



PASTORAL LIFE IN RURAL MONGOLIA: HERDERS' EXPERIENCES, CHALLENGES, AND FUTURE ADAPTATIONS

Aruhan Bai¹ⁱ,

Javzandulam Batsaikhan²

¹Doctoral Student,
Hokkaido University,
Sapporo, Japan

²PhD,
Mongolian National University of Education,
Ulaanbaatar, Mongolia

Abstract:

Pastoralism remains central to Mongolia's cultural heritage and rural economy, yet herders face mounting pressures from environmental change, demographic shifts, and market instability. This qualitative study explores the lived experiences, challenges, and future perspectives of four herders in western Mongolia, representing different generations and family structures. Data were collected through participant observation and semi-structured interviews, and analyzed using thematic analysis. Findings reveal that herders value pastoral life for its harmony with nature, emotional fulfillment from livestock, self-sufficiency, and cultural continuity. However, they also confront profound challenges, including climate variability, labor shortages, educational disruptions, health care inaccessibility, and inadequate government support. Participants voiced concern about the declining number of herders and emphasized that sustaining pastoralism will depend on adaptive strategies, intergenerational knowledge transfer, and responsive state policies. The study contributes to understanding how cultural identity, environmental change, and socioeconomic factors intersect in shaping the future of Mongolian pastoralism.

Keywords: pastoral life, herder, rural Mongolia

1. Introduction

Pastoralism has been central to Mongolia's socio-cultural identity and economic sustainability for centuries. The practice of extensive livestock herding—spanning sheep, goats, cattle, horses, and camels—has long shaped Mongolian livelihoods, spiritual traditions, and community bonds (Fernandez-Gimenez, 1999). The open steppe and high

ⁱ Correspondence: email aruhanbai9@gmail.com, baiaruhan.baiaruhan.k2@elms.hokudai.ac.jp

mountain pastures not only provide grazing grounds but also underpin a worldview emphasizing harmony between humans, animals, and the natural environment (Upton, 2010). Nomadic herding practices have historically maintained ecological balance through mobility and collective pasture management, ensuring resilience in a highly variable climate (Addison, Brown, Davies, Holcombe & Walters, 2013).

Since Mongolia's transition to a market economy in the early 1990s, however, pastoralism has undergone profound transformation. Livestock privatization initially bolstered household autonomy and income opportunities but also spurred rapid herd expansion and intensified pressure on fragile rangelands (Fernandez-Gimenez & Batbuyan, 2004). Coupled with increasingly unpredictable climatic events—such as dzud (harsh winter disasters) and prolonged droughts—these shifts have heightened pastoral vulnerability (Begzsuren Ellis, Ojima, Coughenour, & Chuluun, 2004; Sternberg, 2008). Mining and land-use changes have further disrupted traditional grazing areas, while rural-to-urban migration reshapes demographic patterns (Upton, 2012).

At the social level, pastoralism represents more than an economic strategy: it serves as a repository of intangible cultural heritage, including horsemanship, hospitality, and oral traditions (UNESCO, 2019). Nevertheless, globalization and educational aspirations have encouraged younger generations—especially women—to pursue opportunities beyond herding (Yembuu, 2016). These dynamics raise critical questions about the continuity of pastoral culture and the sustainability of rural livelihoods.

Recent scholarship emphasizes the importance of examining herders' own perspectives to understand these transformations. Qualitative studies have shown that herders' adaptive strategies and cultural values provide insights into balancing economic survival with environmental stewardship (Kreutzmann, 2012; Addison, Brown, Davies, Holcombe & Walters, 2013). By foregrounding herders' voices, this study contributes to the growing body of research on pastoral resilience, identity, and adaptation in the face of socio-environmental change. Specifically, it explores three core dimensions:

- 1) the enduring attractiveness of pastoral life,
- 2) the complex challenges confronting herders, and
- 3) their visions for the future of pastoralism in Mongolia.

2. Methodology

This study adopted a qualitative, interpretivist design to examine how herders in rural Mongolia make sense of their livelihoods amid ecological and socio-economic change. Qualitative inquiry is well-suited to foregrounding participants' meaning-making, situated practices, and culturally embedded knowledge (Fossey, Harvey, McDermott & Davidson, 2002; Merriam & Tisdell, 2016). An intensive, multiple-case orientation enabled depth across diverse life stages and household configurations, supporting analytic generalization about processes rather than populations (Miles, Huberman & Saldaña 2014; Yin, 2018).

