by the center, and of the traditional and agrarian by the modernist and industrialized (Bello-Bravo, 2025; Langa, 2022). For individual buyers, the roundtable involved their participation as representatives of firms seeking favorable purchasing conditions within an industry that includes several possible employers, other institutional roles, and even whole changes of career should the representatives fail. For producers, the failure or success of such an event implicates the existential viability of their way of life, where alpaca fiber is not understood as merely one commodity among many detached from social existence, but a part of a pastoral system by which whole households, communities, and generations of relationships with the world and other living beings who populate it are involved (Astacio, 2022).

Nothing in this asymmetrical cultural gulf was operationalized by the event's premises. It will, of course, seem utopian to suggest

that corporate enterprises might accept slightly reduced profits by offering basic-materials producers higher prices, even though this has been shown to be a rational (and decent) course of action (Boysen et al., 2023; Bugmann et al., 2026). Or, equally, it may seem irrelevant to suggest that buyer (and international) demand for genetically unsustainable white alpaca fleece (Cervantes et al., 2009; Cervantes et al., 2010; Cruz et al., 2019) could be discontinued as a practice, in the interests of not only Peruvian pastoralists' continuing livelihoods and alpacas' quality of life (Astacio, 2022) but also the cultural and biological diversity necessary for life generally (Bello-Bravo, 2020; Bello-Bravo et al., 2024; Díaz-Reviriego et al., 2024; Loh and Harmon, 2005; Maffi, 2005; Otamendi-Urroz et al., 2025; Pretty et al., 2009; York, 2026).

Merely because market logistics have become so normalized as a premise that one hardly notices anymore does not mean there is no alternative to them (Orlie, 2009)—especially given the diverse-economies and de-growth research arguing that dominant market arrangements should not be mistaken for the economy as a whole and that alternative economic practices only become politically available once they are made visible as already-existing or practicable forms of organization (Chamberlin and Jayne, 2013; Champion and Fearn, 2001; Larkin, 2013; Orlie, 2009; Schmid and Smith, 2021; Smith, 2024). Equally, sustainability research has also argued for at least three decades that triple-bottom-line approaches considering the economic, social, and ecological benefits of a transaction are essential for the longer-term survival of civilization, the human race, and life on the planet (Bello-Bravo and Lutomia, 2022; Hensley and Steer, 2019; Kimmerer, 2013; O'Neil, 2018). It is an unpleasant irony of this situation that the “traditional” forms of knowledge and practice embodied in more than six millennia of alpaca pastoralism in the area now known as Peru are—like other living Indigenous examples (Baumflek et al., 2021; Boillat and Berkes, 2013; Cheikhyoussef et al., 2011; Hewitt, 2019; Kimmerer, 2012; Waller and Reo, 2018)—models for such more sustainable living.

Recommendations

The main challenge disclosed in this study involves addressing buyer-tilted asymmetries across the bargaining field. From the data, the two most effective strategies for doing so at the roundtable involved consolidating producer associations and professionalized representative teams able to meet higher-volume thresholds and to hold Responsible Alpaca Standard (RAS) certification, which afforded better price offers.

In general, organizing smallholders into bargaining consortia improves bargaining position by concentrating supply, coordinating contracts, reducing dependence on brokers, and making dispersed production legible to buyers (Hellin et al., 2009; Markelova et al., 2009; Pietrangeli et al., 2025). This is shown as especially critical in this study, as buyers at the roundtable established minimum purchase volumes that denied market access to nearly half of the event's producers. Bargaining consortia not only help overcome production capacity shortfalls but also onerous transaction costs (Barrett, 2008; Poulton et al., 2010).

Failing or refusing to aggregate communities as bargaining consortia does not merely risk, but guarantees, the reproduction

of already-visible patterns of marginalization and poverty. However, if this aggregation is conducted primarily to comply with buyer-controlled agendas, values, and standards, without foregrounding and incorporating Indigenous practices and values, then this strategic “assimilation” just as surely results in the disappearance of the pastoralists’ culture as outright erasure (Gamsakhurdia, 2022; Watson, 2001). The same holds for RAS certification, if not the creation and development of a certification that meets buyers’ desired criteria through practices that sustainably draw on, rather than distort or destroy, pastoralist cultures (Hanspach et al., 2020); these could include more sustainable genetic diversity in alpacas (by breeding less preferentially for white fiber), the development of more sustainable and cost-effective means of dyeing colored fiber white, and global information campaigns to raise public awareness and change demand in light of the consequences of the preference for white fiber in the alpaca value chain (Bello-Bravo et al., 2024). Even modest gains in this direction would be an improvement. A more concrete way to integrate traditional knowledge into these processes would be to draw on experienced maestras to assess baby alpaca fiber. While the technical threshold of $\leq 22.5\ \mu\text{m}$ attempts to standardize an otherwise subjective experience—namely, the especially soft feel associated with that category—maestras could identify samples that provide that experience, regardless of whether they met or failed to meet the technical criterion of $< 22.5\ \mu\text{m}$.

