

From Consultation to Contention: Institutional Feedback Gaps, Social Capital, and the Decoupling of Citizen Voice in Mongolia's South Gobi

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Abstract

Mining conflict is usually recorded when disagreement becomes visible, and participation is the standard instrument for preventing it. Yet consultation and conflict frequently coexist. This study locates the mechanism in what happens after people speak, defining an institutional feedback gap as a condition in which opportunities for voice are not reliably connected to reasoned response, corrective action and communication of the outcome. The design is a convergent mixed-methods embedded case study of one South Gobi province combining three strands: the six statutory provisions naming a party to mining consultation; a survey of 244 herding households recording which of four participation positions each occupies, modelled as a three-stage cascade by continuation-ratio logistic regression with Firth penalization; and a comparative analysis of 150 participants yielding three grievance-response configurations, defined by institutional process rather than by locality. The strands converge. An occasion to speak arose for 82.0% of surveyed households, 57.5% of those spoke, and 13.9% of those were answered. Individual resources, engagement and associational infrastructure predict position at no stage; perceived company openness raises passage at every gate by 9.6 to 17.3 percentage points without stage-specificity, while perceived state responsiveness is inert at the first two gates and decisive at the last, at 15.0 percentage points. The statutory strand shows why: provisions creating access are permissive, those touching the decision are state-held and set no binding standard, and one deems failure to respond an approval. Bonding, bridging and linking ties determine whether voice reaches authority, not whether it is answered.

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Introduction

Mining conflict is usually recorded at the point at which disagreement becomes publicly visible. A road is blocked, a license is challenged, a petition reaches a government office, or a dispute enters court. Treating these events as the beginning of conflict obscures the sequence that produced them, in which environmental pressure, livelihood insecurity and unresolved complaints accumulate before a decision becomes a focal trigger (Andrews et al., 2017; Conde & Le Billon, 2017). The analytical task is to explain how dissatisfaction moves from everyday

experience into organized, alternative or contentious forms of voice. The standard institutional response is participation. Public meetings, environmental consultations, complaint channels and cooperation agreements are expected to surface problems early. Their presence does not establish that community input changes a decision. Arnstein's (1969) distinction between consultation and citizen power remains relevant: people may be informed and invited to speak while final authority and the control of evidence remain elsewhere. Recent scholarship has reinforced this concern. Sinclair et al. (2026) identify persistent weaknesses in public participation in impact assessment, including limited early engagement, insufficient access to information, unequal power relations and accelerated decision timelines. Hofmeyr and Wielga (2026) argue that the mining industry has lost momentum on operational-level grievance mechanisms, with audit culture producing hollow and performative practices rather than substantive remedy, reduced investment in the social function, and a growing focus on risks to projects over human impact. Grama (2025) finds that practitioners often interpret "access to remedy" in the UN Guiding Principles as procedural rather than substantive, meaning that grievance mechanisms may structure ongoing conversation without constraining managerial discretion or delivering remedy for rights holders. These findings suggest that the presence of participatory institutions is a poor guide to their consequences. What is missing from most accounts is the administrative and relational chain after voice is expressed. A complaint can be acknowledged without being investigated. A meeting can collect views without recording how they affected a decision. An official can refer a concern onward without assigning responsibility or communicating an outcome. In each case voice exists and the sequence connecting it to consequence does not. This article defines that disconnection as an institutional feedback gap, and argues that it is the analytically decisive node between participation and conflict. Institutional theory supplies the lineage for that condition. Organizations adopt formal structures as myth and ceremony, conferring legitimacy while remaining buffered from the work itself (Meyer & Rowan, 1977), and Bromley and Powell (2012) distinguish policy–practice decoupling, where a rule is announced but not implemented, from means–ends decoupling, where the practice is implemented in earnest yet stays disconnected from the outcome it was adopted to produce. The second is harder to detect, because activity is plainly occurring, and is most likely in opaque fields where compliance is observable and achievement is not (Wijen, 2014). Consultation in mining is such a field: notices, attendance and minutes are countable, while whether a decision changed is not. The feedback gap is means–ends decoupling seen from the position of the resident. This framing resonates with Grama's (2025) finding that the UN Guiding Principles are unlikely to serve as prescriptions that constrain direct managerial discretion over company grievance mechanisms, and with Hofmeyr and Wielga's (2026) observation that effective grievance systems are essential for maintaining legitimacy and navigating conflict in contested operational environments. Two further questions follow. Who owns each part of the sequence, and what carries voice to them? In extractive governance the party that convenes a consultation is typically the license holder, while the party that can convert what is said there into a changed decision is a public body. Access and uptake are therefore separable goods with different owners. What connects a resident to either is relational as well as procedural: bonding ties help people recognize shared problems, bridging ties connect differently situated groups, and linking ties reach actors who control authority and resources (Putnam, 2000; Szreter & Woolcock, 2004; Woolcock, 1998). Recent work on social capital in mining contexts has shown that these relational resources are not a general stock that automatically produces acceptance. Obie et al. (2026) find that nickel industrialization in Indonesia generates governance ambiguity, declining interpersonal trust, weakening collective norms and increasing social differentiation, while communities demonstrate adaptive resilience through livelihood diversification, informal cooperation and locally embedded support networks. Suopajarvi et al. (2019) similarly show that social capital in mining is relational and context-specific. This study examines one South Gobi province, where extraction competes with mobile pastoralism for pasture and water. It combines three strands of evidence — the statutory provisions that name a party to consultation, a survey of 244 herding households, and comparative qualitative analysis of 150 participants — and asks where the feedback chain breaks, who owns the break, and what happens to the grievances that

meet it. The research gap is direct: existing scholarship identifies the conditions for participation and documents its failures, but treats them as a checklist rather than a sequence, and participation as one good with one owner. No study known to the authors traces an individual resident's passage through the successive gates of invitation, attempt and response, tests whether the same institution governs each, and sets that against both the instruments that create the gates and the relational configurations that carry voice to them. The contribution is threefold: it measures means–ends decoupling at the level of the individual resident, where institutional research has mostly documented it at the level of the organization; it separates access from uptake and shows they have different institutional owners; and it positions social capital as the transmission mechanism rather than as a direct predictor of harmony.

Literature Review

Mining conflict research has moved beyond explanations based on a single impact or confrontation. Comparative work identifies socio-environmental harm, displacement, poor compensation, limited participation and distrust as recurrent conditions associated with resistance (Conde & Le Billon, 2017), and shows that disputes impose material costs produced through a social process rather than by impact alone (Franks et al., 2014). The conflict-pathway framework of Andrews et al. (2017) distinguishes visible manifestations from underlying structural conditions such as centralized authority and weak local institutions, and from contextual pressures such as environmental degradation and institutional mistrust; triggers are decisions that concentrate accumulated dissatisfaction. Host governments can amplify or interrupt such pathways through governance capacity, procedural fairness and regulatory enforcement (Andrews et al., 2018). Tulukcu Yildizbaş et al. (2026) find in Türkiye that environmental risk perception is the most significant factor affecting migration intentions, that trust in governance processes is low, and that economic arguments commonly used to justify social legitimacy for mining projects are insufficient on their own; social acceptance should be grounded in robust environmental risk oversight, transparent governance and meaningful involvement in decision-making. Acceptance is therefore not purchased by economic contribution but earned through institutional performance. A pathway approach suits the South Gobi because water, pasture, mobility, dust, employment and participation are interdependent rather than separate complaints. A new haul road may be experienced as dust, pasture fragmentation, traffic risk and evidence that decisions are made elsewhere. A licensing decision may become a trigger because it gives a visible object to concerns that accumulated previously. Recent Mongolian scholarship shows how licensing converts commonly used rangeland into exclusive tenure (Sternberg et al., 2025) and how mining proximity lowers trust in government across many countries (Mavisakalyan & Minasyan, 2025). Dalaibuyan (2022) documents the negotiated coexistence of mining and pastoralism, showing that outcomes depend on the quality of engagement rather than on the mere presence of consultation mechanisms. Wongnaa et al. (2024) show in Ghana that membership in farmer-based organizations, access to credit and low crop yields influence farmers' shift from crop production to mining activities, demonstrating how structural conditions and contextual pressures interact to shape livelihood trajectories in mining-affected landscapes. Participation theory explains how institutions distribute voice and authority. Arnstein (1969) argues that informing and consultation remain tokenistic when people cannot influence outcomes. Fung (2006) separates who participates, how they communicate, and how their input connects to authority; that third dimension is the one measured here. Gaventa (2006) locates power in the rules determining who may enter invited and claimed spaces, and Miraftab (2004) notes that those excluded from official spaces construct their own. Lowndes et al. (2006) convert this literature into a diagnostic: citizens participate when they can do it, like to do it, are enabled to do it, are asked to do it, and are responded to when they do. The fifth condition is the only one concerning what the institution does after the citizen has acted. Evidence on that condition is thin, for conceptual as much as practical reasons. Responsiveness is a property of representation rather than of participation: Pitkin (1967) defines representing as acting in the interests of the represented in a manner responsive to them, which makes it a relation between citizen and decision-maker rather than a feature of an event. Rowe and Frewer (2000) note that