Fieldwork took place over two months (April–May 2025) in a high-altitude, mountainous region of western Mongolia, approximately 1,000 km from Ulaanbaatar. Campsites ranged 30–70 km from soum centers (a rural administrative unit of Mongolia); terrain was rocky with sparse vegetation, and goat cashmere constituted the principal cash income. Seasonal rhythms (e.g., lambing, shearing) and weather extremes (late snow, high winds) shaped daily labor, mobility, and access to services.

Using purposive sampling (Patton, 2015), we selected four herders (A: M/81; B: F/51; C: F/48; D: M/27) with >10 years of experience to represent generational contrasts and household structures. Maximum-variation logic (age, gender, herd composition, distance to soum) was used to capture heterogeneous experiences under shared ecological constraints (Merriam & Tisdell, 2016). While small-N sampling limits statistical generalizability, it is appropriate for theory-informed, in-depth inquiry where information power resides in the richness and relevance of cases (Guest, Bunce & Johnson, 2006; Malterud, Siersma & Guassora, 2016).

2.1 Data Collection

We combined participant observation and semi-structured interviews to triangulate routines, meanings, and narrated futures.

2.1.1 Participant Observation

The first author spent several days with each participant at their camps, documenting the physical setting, activities/interactions, and conversations, following observational foci adapted from Merriam (1998) and Spradley (1980). Field notes recorded work sequences (e.g., milking, herd movement), task allocation, risk responses, and resource use.

2.1.2 Semi-structured Interviews

One interview per participant ($\approx$ 40 minutes; total $\approx$ 2.5 hours) explored: (1) living conditions; (2) perceptions of the value and burdens of pastoralism; (3) anticipated futures/adaptations. Interview guides balanced consistency with flexibility to probe emergent topics (Kallio, Pietilä, Johnson, & Kangasniemi, 2016). With consent, interviews were audio-recorded; supplementary jottings captured contextual details and nonverbal cues.

Recordings were transcribed verbatim in traditional Mongolian and translated into English by the first author. To preserve conceptual equivalence (not just literal accuracy), we used an iterative translate–review–revise cycle, retaining culturally specific terms (e.g., *dzud*, *otor*) with brief glosses when needed (Temple & Young, 2004). Salient Mongolian phrases were kept in-text where they signified emic categories of meaning.

The first author's extended experience in rural communities facilitated entrée and culturally appropriate rapport. At the same time, we maintained a reflexive stance—documenting assumptions, role transitions (observer $\leftrightarrow$ helper), and potential power dynamics in a reflexive journal—to enhance interpretive transparency (Berger, 2015;

Finlay, 2002). Reflexive memos were integrated into coding meetings to check for confirmation bias and premature closure.

Prior to data collection, participants received plain-language information and provided written informed consent. We emphasized voluntariness, the right to withdraw, and confidentiality. Pseudonyms (A–D) and light de-identification of locations/herd sizes were used to mitigate deductive disclosure. Fieldwork protocols were aligned with ethical guidance for research with rural/indigenous populations. Given the seasonal workload, interviews were scheduled to minimize disruption.

2.2 Data Management and Analysis

Data comprised audio files, transcripts, field notes, and analytic memos. We used an abductive, thematic approach (Miles, Huberman & Saldaña, 2014), alternating between inductive coding of emic categories and deductive attention to sensitizing concepts (e.g., adaptation, livelihood security, cultural continuity). The analytic steps were:

- 1) **Immersion & familiarization:** triple listening to recordings; reading field notes; drafting case synopses.
- 2) **Initial coding:** descriptive and process codes applied line-by-line to transcripts and notes (Miles, Huberman, & Saldaña, 2014).
- 3) **Code consolidation:** merging near-synonyms; building a provisional codebook with definitions and inclusion/exclusion rules.
- 4) **Pattern coding:** grouping codes into higher-order categories (e.g., climate hazards, labor shortage, education-linked separation).
- 5) **Theming & matrix displays:** constructing within- and cross-case matrices to surface convergences/divergences by generation and gender; iteratively refining key themes (e.g., “Attractiveness of pastoral life,” “Challenges,” “Future trajectories”) (Miles, Huberman & Saldaña, 2014).
- 6) **Validity checks:** negative-case analysis; data triangulation (interviews ↔ observations ↔ memos); and audit trail documentation (Lincoln & Guba, 1985).