A third recommendation is to develop and deploy an independent, producer-centered transaction infrastructure to replace functions formerly absorbed by intermediaries. Still assuming the roundtable’s overly market-dominated framework, this would involve providing producers market access through low- or no-cost, likely subsidized or cooperatively-owned, institutional preconditions normally assumed by forward or futures-style commodity exchange (Fernandes et al., 2025), including but not limited to standardized pre-event sampling, independent fiber testing, transparent classification records, a public reference-price registry, more appropriate roundtable timing, and enforceable purchase-intention forms linked to post-event monitoring.

Nonetheless, it is neither necessary nor likely sustainable to assume that the infrastructure replacing intermediaries’ former functions must take such a market-dominated form (Orlie, 2009; Smith, 2024). The original strength of the classical intermediary, in Simmel (1950) sense, is an ability not only to move between two parties but also to translate between two worlds. When the female producer said of her female counterpart at the buyer’s table, “No quiero volver a ver a esa señora” [“I do not want to see that woman again”], this was not merely the collapse of a price negotiation; it was also evidence of two social worlds, and two ways of being and valuing the transaction, failing to become mutually intelligible. The successful intermediary possesses a form of practical bilingualism and bicultural competence: trusted in both domains, able to translate requirements and constraints in both directions, and able to absorb certain transaction costs that neither side can easily manage alone (even if at the added cost of skimming using a rigged, spring-loaded scale).

Any proposal to replicate this figure’s function must therefore enable a translation between producers and buyers that genuinely accounts for pastoralists’ values, practices, knowledge, and worldview (Bello-Bravo et al., 2023a; Bello-Bravo and Neuenschwander, 2025). Experiences across Africa south of the

Sahara have demonstrated the affordances and limitations of digital tools for realizing this, while also decreasing information asymmetry and absorbing some transaction costs for smallholder producers (Bello-Bravo et al., 2025c; Bello-Bravo et al., 2023a). Although the combination of these benefits can help reduce barriers to market access, they are rarely fully effective on their own. Stated another way, digital tools, even with limited infrastructures, are arguably an already-solved technical problem (Bello-Bravo et al., 2023b; Bello-Bravo, Medendorp, Lutomia, et al., 2022); what remains requires centering indigenous data sovereignty in any such attempt and realizing the will to address the social, or “wicked,” aspects of this problem (Bello-Bravo et al., 2023b; Daré et al., 2014; Kukutai and Taylor, 2016; Orlie, 2009; Rainie et al., 2019; Smith, 2024).

Conclusion

This theory-informed qualitative case study of disintermediation between alpaca-fiber producers and buyers at a roundtable meeting in Peru tracked how transaction costs conventionally absorbed or mediated by intermediaries were shifted onto producers through buyer-dominated bargaining conditions. It showed how the intermediary’s usual work—around aggregation, quality verification, liquidity provision, risk absorption, and translation between the social worlds of urban buyers and rural sellers—reappeared as often unmet and difficult- or impossible-to-meet producer-side obligations framed by buyers in terms of fiber standards, producer certification, minimum-volume thresholds, and laboratory-verified fiber quality. Although the roundtable reduced search costs for buyers and generated public price signals to producers that were higher than traditional intermediary offers, the roundtable setting did not, by itself, redistribute the capacities needed to make exchange equitable or reliable for producers; producers’ lower satisfaction scores with the event relative to buyers’ reflected this unresolved asymmetry.

Recommendations from this study include further development of producer coalitions, certification accessible to all smallholders, and a restoration of intermediary roles around representation, cultural translation, and support through digital and face-to-face infrastructures that reduce informational asymmetries, transaction costs, and barriers to market access. Enacting these recommendations, however, cannot be driven only by market logics or buyer-centered goals and values; they must instead center and respect pastoralists’ practical knowledge, values, and worldview—not merely because maintaining the upstream continuity of Peru’s alpaca-fiber value chain is economically necessary and rational, but also because the region’s alpaca pastoralism preserves and reflects six millennia of ecological, practical, and culturally sustainable knowledge on which that upstream continuity depends.

Data availability statement

The datasets presented in this article are not readily available to protect the privacy, confidentiality, and anonymity of participants

and communities. Requests to access the datasets should be directed to the corresponding author.

Ethics statement

The study's protocol was reviewed and approved by the Purdue University Institutional Review Board (IRB #0424002497). It was conducted using non-participant observational field notes, analytic debriefings, and event documents from a public, state convened alpaca fiber business roundtable. Researchers were present as non-participant observers with authorization from the event organizers. The study is reported as observational human-subjects research; however, individual participant consent was not required because the observations occurred in a public event setting and the analysis does not identify individual participants. Moreover, no audio or video recordings were made, in keeping with event restrictions and privacy considerations, and no personally identifying information was collected or presented in this study. All individual-level data were de-identified, with observer-recorded field-note fragments used rather than audio-verified direct quotations. Such excerpts were used only where they illuminate the study's central themes of transaction costs, information asymmetry, market access, and bargaining power, and the analysis reports interactional and institutional patterns rather than identifying individual participants.

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Conflict of interest

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The author(s) declared that generative AI was not used in the creation of this manuscript.

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