the influence of input on outcomes is the evaluation criterion least often assessed. International guidance treats accessible, predictable and rights-compatible grievance processes as core to community relations (International Council on Mining and Metals, 2019), yet empirical work finds that formal design criteria do not guarantee remedy for rights holders (Hofmeyr, 2025a). Hofmeyr (2025b) shows that corporate rationales of efficiency and legitimacy create participatory spaces that are hard to access yet emboldened with considerable decision-making power, creating information asymmetries and transferring the burden of engagement onto community representatives; where representatives fail to disseminate information, mistrust deepens, reinforcing the perception that participation not only empowers elites but actively produces them. Hofmeyr and Wielga (2026) argue that the mining industry initially led the development of grievance systems but has since lost momentum, with reduced investment in the social function, the rise of audit culture driving empty and performative practices, and a growing focus on risks to projects over human impact. Jager et al. (2020) supply the countervailing result, showing that participation improves outcomes where it is connected to implementation. In the extractive sector, procedural research has concentrated on impact assessment. O'Faircheallaigh (2010) shows that the purposes participation serves there are frequently in tension, and later that community-controlled assessment and negotiated agreements shift outcomes where consultation alone does not (O'Faircheallaigh, 2017). Work on free, prior and informed consent finds the standard commonly implemented as disclosure rather than consent (Hanna & Vanclay, 2013; Owen & Kemp, 2014). Loginova et al. (2025) review community experiences across the Arctic and sub-Arctic, finding that despite unprecedented inclusion of Indigenous peoples in resource governance, it remains unclear how consultation and consent can support Indigenous-centered decision-making. Brombal et al. (2026) identify three core flaws in conventional environmental impact assessments: an inherent bias favoring development projects, an anthropocentric and short-sighted vision of sustainability, and a lack of meaningful participation by affected communities. Byambaa and de Vries (2020) show for Mongolia that assessment fits mobile pastoral land use poorly, because affected parties are defined by registered residence while the affected resource crosses administrative boundaries. The social license literature supplies the outcome these processes are meant to secure. Moffat and Zhang (2014) provide the most influential empirical model, in which contact quality and procedural fairness shape trust and trust shapes acceptance. Critical treatments warn that the concept can describe an absence of visible opposition rather than considered consent (Owen & Kemp, 2013), and Meesters and Behagel (2017), writing on Mongolia, show how its language can neutralize harm by reframing it as a relationship to be managed. Hatcher (2020) traces the selective domestication of international standards at the country's largest copper project. Paes et al. (2026) argue that in contexts of institutional fragility, the social license operates as legitimacy under moral asymmetry, an unstable and conditional moral contract shaped by structural dependency and ongoing relational performance rather than a license to be obtained; communities assess legitimacy based on the consistency of corporate presence and recognition over time, while companies manage moral exposure by translating political and relational conflicts into technical and managerial language. Renner and Mayr-Veselinovic (2025) find through discourse analysis of mining projects in Serbia and Austria that technically legitimate projects can falter if there is a deficiency in responsible communication. This work describes what acceptance rests on, not the sequence by which an objection does or does not reach a decision. Social capital concerns resources embedded in social relations (Bourdieu, 1986). Putnam (2000) distinguishes inward-looking bonding from outward-looking bridging ties, and Woolcock (1998) and Szreter and Woolcock (2004) add linking social capital for vertical relations across gradients of institutional power. Bonding ties create shared interpretations of harm and the trust needed for collective action; bridging ties connect groups with different livelihoods and reduce the risk that one representative speaks for all; linking ties connect local actors to institutions that can authorize investigation and remedy. Suopajarvi et al. (2019) show that social capital in mining is relational and context-specific rather than a general stock that automatically produces acceptance. Ashraf (2026) analyses the Gorano protest movement against coal mining in Tharparkar, Pakistan, showing how heterogeneous groups divided across class, caste and religion successfully

formulated a collective identity anchored in shared folklore, history and territory, which helped overcome differentiation and created the conditions for collective action. For conflict analysis the central issue is configuration: strong bonding with weak linking may produce organized voice that cannot reach decision authority, while strong linking without representative bonding or bridging may produce elite brokerage and selective access. What becomes of voice that receives no response is the subject of Hirschman's (1970) account of exit, voice and loyalty. Voice repeatedly unanswered decays into resignation or migrates to channels outside the one that failed, which predicts movement from invited into claimed space (Gaventa, 2006; Mirafteb, 2004). Djukanović (2026) analyses the refusal of lithium mining in Serbia, showing how communities moved beyond conventional participation channels to protest, blockades and the articulation of alternative green futures. Agbo and Swatuk (2023) show in Ghana that the most successful outcomes in forest governance are observed where local participation is an essential part of conservation efforts, and that a bottom-up all-inclusive approach to managing forest resources is necessary, suggesting that the quality and inclusiveness of participation, not merely its presence, determines whether conflict or collaboration results. Research on Mongolia supplies the setting: Dalaibuyan (2022) documents the negotiated coexistence of mining and pastoralism, Sternberg et al. (2025) analyze licensing as a process converting commonly used rangeland into exclusive tenure, and Mavisakalyan and Minasyan (2025) find across many countries that proximity to mining lowers trust in government, placing the state rather than the company at the center of the political response to extraction. Taken together, this work identifies the conditions for participation and documents its failures, but treats them as a checklist rather than a sequence, and participation as one good with one owner. No study known to the authors traces an individual resident's passage through the successive gates of invitation, attempt and response, tests whether the same institution governs each, and sets that against both the instruments that create the gates and the relational configurations that carry voice to them.

Theoretical Framework and Hypothesis Development

The framework places social capital and institutional feedback inside the conflict pathway. Structural conditions and contextual pressures generate the setting in which grievance accumulates; a trigger makes it actionable; bonding, bridging and linking ties shape whose concerns are assembled and whether they reach actors with authority. At the feedback node the pathway diverges. A completed chain of response, corrective action, monitoring and communicated follow-up supports negotiated adjustment; an incomplete chain reproduces grievance and increases the use of alternative or intensified voice. Figure 1 sets out the framework and the three evidence strands. Because the strands answer different kinds of question, the study states testable hypotheses for the survey strand and interpretive propositions for the documentary and qualitative strands.

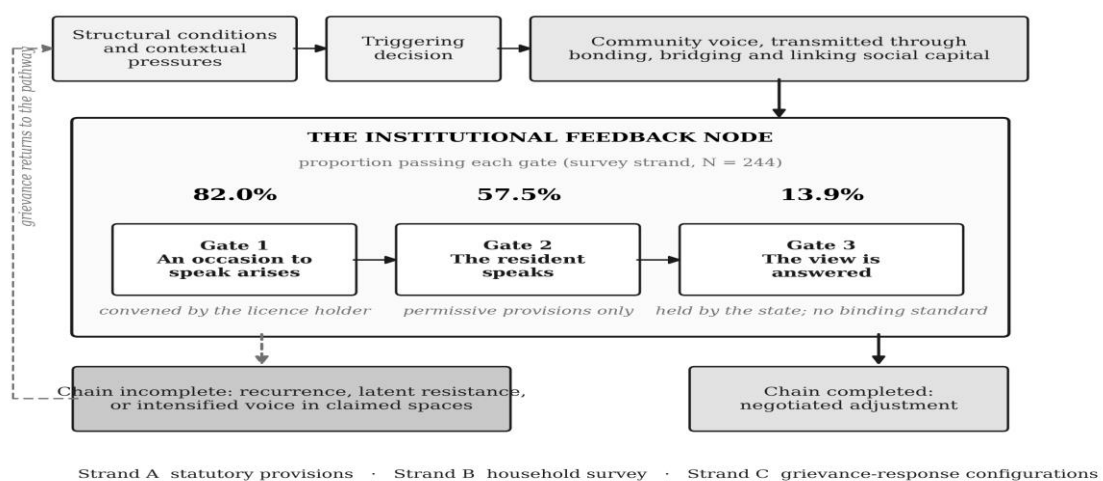


Figure 1: The institutional feedback framework.