We retained short, in vivo quotations to anchor interpretations, ensuring that claims remained grounded in participants’ language and situated practice.

3. Findings

Three major themes emerged from the analysis: (1) the attractiveness of pastoral life, (2) the challenges confronting herders, and (3) visions for the future of pastoralism. Each theme comprises several interrelated subthemes that reflect generational perspectives, socio-economic dynamics, and environmental realities. Participant quotations are presented verbatim to retain their original meaning and cultural nuance.

3.1 The Attractiveness of Pastoral Life

3.1.1 Appeal of the Natural Environment

All four participants emphasized the physical beauty and health benefits of Mongolia's pastoral landscapes. Participant D described countryside living as *"free...the air is good, it feels comfortable and fulfilling."* Similarly, Participant A highlighted the peace of rural life:

"The most attractive aspect of the countryside is that the environment is good, very peaceful, and there is no noise. Second, there is no air pollution—we can often see blue skies and white clouds, and we live in a warm home with few worries."

This appreciation reflects a deep emotional connection between herders and their ecological surroundings. Participant C underscored the dependence on ecological health:

"Only nature produces—when grass grows well, livestock and land support our life. I believe it is very important to protect nature and preserve it in its original form."

3.1.2 Fulfillment Through Coexistence with Livestock

Livestock were consistently described as emotional anchors and material providers. Participant A declared:

"There has never been anything better than being with livestock. We love them...if the pen is empty, it feels uncomfortable...when the cattle are here, it feels incomparably good—nothing is better than livestock."

Participant B similarly noted that making dairy products, feeding her children, and selling surplus *"makes me feel very fulfilled."*

3.1.3 Freedom and Self-Sufficiency

The autonomy afforded by herding was framed as a source of pride. Participant A recalled:

"When slaughtering animals for food, the only thing we need to buy is flour and rice; everything else is self-sufficient. When we were young, we even sewed our own clothes. We did not rely much on others."

Participant D added that herding *"feels liberating"* compared to settled life.

3.1.4 Continuity of Culture and Tradition

Herders saw pastoralism as a vehicle for preserving Mongolian culture. Participant D stated:

"Herding is not only about profit; it carries cultural traditions and heritage...if everyone settles permanently, without pastoralism, it would mean the loss of Mongolian culture and tradition."

Hospitality and strong community bonds were also highlighted, as Participant A described:

"People in pastoral areas are hospitable...they serve tea and dairy products to visitors and provide bedding if needed. People's character is the same as before; everyone knows their neighbors and relatives."

3.2 Challenges Confronting Herders

3.2.1 Climate and Environmental Hazards

Participants identified climate variability — dzud, droughts, and dust storms — as primary threats. Participant A reflected:

"When I was little, the climate was still pretty stable. But now, things have changed a lot — blizzards, freezing weather, even those biting snowstorms with strong winds."

Participant D noted the combined effects of climate and mining:

"Mining in the area has really affected the land...Even the mountain springs we've relied on for generations are starting to dry up."

3.2.2 Rising Livestock Numbers and Economic Pressures

Herders observed that herd sizes had nearly doubled since privatization. Participant A explained:

"During the socialist period...our soum had around 60,000 livestock in total. But after privatization, the numbers really started to grow. Now...about 140,000 animals — almost double."

While larger herds are a survival strategy, they exacerbate pasture degradation and labor demands.

3.2.3 Insufficient Government Support

Participants voiced frustration over weak policy frameworks. Participant D remarked:

"Personally, I think the policies to support herders in Mongolia are really weak...It's not that we're asking for money. What herders want is for the government to support us through better policies."

3.2.4 Family Separation and Education

Educational access often requires children to live away from home, creating emotional strain. Participant C described:

"The kids only come back to the mountain during long holidays, maybe once every three or four months...We miss them. We worry...It's hard not being there."

3.2.5 Labor Shortages

The imbalance between livestock numbers and available labor was evident. Participant B said:

"In the countryside, there's just not enough help. If someone gets sick, it's really tough. And once the kids go off to school, it gets even harder—just not enough hands around."

This reflects broader demographic shifts, where younger generations migrate to towns or cities.

3.2.6 Health Care Access and Geographic Isolation

Remote locations limit access to health services. Participant C noted:

"We don't really go to the hospital when someone gets sick—we usually just treat it the old way."

3.2.7 Gender Imbalance

Young men dominate pastoral populations. Participant D observed:

"Out in the countryside, most of the young people you see—those between twenty and thirty-five—are men. Women are rare, almost absent."

3.3 Visions for the Future of Pastoralism

3.3.1 Climate Change and Livelihood Abandonment

Several herders predicted that worsening environmental conditions would prompt abandonment of herding. Participant B said:

"These days, a lot of herders feel that grazing in the pasture has become really difficult. Because of that, many are thinking about leaving the grasslands and starting a settled life instead."

3.3.2 Declining Numbers and Potential Adaptation

Participants expressed concern about shrinking herder populations. Participant A warned:

"The number of herders in the countryside just keeps shrinking, and it really worries me. If there are fewer and fewer Mongolian herders, I'm afraid our pastoral way of life might one day disappear."

Some proposed strategies—like semi-intensive grazing or improved livestock breeds are ways to cope with environmental pressures.

3.3.3 Policy Dependence

Herders stressed that their future depends on effective government action. Participant D stated:

"The government plays a key role...we are not asking for cash handouts—herders simply hope that the government can support them through effective policies."

3.3.4 Herding Succession and Cultural Continuity

Despite challenges, some families deliberately pass down herding knowledge. Participant C emphasized:

"Boys becoming herders...preserve traditions, preventing them from switching to settled life, which ensures the continuation of cultural heritage."

Collectively, these results reveal that pastoralism is valued for its environmental harmony, emotional fulfillment, autonomy, and cultural significance, but is imperiled by ecological shocks, economic instability, demographic imbalances, educational demands, and insufficient institutional support. Herders remain committed to adaptation and cultural preservation but express uncertainty about the viability of pastoral life under current conditions.

4. Discussion

This study illuminates the enduring cultural, emotional, and economic significance of pastoralism in Mongolia while revealing the profound pressures reshaping herders' livelihoods. By situating herders' narratives within broader socio-environmental change, three interrelated themes emerge: pastoralism's continued attractiveness, the multifaceted challenges threatening its sustainability, and herders' adaptive visions for the future.

4.1 Pastoralism as Cultural Heritage and Emotional Fulfillment

Participants emphasized pastoralism as more than a means of subsistence. The beauty of the steppe, fresh air, and freedom of movement were described as sources of well-being and self-realization. Livestock were framed as companions and cultural carriers—findings consistent with Fernandez-Gimenez's (1999) argument that pastoralism

embodies ecological knowledge and a moral economy rooted in reciprocity and respect for nature. The strong sense of autonomy reported by herders echoes Upton's (2010) observation that nomadic life fosters resilience and identity even under changing socio-economic conditions. The participants' emphasis on tradition and hospitality also reinforces UNESCO's (2019) recognition of Mongolian pastoralism as an element of intangible cultural heritage that sustains social cohesion.

4.2 Climate Variability, Economic Pressures, and Labor Shortages

The narratives reveal how climate change and environmental degradation have destabilized pastoral livelihoods. Extreme events such as dzud and drought—described by participants as increasingly frequent—mirror documented trends in rangeland research (Begzsuren, Ellis, Ojima, Coughenour, & Chuluun, 2004; Sternberg, 2008). These ecological pressures, coupled with herd expansion after livestock privatization, have strained both labor capacity and pasture health (Fernandez-Gimenez & Batbuyan, 2004). Herders' concerns about inadequate government support for fodder, product pricing, and disaster response resonate with Addison, Brown, Davies, Holcombe, & Walters's (2013) critique of policy gaps in rangeland management. Furthermore, the labor shortage—intensified by family separation for education—aligns with Miyamae's (2003) and Yembuu's (2016) findings on rural demographic imbalance and its educational consequences.

4.3 Demographic Change and Gendered Livelihood Trajectories

Gendered patterns in herding succession emerged clearly: daughters were often encouraged to pursue education and urban employment, while sons were expected to inherit herding duties. This echoes broader demographic shifts noted by Upton (2012), who found that rural youth—especially women—migrate to urban areas for greater opportunity. Such gendered pathways may deepen demographic imbalances and threaten knowledge transmission, as fewer young people remain in pastoral areas to maintain herding traditions.

4.4 Adaptive Strategies and Future Outlooks

Despite challenges, some participants expressed optimism about pastoral continuity, citing deliberate knowledge transfer and children's interest in cultural traditions. Others called for adaptive measures, such as reducing herd sizes, semi-intensive grazing, or enclosed livestock management. These perspectives echo Kreutzmann's (2012) and Addison, Brown, Davies, Holcombe & Walters's (2013) findings that pastoral communities across Asia are experimenting with hybrid practices that combine traditional mobility with modern husbandry techniques. Participants' insistence on effective, responsive policies underscores that pastoral sustainability depends on coordinated government action—particularly on market stabilization, veterinary support, and infrastructure development.