Note. Voice reaches the feedback node through bonding, bridging and linking ties; the node has three gates, each with a different institutional owner. Percentages are observed passage rates in the survey strand. Where the chain is incomplete, grievance returns to the pathway. Source: authors' compilation.

Citizen-side conditions under a supply-convened regime

The resource model holds that participation depends on what the individual brings to it: time, money and civic skills, with education the most consistent correlate (Brady et al., 1995; Verba et al., 1995). That evidence comes overwhelmingly from activities citizens initiate, where the citizen performs the selection. Consultation in extractive governance works the other way. The occasion is created by a proponent, notification is controlled by it, and the agenda, venue and timing are set by it (O'Faircheallaigh, 2010; Owen & Kemp, 2014). Where selection is performed by the institution, individual endowments should carry little of the variation in who ends up where, because that variation is generated upstream of the individual. The same reasoning extends to organized intermediaries. Wongnaa et al. (2024) show in Ghana that membership in farmer-based organizations and access to credit influence participation in mining activities, suggesting that associational capacity can matter where individuals choose to enter an activity. But consultation in extractive governance is not an activity citizens initiate. Hofmeyr (2025b) shows that participatory spaces created by corporate rationales of efficiency and legitimacy are hard to access yet emboldened with considerable decision-making power, creating information asymmetries and transferring the burden of engagement onto community representatives. Obie et al. (2026) find that nickel industrialization generates declining interpersonal trust, weakening collective norms and increasing social differentiation, which further undermines the capacity of associational infrastructure to sort residents into participation positions. Where the occasion and the agenda remain the proponents to set, associational capacity faces the same closed door as individual capacity. This makes the resource model's failure a prediction rather than an anomaly, and the test is informative in both directions. Therefore, the following hypothesis has been developed:

H1. *Individual resources, engagement and perceived associational infrastructure do not predict passage at any stage of the cascade.*

Convening authority and access

Access is supplied by whoever convenes. Moffat and Zhang (2014) show that the quality of company–community contact is the strongest single antecedent of the trust on which acceptance rests, so a company that works with herders as a matter of routine should generate more occasions and invitations more worth accepting. Renner and Mayr-Veselinovic (2025) find that deficient communication can cause technically legitimate projects to falter, suggesting that the quality and consistency of company engagement matters across the entire participation sequence rather than at any single point. Paes et al. (2026) find that communities assess legitimacy based on the consistency of corporate presence and recognition over time, while companies manage moral exposure by translating political and relational conflicts into technical and managerial language. Hofmeyr and Wielga (2026) argue that effective grievance systems are essential for maintaining legitimacy and navigating conflict in contested operational environments, and that credible, responsive community complaint mechanisms should be a central pillar of responsible mining. Hofmeyr (2025b) shows that corporate rationales of efficiency and legitimacy create participatory spaces that are hard to access yet emboldened with considerable decision-making power. The framework adds a sharper prediction from this literature. Convening is a standing disposition towards the affected population rather than an act performed at one point in a decision, so its effect should not concentrate at any particular gate; it should appear across the sequence and show no stage-specificity. This distinguishes H2 from H3 and makes the two separately falsifiable on the same data. If company openness is a convening effect, it should raise passage at every gate. If it were instead a gate-specific effect, it would raise passage only where the company holds authority, which is at the point of invitation rather than at the point of response. Therefore, the following hypothesis has been developed:

H2. *Perceived company openness raises the probability of passage, and does so at every stage rather than at any particular one.*

Decisional authority and uptake

Uptake is a different good with a different owner. Under Mongolian law the instruments carrying legal weight are held by public bodies: the district administration is party to the agreement with the license holder, the district assembly gives the opinion required before certain decisions, and environmental authorities act on assessment findings. A company may convene a meeting; converting an expressed view into a changed decision requires an administrative act. Fung (2006) treats the link between voice and authority as a design dimension distinct from recruitment, and Mavisakalyan and Minasyan (2025) show that the political consequences of extraction attach to government rather than to firms. Prior studies support this separation. Grama (2025) finds that the UN Guiding Principles are unlikely to serve as prescriptions that constrain direct managerial discretion over company grievance mechanisms, and suggests that more participatory approaches may be needed to include and empower rightsholders. This indicates that private actors, even when they convene participation, do not hold the authority to convert voice into binding remedy. Loginova et al. (2025) identify limitations of state- and company-led consultation and consent across the Arctic, showing that community consultation and consent often fail to support Indigenous-centered decision-making. Tulukcu Yildizbaş et al. (2026) find in Türkiye that trust in governance processes is low and most respondents desire greater participation in those processes, suggesting that state responsiveness is the missing element rather than company engagement. Paes et al. (2026) find that in contexts of institutional fragility, communities assess legitimacy based on the consistency of corporate presence and recognition over time, but that companies manage moral exposure by translating political and relational conflicts into technical and managerial language, which implies that companies cannot substitute for state authority in delivering remedy. The prediction is therefore specific in a way H2 is not: decisional authority binds only where a decision is made. State responsiveness should be inert at the gates where access is at issue and decisive at the gate where a decision is at stake. This makes H3 falsifiable against H2 on the same data. Therefore, the following hypothesis has been developed:

H3. *Perceived state responsiveness raises the probability that an expressed view is answered, and is inert at the earlier stages.*

Proposition Development for the Documentary Strand

The documentary strand concerns institutional design rather than individual variation. Prior research on statutory and regulatory frameworks in extractive governance provides the basis for a proposition about what the instruments provide. O'Faircheallaigh (2010) shows that the purposes participation serves in impact assessment are frequently in tension, and later that community-controlled assessment and negotiated agreements shift outcomes where consultation alone does not (O'Faircheallaigh, 2017). Hanna and Vanclay (2013) and Owen and Kemp (2014) find that free, prior and informed consent is commonly implemented as disclosure rather than consent, indicating that legal instruments often create access without binding decisions. Byambaa and de Vries (2020) show for Mongolia that assessment fits mobile pastoral land use poorly because affected parties are defined by registered residence while the affected resource crosses administrative boundaries. Recent work reinforces this pattern. Brombal et al. (2026) identify three core flaws in conventional environmental impact assessments: an inherent bias favoring development projects, an anthropocentric and short-sighted vision of sustainability, and a lack of meaningful participation by affected human communities. Grama (2025) finds that access to remedy is often interpreted as procedural rather than substantive, meaning that legal instruments may structure ongoing conversation without constraining discretion. Hofmeyr and Wielga (2026) argue that audit culture in mining grievance mechanisms drives empty and performative practices rather than substantive remedy. Wijen (2014) provides the theoretical mechanism: means–ends decoupling is most likely in opaque fields where compliance is observable and achievement is not. Taken together, this literature suggests that statutory mechanisms in mining consultation are likely to create access permissively and leave decisions unbound, making the feedback gap a feature of the instruments rather than only of their administration. Therefore, the following proposition has been developed:

P1. *The statutory mechanisms create resident access permissively and leave the decision unbound, so that the feedback gap is a feature of the instruments rather than only of their administration.*

Proposition Development for the Qualitative Strand

The qualitative strand concerns process and relations rather than individual variation. Prior research on social capital in mining contexts provides the basis for a proposition about how configurations of ties condition the transmission of voice. Putnam (2000) distinguishes inward-looking bonding from outward-looking bridging ties, and Woolcock (1998) and Szreter and Woolcock (2004) add linking social capital for vertical relations across gradients of institutional power. Suopajarvi et al. (2019) show that social capital in mining is relational and context-specific rather than a general stock that automatically produces acceptance. Obie et al. (2026) find that nickel industrialization generates declining interpersonal trust, weakening collective norms and increasing social differentiation, while communities demonstrate adaptive resilience through livelihood diversification, informal cooperation and locally embedded support networks. Ashraf (2026) shows how heterogeneous groups divided across class, caste and religion successfully formulated a collective identity anchored in shared folklore, history and territory, which helped overcome differentiation and created the conditions for collective action. These studies suggest that the configuration of social capital matters more than its quantity. Strong bonding with weak linking may produce organized voice that cannot reach decision authority; strong linking without representative bonding or bridging may produce elite brokerage and selective access. Hofmeyr (2025b) shows that where representatives fail to disseminate information, mistrust deepens, reinforcing the perception that participation not only empowers elites but actively produces them. Taken together, this literature suggests that bonding organizes claims, bridging determines the breadth of representation, and linking determines whether claims reach actors able to investigate and remedy. Therefore, the following proposition has been developed:

P2. *Social capital configurations condition the transmission of voice: bonding organizes claims, bridging determines the breadth of representation, and linking determines whether claims reach actors able to investigate and remedy.*

Proposition Development for Conflict Dynamics

Prior research on what happens when voice receives no response provides the basis for a proposition about the movement from invited to claimed spaces. Hirschman (1970) argues that voice repeatedly unanswered decays into resignation or migrates to channels outside the one that failed. Gaventa (2006) locates power in the rules determining who may enter invited and claimed spaces, and Miraftab (2004) notes that those excluded from official spaces construct their own. Djukanović (2026) analyses the refusal of lithium mining in Serbia, showing how communities moved beyond conventional participation channels to protest, blockades and the articulation of alternative green futures, and argues that refusal must be understood as multidimensional rather than merely passive or negative. Agbo and Swatuk (2023) show in Ghana that the most successful outcomes in forest governance are observed where local participation is an essential part of conservation efforts, and that a bottom-up all-inclusive approach to managing forest resources is necessary. Jager et al. (2020) supply the countervailing result, showing that participation improves outcomes where it is connected to implementation. These studies suggest that the completion of the feedback chain determines whether grievance recurs and voice intensifies, or whether the same institutions can support negotiated adjustment. Where official channels appear ineffective, participants describe repeated complaints, public meetings, media engagement, litigation, civic organization and road blockades. Where recurring forums connect community, government and company actors, evidence and follow-up become more visible. Taken together, this literature suggests that incomplete feedback chains produce recurrence and intensification, while completed chains support adjustment. Therefore, the following proposition has been developed:

P3. *Where the feedback chain is incomplete, grievance recurs and voice intensifies into alternative or claimed spaces; where it is completed, the same institutions can support negotiated adjustment.*

Research Methods

Design and integration strategy

The study is a convergent mixed-methods embedded case study (Fetters et al., 2013; Yin, 2018). The case is the citizen participation system of one southern Mongolian province. Three strands were collected and analyzed separately and then integrated at the point of interpretation, each with its own embedded unit of analysis and each answering a question the others cannot. The documentary strand takes the statutory provision as its unit and establishes what the institutions oblige. The survey strand takes the household as its unit and establishes where residents actually end up, and in what proportions. The qualitative strand takes the grievance-response episode as its unit and establishes how the sequence varies and why. Table 1 sets out the design. In none of the three strands is the locality the case. District is a covariate in the survey models, where it predicts position at no stage, and geographical comparison is the subject of a companion study of the same fieldwork. Taking provisions, households and episodes as units instead places the units of analysis where the propositions lie. Integration follows a joint-display logic: findings from each strand are arrayed against the three gates of the feedback node, and convergence, divergence and silence are reported explicitly rather than asserted.

Setting

Fieldwork covered three mining-affected districts of one southern province, selected to vary the kind of operation hosted while holding the regional setting constant: one hosts small-scale coal extraction, one large-scale coal, and one a copper–gold operation of national significance. All are arid rangeland districts in which mobile pastoralism is the principal traditional livelihood and extraction competes with herding for pasture, water points and passage. Sites are identified by mineral and scale throughout; localities and license holders are not named, to preserve the anonymity undertaken to respondents. Published accounts of mediation in the region are cited as public regional context and not as descriptions of the study sites.

Strand A: statutory provisions

The documentary units are the six provisions of the two governing laws that name a party to mining consultation. They are a census rather than a sample. Each was coded on three attributes drawn from the framework: who convenes or holds it, whether its language is mandatory or permissive, and whether it connects to a decision that can change. Coding was applied to the official English texts of the primary legislation rather than to secondary descriptions of it. The proposition tested is P1.

Strand B: household survey

The survey strand uses responses from 244 herding households collected on paper during fieldwork in the three districts, administered in Mongolian. It covers information access, opportunities to comment, perceived effects on livelihood and on pasture and water, dealings with state bodies and companies, knowledge of free, prior and informed consent, the importance attached to taking part, household members employed in mining, and agreement items on monitoring and benefit distribution. There are no missing values on any variable used. A parallel survey of 438 public servants used an instrument recording opportunities to comment on an agreement scale rather than as mutually exclusive outcomes, so it cannot be used to construct the cascade. The dependent variable comes from a single item offering four mutually exclusive answers: expressed a view and it was accepted; expressed a view but it was not taken into consideration; made no attempt to express a view; and no opportunity arose at all. These describe positions in a determinate sequence, since a resident must have an opportunity before the question of using it arises and must have used it before the question of response arises. The variable was therefore decomposed into three binary transitions, each defined on the respondents still at risk. This is the continuation-ratio formulation, in which the likelihood factorizes into the product of the stage likelihoods (Ananth & Kleinbaum, 1997; Agresti, 2010). It is preferred to the proportional-odds model because it does not assume one coefficient vector governs every transition, and to the multinomial logit because it uses the known ordering.

Predictors were divided by whether they could plausibly be affected by the outcome. The structural block contains education, gender, an indicator for age 35 or over, household size, an indicator for any household member employed in mining, and district indicators. The perceptual block contains four single items, reverse-coded so a higher score denotes more of the named quality: whether information reaches the household, whether taking part is considered important, the quality of dealings with state bodies, and whether companies work with herders. A fifth item, whether citizen monitoring groups and non-governmental organizations take a clear part locally, measures associational infrastructure. Polychoric correlations among the perceptual items average .196 and they would return an ordinal alpha of .494 if treated as one scale, so they were entered separately rather than combined. The largest variance inflation factor is 1.44.

Strand C: grievance-response configurations

The qualitative strand is an interpretive, process-oriented comparative analysis. Its unit is the grievance-response episode: a sequence linking structural conditions and contextual pressures to a specific concern or triggering decision, the form of voice used, the response of responsible institutions, and the subsequent movement toward adjustment, recurrence, latent resistance or visible contention. The analytical logic was abductive, moving between field evidence and the framework, with conflict-pathway and social-capital concepts used as sensitizing concepts rather than fixed variables. The field record identifies 150 participants across the regional study area, including affected herders, other residents, mine workers and environmental personnel, local representative and executive officials, land and environmental officers, civil-society actors, and people involved in company-community dialogue. Purposive stakeholder sampling emphasized variation in livelihood, organizational role and access to decision makers rather than statistical representativeness. Evidence came from semi-structured individual and small-group engagement, researcher notes and direct observation, supported by publicly available company reports, environmental-impact documentation and monitoring materials for 2018–2025. Documents were used to compare formally described procedures with participant accounts of their operation, not to establish prevalence. Analysis proceeded from inductive thematic coding (Braun & Clarke, 2006) to deductive mapping onto conflict-pathway categories, then to social-capital interpretation of evidence about internal organization, cross-group connections, intermediaries and vertical access. Episodes were grouped into cases when they shared a comparable channel of voice, allocation of responsibility, pattern of linking relations and degree of visible follow-up. Three configurations resulted: fragmented direct response, brokered public response, and institutionalized multi-party feedback. These are process cases rather than places; more than one configuration can occur within a locality.