4.5 Implications for Policy and Research

At the policy level, these findings highlight the need for integrated rural development strategies. Beyond economic measures, interventions should protect cultural heritage, support gender equity, and address educational and healthcare accessibility in remote areas. Programs encouraging young people—especially women—to engage with herding on their own terms (e.g., through cooperative models or diversified income strategies) could counterbalance outmigration. For researchers, this study underscores the value of qualitative, emic perspectives in understanding adaptation: herders' narratives reveal not just vulnerability but also agency, innovation, and cultural commitment.

5. Limitations

As a small-N qualitative study, the findings are not statistically generalizable. The sample represents one western Mongolian region, and dynamics may vary in other ecological or socio-political contexts. Translation processes, while carefully managed, may have introduced subtle shifts in meaning. Nevertheless, the thick description, triangulation of methods, and analytic transparency enhance the transferability and trustworthiness of the results (Lincoln & Guba, 1985; Tracy, 2010).

6. Conclusion

This study demonstrates that pastoralism in rural Mongolia is far more than an economic activity—it is a cultural institution, a livelihood system, and a deeply embedded relationship between people, livestock, and the natural environment. Herders' narratives reveal that the appeal of pastoral life lies in its freedom, self-sufficiency, and the emotional and spiritual fulfillment derived from living closely with animals and the land. These values continue to anchor Mongolia's national identity and social fabric.

Nevertheless, the findings also underscore the mounting vulnerabilities herders face. Climate variability, rangeland degradation, and mining-related environmental pressures are intensifying the physical demands of herding. Economic instability—including low prices for animal products and limited market diversification—has encouraged herd expansion, further stressing ecosystems and household labor. Family separation for education, healthcare inaccessibility, and gender imbalance threaten the intergenerational transmission of pastoral knowledge and skills.

Participants' mixed outlooks point to both adaptation and uncertainty. Some foresee the gradual abandonment of pastoralism as younger generations migrate to urban centers, while others express cautious optimism that herding traditions will endure through deliberate knowledge transfer and cultural commitment. Across perspectives, one message is clear: the future of pastoralism depends heavily on responsive government policies, including market stabilization, disaster preparedness, rural infrastructure, and equitable social services.

For Mongolia, sustaining pastoralism is not merely about preserving a livelihood—it is about safeguarding cultural heritage, maintaining rural resilience, and honoring centuries-old ecological knowledge. Addressing herders' needs holistically—through adaptive grazing strategies, diversified rural economies, and inclusive policy frameworks—can ensure that pastoral life persists as a vibrant and viable way of life in the face of environmental and social transformation.

Creative Commons License Statement

This research work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/4.0>. To view the complete legal code, visit <https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode.en>. Under the terms of this license, members of the community may copy, distribute, and transmit the article, provided that proper, prominent, and unambiguous attribution is given to the authors, and the material is not used for commercial purposes or modified in any way. Reuse is only allowed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Aruhan Bai is a PhD student at the Graduate School of Education, Hokkaido University, Japan. Her research interests include herder knowledge, traditional ecological knowledge, and indigenous knowledge, particularly in the context of knowledge transmission and sustainability among herder communities.

Dr. Javzandulam Batsaikhan serves as Chair of the Department of Methodology in the School of Preschool Education at the Mongolian National University of Education. She teaches both undergraduate and graduate courses in Qualitative Research in Education, Action Research, Research Paradigms and Issues, and Quantitative and Qualitative Research Methods. Her research focuses on child learning and development, contextual issues in learning and teaching, preschool education curriculum, and the professional development of pre-service and in-service teachers.