Estimation, inference and trustworthiness

Each cascade stage was estimated by binary logistic regression. The third has 16 positive outcomes among 115 respondents at risk, so it was estimated by Firth's penalized likelihood, which removes first-order bias and yields finite estimates under sparse data (Firth, 1993; Heinze & Schemper, 2002); its constrained fits hold the coefficient at zero within the full design rather than deleting its column, because deleting it changes the basis on which the penalty is computed. Tests are likelihood-ratio tests and intervals are profile likelihood intervals on the same likelihood. Effects are reported as average marginal effects as well as odds ratios. Logistic coefficients are scaled by the residual variation of the sample they are estimated on, so comparing log-odds across stages estimated on different subsamples confounds differences in effect with differences in unobserved heterogeneity (Mood, 2010). Since the central claim is such a comparison, the stage contrasts are established on the probability scale. Discrimination is reported both apparent and corrected for optimism by 400 bootstrap resamples (Harrell et al., 1996); sensitivity to unmeasured confounding is quantified by E-values (VanderWeele & Ding, 2017); and multiplicity is addressed by the Benjamini and Hochberg (1995) procedure. Qualitative trustworthiness was addressed through the four criteria of Lincoln and Guba (1985). Credibility was strengthened by triangulating participant groups, observation and documents and by examining discrepant as well as agreeing accounts; dependability by maintaining an

evidence chain from field code to episode, theme, pathway category and configuration; confirmability by separating participant perceptions from independently verified facts and avoiding causal claims about health or environmental change where no independent measurement existed; transferability through explicit definitions of the three configurations. Quotations are concise author translations of Mongolian field notes, identified by anonymized field codes. The qualitative strand seeks analytical rather than statistical generalization and does not infer prevalence from the number of coded references (Yin, 2018).

Ethical considerations

Participation was voluntary, responses were recorded anonymously, and participants were informed of the purpose of the study beforehand. Names and directly identifying details are omitted, geographical and organizational identifiers are generalized, and statements about environmental or health effects are reported as participant perceptions unless supported by independent measurement.

Table 1: The three evidence strands

Strand	Evidence	Unit of analysis	What it establishes
A. Documentary	Six statutory provisions naming a party to mining consultation	The provision	What the institutions oblige, who convenes, whether a decision is bound
B. Survey	244 herding households, four mutually exclusive participation positions	The household	Where residents end up, in what proportions, and what predicts position
C. Qualitative	150 participants; documents 2018–2025; three response configurations	The grievance-response episode	How the sequence varies, through what relations, and why

Note. The locality is not the case in any strand. District enters the survey models as a covariate, where it predicts position at no stage, and geographical comparison is the subject of a companion study of the same fieldwork. Source: authors' compilation.

Results and Discussion

What the instruments provide

Table 2 sets out the six statutory provisions. Every provision creating an occasion for residents is permissive. Article 42.2 of the Minerals Law provides that a license holder, in cooperation with the local administrative body, may organize a public forum; Article 42.3 provides that a representative with obligations to monitor the holder's activities may be selected from the public. Both are discretionary, and in both the initiative rests with the holder or the administration rather than with residents. The one mandatory provision in that article does not involve residents at all: Article 42.1 requires that a license holder shall conclude an agreement and work in cooperation with local administrative bodies on environmental protection, infrastructure and employment. It is the instrument with real content, and its parties are the company and the administration. The provisions reaching the decision are state-held and bind no one. Under Article 19.4 the Governor shall respond to the state administrative body after obtaining the opinions of the district and provincial citizens' representative assemblies, and failure to respond within thirty days shall be deemed as approved. Silence is construed as consent, converting the absence of a response into a permission rather than an omission. The environmental impact assessment law requires the detailed report to include the opinion of citizens of the area (Article 5.4.8), but that opinion is collected by the assessing entity engaged by the proponent, and the decision is made taking the opinion into account (Article 7.3), a formulation imposing no standard against which a decision could be tested. There is no provision under which a resident's expressed view attaches to an outcome. P1 is supported: this is Wijen's (2014) opacity in statutory form, in which compliance can be shown by a forum held and an opinion appended while achievement has no definition against which it could fail. The finding resonates with Hofmeyr and Wielga's (2026) observation that audit culture in mining grievance mechanisms drives empty and performative practices, and with Grama's (2025) finding that practitioners interpret access to remedy as procedural rather than substantive.

Table 2: The six statutory participation mechanisms

Provision	Who convenes or holds it	Statutory language	Bound to a decision?
Minerals Law, Art. 42.1	License holder and local administrative bodies	Holder "shall conclude agreement and work in cooperation"	Mandatory, but residents are not a party
Minerals Law, Art. 42.2	License holder, with the local administrative body	Holder "may organize a public forum"	Permissive; no link to any decision
Minerals Law, Art. 42.3	Selected from the public	A monitoring representative "may be selected and employed"	Permissive; no link to any decision
Minerals Law, Art. 19.4	Governor, obtaining assembly opinions	Governor "shall respond... after obtaining opinions"; failure to respond "shall be deemed as approved"	State-held; silence construed as approval
EIA Law, Art. 5.4.8	The assessing entity engaged by the proponent	The detailed report shall include the "opinion of citizens... of the area"	Mandatory to record, not to answer
EIA Law, Art. 7.3	State administrative body	Decision made "taking into account citizens opinion of the area"	Names the decision; sets no standard

Note. The six provisions exhaust those in the two governing laws that name a party to mining consultation, so the units are a census rather than a sample. Language is quoted from the official English texts of the Minerals Law of Mongolia (2006) and the Law of Mongolia on Environmental Impact Assessment (2012). Source: authors' compilation.

Where residents stand

Table 3 reports where the surveyed households stand. An occasion to comment arose for 82.0% of respondents, which by the standards of the participation literature is a high rate of invitation. Of those, 57.5% attempted to speak, and of those, 13.9% reported that their view was taken up. In total 6.6% completed the sequence, while 40.6% ended having spoken without being heeded. The shape of the loss matters as much as its size: most attrition occurs after the resident has acted, so a process assessed on invitation would score this system well and one assessed on attendance adequately. One rival explanation must be dismissed first. If herders did not regard mining as salient, low participation would follow without institutional failure. The data exclude that reading: 88.1% report that pasture and water have been disturbed or degraded, and 82.0% name pasture and nature protection as the single most important issue facing them. Grievance is near-universal and concentrated on the resources mining affects. Structural group differences in position are also absent, with chi-square tests returning $p = .468$ against district, $p = .428$ against gender, $p = .316$ against education band and $p = .105$ against household mine employment. This pattern of near-universal grievance alongside low uptake resonates with Tulukcu Yildizbaş et al.'s (2026) finding in Türkiye that trust in governance processes is low and most respondents desire greater participation, and that economic arguments alone are insufficient to justify social legitimacy. It also aligns with Wongnaa et al.'s (2024) finding in Ghana that structural factors such as membership in farmer-based organizations and access to credit influence participation in mining.

Table 3: Position in the participation sequence and passage rate at each gate

Panel A. Terminal position			
	n	%	95% CI
Spoke and the view was taken up	16	6.6	[3.5, 9.7]
Spoke and the view was not considered	99	40.6	[34.4, 46.7]
Made no attempt to speak	85	34.8	[28.9, 40.8]
No opportunity arose at all	44	18.0	[13.2, 22.9]

Panel B. Passage rate		At risk	Passed	% passing
Gate 1 An occasion arose		244	200	82.0
Gate 2 The resident spoke, given an occasion		200	115	57.5
Gate 3 The view was answered, given that the resident spoke		115	16	13.9
Cumulative passage through all three gates		244	16	6.6

Note. N = 244. Panel A intervals are normal-approximation intervals for a single proportion. Panel B reports each transition among the respondents still at risk, the continuation-ratio decomposition used in the models. Source: authors' calculations.

Table 4 reports the models. A structural-only specification does not fit at any stage, and adding the perceptual block improves fit at every stage, by $\chi^2(4) = 20.88$, $p < .001$; $\chi^2(4) = 9.47$, $p = .050$; and $\chi^2(4) = 25.23$, $p < .001$. H1 is supported, and it was framed as a prediction of absence. Education does not predict passage anywhere, with marginal effects of -1.82 , -1.92 and $+2.55$ percentage points and no p-value below .34. Gender is unrelated to position at every stage, notable in a sample that is 71.7% women. The importance a herder attaches to participating predicts nothing, and this is not a floor effect, since 70.1% call participation in local decisions very important. Perceived associational infrastructure predicts nothing either: added to the specification it returns $OR = 1.29$, $p = .143$ at stage one, $OR = 1.01$, $p = .940$ at stage two and $OR = 0.87$, $p = .648$ at stage three, leaving the other estimates undisturbed. Where the institution performs the selection, neither individual endowment nor organizational capacity sorts residents. This finding parallels Hofmeyr's (2025b) observation that corporate participatory spaces transfer the burden of engagement onto community representatives, creating information asymmetries that individual resources cannot overcome, and Obie et al.'s (2026) finding that social differentiation increases under extractive expansion. H2 is supported in both its parts. Perceived company openness raises the probability of passage at every gate, by 10.90 percentage points at stage one ($p = .010$), 17.33 at stage two ($p = .004$) and 9.60 at stage three ($p = .079$), and the targeted contrast confirms the absence of stage-specificity: allowing the company effect to differ by stage improves fit by only $\chi^2(2) = 2.03$, $p = .363$. This is consistent with Renner and Mayr-Veselinovic's (2025) finding that deficient communication can cause technically legitimate projects to falter, with Moffat and Zhang's (2014) model in which contact quality shapes trust and acceptance, and with Paes et al.'s (2026) finding that communities assess legitimacy based on the consistency of corporate presence and recognition over time. H3 is supported, and it is the sharpest quantitative result. Perceived state responsiveness is inert at the first two gates, at 5.07 percentage points ($p = .173$) and 0.56 ($p = .915$), and decisive at the third, at 15.01 ($p = .001$), the largest marginal effect anywhere in the analysis.

Table 4. Predictors of passage at each gate: odds ratios and average marginal effects

Predictor	Gate 1 OR AME	Gate 2 OR AME	Gate 3 OR AME
Education (5 bands)	0.87 -1.82	0.92 -1.92	1.30 +2.55
Female	1.08 +0.98	1.19 +3.89	0.51 -6.80
Aged 35 or over	1.73 +7.96	1.07 +1.41	3.02 +8.69
Household size	1.06 +0.79	0.83 -4.00†	0.86 -1.42
Household member in mining	0.51† -8.61†	1.70† +11.77†	0.32 -11.36
Large-scale coal site	0.94 -0.79	1.34 +6.36	2.05 +7.01
Copper-gold site	1.44 +4.54	2.22† +17.00†	1.95 +6.74
Information reaches the household	1.43 +4.71	0.94 -1.34	1.92 +6.28†
Taking part is important	1.24 +2.83	0.81 -4.64	1.44 +3.50
Perceived state responsiveness	1.47 +5.07	1.03 +0.56	4.77*** +15.01***
Perceived company openness	2.30** +10.90**	2.21** +17.33**	2.72† +9.60†
n (events)	244 (200)	200 (115)	115 (16)
Model LR $\chi^2(11)$	26.17**	22.21*	34.65***
Nagelkerke R^2	.167	.141	.470
AUC, apparent / corrected	.735 / .657	.684 / .613	.896 / .819

Note. Odds ratios and average marginal effects in percentage points from the same models; full confidence intervals are reported in the text for the predictors carrying hypotheses. Marginal effects, not odds ratios, are the basis for comparison across gates, since logistic coefficients are scaled by the residual variation of the subsample they are fitted on (Mood, 2010). Gate 3 uses Firth penalized likelihood. Reference category for site is the small-scale coal site. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Source: authors' calculations.

The targeted contrast confirms the stage-specificity, $\chi^2(1) = 8.71$, $p = .003$, with the stage-three odds ratio 3.85 times its value at the earlier gates. Because the comparison is made on the probability scale it is not vulnerable to the rescaling objection attending cross-sample comparison of logit coefficients (Mood, 2010). Information criteria confirm that the departure from a common structure is specific rather than general: freeing every slope improves fit over common slopes, $\chi^2(22) = 37.76$, $p = .020$, but is preferred by neither AIC nor BIC, while the

common-slope model with a single added term for state responsiveness at the uptake gate wins on both, at AIC 569.9 against 576.6 and 582.9. This pattern of state-held decisional authority aligns with Paes et al.'s (2026) finding that in contexts of institutional fragility, companies manage moral exposure by translating political and relational conflicts into technical and managerial language, with Mavisakalyan and Minasyan's (2025) evidence that political consequences of extraction attach to government rather than to firms, and with Loginova et al.'s (2025) identification of limitations of state- and company-led consultation.

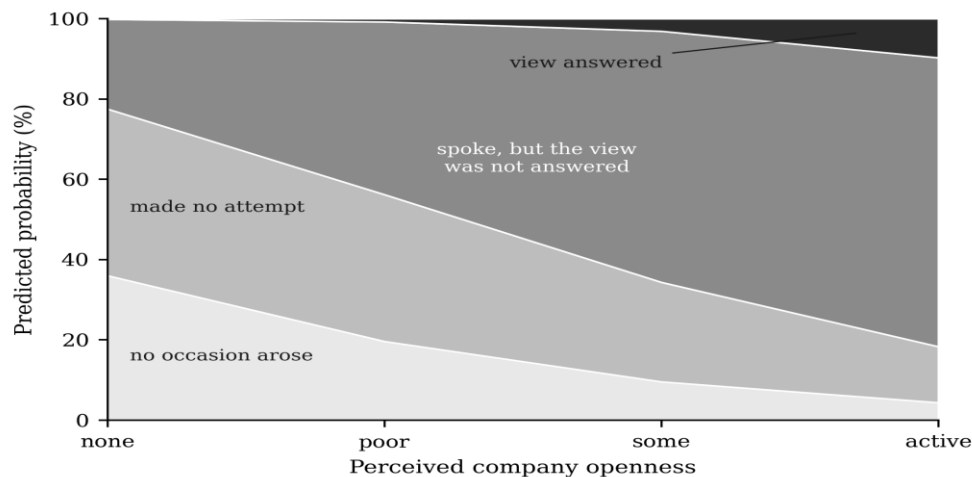


Figure 2: Predicted probability of each terminal position by perceived company openness, obtained by multiplying the fitted gate probabilities for a female respondent at the sample mean on the other predictors, with one household member in mining, at the small-scale coal site.

Source: authors' calculations.

Figure 2 converts these estimates into predicted terminal positions, and the result is not what an advocate of engagement would expect. Raising perceived company openness from its lowest to its highest level lowers the predicted probability that no occasion arose from 36.0% to 4.4%, and of having an occasion but not using it from 41.5% to 13.9%. Almost all that mass moves into one position: speaking and not being heeded rises from 22.3% to 71.9%, while being heeded rises only from 0.2% to 9.7%. Convening effort converts exclusion into disregard. The same calculation on state responsiveness raises the probability of being answered from 0.1% to 14.7%. This pattern supports Hofmeyr's (2025b) finding that participatory spaces created by corporate rationales of efficiency and legitimacy create information asymmetries and transfer the burden of engagement onto community representatives, Hofmeyr and Wielga's (2026) argument that effective grievance systems require substantial investment in personnel, monitoring and accessibility, and Grama's (2025) finding that access to remedy is often interpreted as procedural rather than substantive.