ORCID: <https://orcid.org/0000-0002-3267-0012>

References

- Addison, J., Brown, C., Davies, J., Holcombe, S., & Walters, G. (2013). A critical review of rangeland management in Mongolia. *Pastoralism: Research, Policy and Practice*, 3(1), 8. <https://doi.org/10.1186/2041-7136-3-8>

- Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research? *Qualitative Sociology*, 42(2), 139–160. <https://doi.org/10.1007/s11133-019-9413-7>
- Begzsuren, S., Ellis, J. E., Ojima, D. S., Coughenour, M. B., & Chuluun, T. (2004). Livestock responses to droughts and severe winter weather in the Gobi Three Beauty National Park, Mongolia. *Journal of Arid Environments*, 59(4), 785–796. <https://doi.org/10.1016/j.jaridenv.2004.02.001>
- Berger, R. (2015). Now I see it, now I don't: Researcher position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219–234. <https://doi.org/10.1177/1468794112468475>
- Fernandez-Gimenez, M. E. (1999). Sustaining the steppes: A geographical history of pastoral land use in Mongolia. *The Geographical Review*, 89(3), 315–342. <https://doi.org/10.2307/216154>
- Fernandez-Gimenez, M. E., & Batbuyan, B. (2004). Law and disorder: Local implementation of Mongolia's land law. *Development and Change*, 35(1), 141–165. <https://doi.org/10.1111/j.1467-7660.2004.00345.x>
- Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative Research*, 2(2), 209–230. <https://doi.org/10.1177/146879410200200205>
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732. <https://doi.org/10.1046/j.1440-1614.2002.01100.x>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Israel, M., & Hay, I. (2006). *Research ethics for social scientists*. SAGE. Retrieved from <https://methods.sagepub.com/book/mono/research-ethics-for-social-scientists/toc#>
- Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for semi-structured interview guides. *Journal of Advanced Nursing*, 72(12), 2954–2965. <https://doi.org/10.1111/jan.13031>
- Kreutzmann, H. (2012). Pastoral practices and their transformation in the Karakoram. In H. Kreutzmann (Ed.), *Pastoral practices in High Asia* (pp. 1–29). Springer. <https://doi.org/10.3167/082279404780446096>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE. Retrieved from <https://us.sagepub.com/en-us/nam/book/naturalistic-inquiry>
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. Jossey-Bass. Retrieved from <https://eric.ed.gov/?id=ED415771>
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass. Retrieved from

- https://books.google.ro/books/about/Qualitative_Research.html?id=JFN_BwAAQBAJ&redir_esc=y
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE. Retrieved from https://books.google.ro/books/about/Qualitative_Data_Analysis.html?id=p0wXBAAAQBAJ&redir_esc=y
- Miyamae, N. (2003). モンゴルにおける初等教育の諸問題と教育協力の課題 [Issues of primary education and educational cooperation in Mongolia]. *Kyushu Kyoiku Gakkai Kenkyu Kiyō*, 31, 105–112.
- O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine*, 89(9), 1245–1251. <https://doi.org/10.1097/ACM.0000000000000388>
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). SAGE. Retrieved from <https://us.sagepub.com/en-us/nam/qualitative-research-evaluation-methods/book232962>
- Spradley, J. P. (1980). *Participant observation*. Holt, Rinehart and Winston. Retrieved from <https://doi.org/10.2307/2392270>
- Sternberg, T. (2008). Environmental challenges in Mongolia's dryland pastoral landscape. *Journal of Arid Environments*, 72(7), 1294–1304. <https://doi.org/10.1016/j.jaridenv.2007.12.016>
- Temple, B., & Young, A. (2004). Qualitative research and translation dilemmas. *Qualitative Research*, 4(2), 161–178. <https://doi.org/10.1177/1468794104044430>
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837–851. <https://doi.org/10.1177/1077800410383121>
- UNESCO. (2019). *Nomadic pastoralism in Mongolia: Intangible cultural heritage and sustainable development*. UNESCO Publishing.
- Upton, C. (2010). Living off the land: Nature and nomadism in Mongolia. *Geoforum*, 41(5), 865–874. <https://doi.org/10.1016/j.geoforum.2010.06.004>
- Upton, C. (2012). Managing Mongolia's commons: Land reforms, social context, and institutional change. *Society & Natural Resources*, 25(2), 156–171. <https://doi.org/10.1080/08941920.2011.565454>
- Yembuu, B. (2016). Mongolian nomads: Effects of globalization and social change. In K. Ueno, S. Sonoda, & A. Nishimura (Eds.), *Everyday knowledge, education and sustainable futures: Transdisciplinary approaches in the Asia-Pacific region* (pp. 89–105). Singapore: Springer. Retrieved from https://doi.org/10.1007/978-981-10-0216-8_7
- Yin, R. K. (2018). *Case study research and applications* (6th ed.). SAGE. Retrieved from <https://us.sagepub.com/en-us/nam/case-study-research-and-applications/book250150>