How the sequence varies

Table 5 compares the three grievance-response configurations. Across all of them, participants did not describe mining conflict as the consequence of one isolated incident. Their accounts connected pasture reduction, water access, dust, transport, mobility, employment and the history of earlier institutional responses, and a new road or land decision was interpreted through that history. A single event became conflict-relevant when it condensed several prior concerns into one decision that could be challenged. Local officials partly confirmed this while placing greater emphasis on administrative capacity, acknowledging the economic contribution of mining alongside pressure on local services and difficulties in coordinating responsibilities. The clearest pattern was not an absence of voice. Participants referred to bagh-level meetings, environmental-assessment discussions, direct approaches to companies, complaints transmitted through local government, petitions, media and organized opposition; documents likewise described

information meetings, consultation and grievance channels. The configurations differed in what happened after the point of expression. In the fragmented direct-response case, one field code summarized the problem directly: complaints taken to a mining company were not resolved, and conveying them onward did not produce a visible reply (GV-H17). Another participant stated that companies approached residents mainly when an environmental assessment affecting the operator required discussion (GV-H18). The defining characteristic was not the company or locality involved but the absence of stable ownership and traceable closure. This resonates with Hofmeyr's (2025a) finding that operational-level grievance mechanisms leave both employees implementing policies and community actors urged to make use of them frustrated and disempowered, and with the emergence of parallel systems to negotiate over issues in the shadow of inadequate procedures. In the brokered public-response case, access depended on intermediaries. One participant reported being unable to enter a company to communicate a request (TT-H143), while others said their views were not accepted or acted upon. The call for the bagh governor to function as a bridge to public institutions (TT-H217) is especially revealing: it identifies the need for linking social capital and an intermediary capable of carrying claims across an authority boundary. Brokerage enabled voice to travel but did not guarantee that the broker possessed authority to investigate, require a remedy, or communicate closure. This is the qualitative counterpart of the survey finding that company openness moves residents into the arena without moving them through it, and it aligns with Hofmeyr's (2025b) observation that where representatives fail to disseminate information, mistrust deepens, reinforcing the perception that participation not only empowers elites but actively produces them. P2 is supported in a conditional form. Bonding capital was visible in calls for residents to unite their voices and in the repeated articulation of shared concerns; it functioned as a resource for voice rather than as a source of consensus or calm. Bridging capital was more uneven, since the issues raised by herders, permanent residents, businesses, workers and officials were related but not identical, and where dialogue depended on a narrow set of representative participants questioned whether diverse experiences were transmitted. Linking capital produced the sharpest contrast: fragmented episodes involved weak or intermittent vertical access, brokered episodes depended on officials whose authority could be uncertain, and institutionalized episodes created more regular connections through recurring councils and joint monitoring. Strong bonding with weak linking generates organized claims that remain outside the institutions able to remedy them; strong linking without broad bridging produces selective access lacking representative legitimacy. This configuration analysis parallels Ashraf's (2026) finding that heterogeneous groups in Tharparkar successfully formulated a collective identity anchored in shared folklore, history and territory, which helped overcome differentiation and created conditions for collective action. It also resonates with Obie et al.'s (2026) finding that nickel industrialization in Indonesia generates declining interpersonal trust, weakening collective norms and increasing social differentiation, while communities demonstrate adaptive resilience through livelihood diversification, informal cooperation and locally embedded support networks.

P3 is supported. Participants and documents referred to licensing, haul roads, expansion, relocation and land-use decisions as moments at which dissatisfaction became visible, their common function being to make accumulated pressure concrete and time-bound. Where official channels appeared ineffective, participants described repeated complaints, public meetings, media engagement, litigation, civic organization and road blockades. These manifestations should not be arranged mechanically from moderate to severe; they are partly different institutional strategies, since litigation seeks an authoritative legal decision, media action seeks public leverage, and a blockade makes the cost of non-response immediate. Visible contention is in this sense intensified voice after ordinary voice has failed to produce consequence. The analysis also identifies latent conflict within apparently institutionalized episodes: field observation suggested some participants were reluctant to speak freely in the presence of local authorities, so the absence of open protest is not sufficient evidence of resolution. This migration of voice from invited to claimed spaces aligns with Djukanović's (2026) analysis of refusal of lithium mining in Serbia, where communities moved beyond conventional participation channels to protest,

blockades and the articulation of alternative futures, with Loginova et al.'s (2025) identification of limitations of state- and company-led consultation across the Arctic, and with Agbo and Swatuk's (2023) finding that bottom-up all-inclusive approaches are necessary for successful outcomes in resource governance. The institutionalized multi-party configuration provides a partial counterpoint. Recurring tripartite dialogue brings together representatives of herders, local government and company actors, while joint monitoring creates opportunities to examine wells, pasture and environmental concerns through shared evidence. Published accounts of mediation in the South Gobi similarly show that repeated dialogue, joint fact-finding and negotiated commitments can transform a dispute sufficiently to reach community-development agreements (Compliance Advisor Ombudsman, 2017; Sternberg et al., 2020). The field evidence does not justify treating such arrangements as full partnership: final decision authority remains unequal and representation can be contested. The mechanism matters because it lengthens the institutional memory of a grievance, so that a concern can return to the agenda, be linked to evidence and responsibility, and be monitored over time. The relevant contrast is not mechanism versus no mechanism, but complete versus incomplete cycles. This finding resonates with Jager et al.'s (2020) evidence that participation improves outcomes where it is connected to implementation, and with Paes et al.'s (2026) argument that legitimacy in institutionally fragile settings depends on the temporal continuity of moral attention and recognition over time.

Table 5: The three grievance-response configurations

Configuration	Defining boundary	Primary channels	Feedback characteristic
Fragmented direct response	Direct or episodic contact without stable institutional ownership	Company complaint, direct approach, one-off assessment consultation	Acknowledgement, responsibility, remedy or closure not traceable
Brokered public response	Voice reaches institutions through public or representative intermediaries	Bagh or soum official, public meeting, petition, media, litigation	Referral visible; brokers' authority and corrective power uncertain
Institutionalized multi-party feedback	Recurring forum connecting community, government and company	Tripartite council, joint fact-finding, joint monitoring	Evidence and follow-up more visible; decision authority still unequal

Note. The configurations are analytical process cases, not places: more than one can occur within a locality and a single grievance may move between them over time. No claim is made about their relative prevalence. Source: authors' analysis of the qualitative strand.

Integration across the strands

Table 6 arrays the three strands against the three gates. The convergence is the study's principal warrant. At the first two gates the documentary strand finds only permissive, proponent-convened provisions; the survey finds perceived company openness governing passage; and the qualitative strand finds access mediated by company contact and by brokers. At the third gate the documentary strand finds state-held provisions that set no standard and one that construes silence as approval; the survey finds perceived state responsiveness the only predictor that acts there and the largest effect in the analysis; and the qualitative strand finds the absence of traceable closure to be the defining feature of the fragmented and brokered configurations. Three independent methods, applied to three different units of analysis, locate the same break at the same point. The strands also diverge in one instructive way, and reporting it matters more than reporting the agreements. The survey finds perceived associational infrastructure inert, while the qualitative strand finds social capital consequential. These are not contradictory once the level of analysis is separated. Social capital operates on the transmission of claims — whether a grievance is assembled, represented and carried to an authority — and the qualitative strand observes exactly that. It does not sort individual households into positions, because the gates are held by institutions whose openness does not vary with a household's organizational connections. Social capital determines whether voice reaches authority; it does not determine whether authority answers it. That distinction is invisible to either strand alone. This interpretation aligns with Obie et al.'s (2026) finding that social capital transformation under nickel industrialization involves declining interpersonal trust and weakening collective norms alongside adaptive resilience

through locally embedded networks, and with Ashraf's (2026) demonstration that collective identity can help overcome differentiation and create conditions for collective action even in fragmented social settings. Five checks support the quantitative strand. Corrected for optimism over 400 bootstrap resamples, discrimination falls from .735 to .657 at stage one, .684 to .613 at stage two, and .896 to .819 at stage three, so the apparent fit at the third was flattered, as expected on 16 events, though the corrected value remains the strongest. The stage-three finding is not fragile to unmeasured confounding, with an E-value of 3.79 and 2.04 at the confidence limit. Removing each district in turn leaves the pattern intact in direction though unstable in magnitude. Under the Benjamini and Hochberg (1995) procedure the state and company findings survive across the twelve hypothesis-bearing tests, and state responsiveness at stage three survives across all thirty-three. The specification omitting state responsiveness altogether leaves company openness at OR = 3.79, 95% CI [1.47, 11.11], $p = .006$.

Table 6: Joint display: what each strand finds at each gate

	Gates 1 and 2: access	Gate 3: response
A. Statutory provisions	Permissive only; the forum and the monitoring representative "may" be convened, and the mandatory instrument excludes residents	State-held; opinion to be "taken into account"; silence deemed approval
B. Household survey	Company openness raises passage at both gates (+10.90, +17.33 pp); state responsiveness inert	State responsiveness decisive (+15.01 pp), the largest effect in the analysis
C. Qualitative cases	Access mediated by company contact and by brokers whose authority is uncertain	Absence of traceable closure defines the fragmented and brokered configurations
Convergence	Access is convened by the proponent and is discretionary	No actor is obliged to answer, and only the state can

Note. Integration follows a joint-display logic (Fetters et al., 2013). The one divergence — associational infrastructure is inert in the survey while social capital is consequential in the qualitative strand — is discussed in the text. Source: authors' compilation.

The institutional feedback gap explains why consultation can coexist with conflict. Participation theory correctly asks whether citizens possess influence, and conflict research identifies the structural conditions and triggers of contention; both become more explanatory when a feedback node is placed between voice and outcome. Communities may have formal channels to speak while remaining unable to trace response, remedy and follow-up, and under those condition consultation does not close a grievance but becomes another episode in its accumulation. This clarifies why counting meetings or complaints is an inadequate performance measure. A rising number of complaints may reflect improved access, worsening impacts or repeated non-resolution; a low number may reflect satisfaction, but also fear, distance or low confidence. The meaningful unit of assessment is the completed case pathway. This argument resonates with Hofmeyr and Wielga's (2026) call to reinvest in credible, responsive community complaint mechanisms and the teams to operate them as a central pillar of responsible mining, and with Grama's (2025) suggestion that more participatory approaches may be needed to include and empower rightsholders. The findings also qualify optimistic accounts of social capital and of company engagement alike. Bonding ties can intensify opposition when institutions do not respond; linking ties can reproduce dependence when the relationship is not accountable; and company openness, on the survey evidence, efficiently converts exclusion into disregard. What the three strands jointly establish is that access and uptake are separately owned goods, that the instruments allocate ownership in a way that leaves the second unclaimed, and that no amount of relational capacity on the community side substitutes for an institution obliged to answer. This supports Paes et al.'s (2026) argument that in contexts of institutional fragility, legitimacy is an unstable and conditional moral contract shaped by structural dependency and ongoing relational performance, rather than a license to be obtained through procedural compliance alone.

Theoretical Applications

The study makes three theoretical contributions. First, it measures means–ends decoupling at the level of the individual resident rather than the organization. Bromley and Powell (2012) distinguish policy–practice from means–ends decoupling, and Wijen (2014) argues the latter is most likely in opaque fields where compliance is observable but achievement is not. Consultation in mining is such a field: the 82.0% invitation rate against the 13.9% response rate is decoupling in operation, visible in the accumulated experience of those who speak without being answered. This extends Grama's (2025) finding that the UN Guiding Principles rarely constrain managerial discretion and Hofmeyr and Wielga's (2026) argument that audit culture drives performative practice. Second, it separates access from uptake and shows they have different institutional owners. Participation theory has treated participation as a single good (Arnstein, 1969; Fung, 2006). Here access is proponent-convened and discretionary, while uptake is state-held with no binding standard: company openness raises passage at every gate without stage-specificity, whereas state responsiveness is inert until a decision is at stake (+15.01 pp) and then decisive. This refines Fung's (2006) authority-linkage dimension and qualifies Moffat and Zhang's (2014) contact-quality model by showing contact may move residents into the arena without moving them through it. It aligns with Paes et al. (2026) and Loginova et al. (2025). Third, it positions social capital as transmission mechanism rather than predictor of harmony. Bonding organizes claims, bridging determines breadth of representation, linking determines whether claims reach actors able to remedy, and none obliges an institution to answer. The survey finds associational infrastructure inert while the qualitative strand finds social capital consequential; these reconcile once the level of analysis is separated. This refines Obie et al. (2026) and Ashraf (2026).

Practical Applications

Companies should organize engagement around case closure rather than event completion. Raising perceived company openness from lowest to highest lowers the probability that no occasion arose from 36.0% to 4.4% and of having an occasion but not using it from 41.5% to 13.9%, but almost all that mass moves into speaking and not being heeded, which rises from 22.3% to 71.9%; convening effort converts exclusion into disregard. This aligns with Hofmeyr and Wielga (2026), Grama (2025) and Hofmeyr's (2025a) identification of chronic under-resourcing. Each concern needs a reference, responsible unit, deadline, reasoned outcome and follow-up record, reported by age, recurrence, resolution category and verification. A response matrix should accompany consultation reports, addressing the information asymmetries Hofmeyr (2025b) identifies. Local government needs defined authority, technical support and escalation rules so officials are not reduced to informal messengers. State responsiveness is inert at the first two gates and decisive at the third (+15.01 pp), the largest effect in the analysis, while brokered response depends on officials whose authority is uncertain. Paes et al. (2026) and Tulukcu Yildizbaş et al. (2026) support area-based coordination, jointly governed monitoring with agreed data access and mandatory response thresholds. The institutionalized multi-party configuration is a partial model because it lengthens institutional memory, though decision authority remains unequal. This resonates with Agbo and Swatuk (2023) and Jager et al. (2020). Community councils need representative rules covering selection, rotation, constituency reporting and inclusion of less connected households, since bridging capital was uneven and narrow representation was contested. Ashraf (2026) shows collective identity can overcome differentiation but depends on socio-cultural dynamics; Obie et al. (2026) show sustainable governance requires protecting social capital. Renner and Mayr-Veselinovic (2025) suggest communication should be treated as relational rather than technical.

Conclusion

Attrition through the participation sequence is severe and concentrated after the resident has acted: an occasion arose for four households in five, a majority of those spoke, and one in seven of those was answered. The break is not explained by who the resident is, how much they care, or the organizational infrastructure around them, but by which institution owns which gate. Company openness raises passage at every gate without stage-specificity; state responsiveness is

inert until a decision is at stake and then decisive; and the statutory provisions reproduce that division, creating access permissively and leaving the decision unbound. The theoretical contribution replaces the ladder's single-owner assumption with a sequence of separately owned goods and identifies the institutional feedback gap as the node at which the conflict pathway diverges. Social capital conditions transmission, not reception: bonding organizes claims, bridging broadens representation, linking carries claims to authority, and none obliges an institution to answer. The cascade measures mean-ends decoupling at the level of the individual resident, in a field whose opacity guarantees that a system audited on invitations and attendance records success exactly where the loss occurs. This resonates with Hofmeyr and Wielga (2026), Grama (2025) and Paes et al. (2026). Six recommendations follow: organize engagement around case closure, not event completion; include a response matrix in consultation reports; give local government defined authority, technical support and escalation rules with area-based coordination; govern monitoring independently or jointly with mandatory response thresholds; adopt representative rules for community councils including less connected households; and for legislators, create a point at which an expressed view attaches to an outcome, since the rule deeming a Governor's silence an approval works directly against responsiveness. Inclusiveness and responsiveness are separate accomplishments with separate institutional owners, and measuring participation by invitation and attendance registers progress on the first while the second does not occur.

Limitations and Future Research Directions

The first limitation is causal direction: perceptual predictors and outcome came from one respondent, so common-method variance is present (Podsakoff et al., 2003), sharpest at the third gate where acceptance may color reports of state dealings. Future research should track grievances prospectively from submission to closure, interviewing claimants and officials, replacing perceived with documented response. The second is power at the final stage, where sixteen positive outcomes support penalized estimation with few predictors; future research should estimate the cascade on a sample large enough to support that gate. The third is the outcome measure, drawn from a single recalled item; diary methods or administrative records should validate self-reported participation and response. The fourth is the qualitative strand's reliance on interview notes rather than verbatim transcripts, with no precise enumeration of episodes by configuration; social network analysis should measure bonding, bridging and linking directly, and follow whether those who spoke unanswered later appear in claimed spaces, as Hirschman (1970) predicts. The fifth is scope: the documentary strand establishes what instruments provide, not how officials apply them, and whether the same separation of convening from decisional authority appears elsewhere remains untested; future research should extend the cascade to comparative legal settings.

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