



Pastoralism in the Sahel: Perceptions and adaptation strategies of pastoralist youth

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Key words: Youth pastoralists; Rangeland; Pastoralism; Senegal

Abstract

Our study examines how young people in the Senegalese silvo-pastoral zone perceive and engage in pastoral livestock farming. Nowadays, pastoralism remains a significant cultural element, however traditional practices such as transhumance are perceived as very rigorous. Young people consider livestock farming as a means of saving money but face challenges such as pasture degradation and limited State support. They advocate for reforms to modernize pastoralism and improve their living conditions. While many diversify their income sources, they are reluctant to pass these practices on to their children.

Introduction

Pastoralism is recognized as a sustainable way of utilizing pastoral ecosystems (grazing lands and water points) that promotes the maintenance of biodiversity (Andreas et al. 2017). In pastoral communities, young people (under 40 years) play a crucial role in livestock management and provide reliable support in all pastoral activities, including transhumance, watering, and herd monitoring. Caught between the pull of modernity and traditional pastoral practices, these young people strive to maintain the pastoral culture inherited from their parents while adapting to a modern lifestyle (Korbéogo 2016), made possible by the opening of rural areas to urban influences and the exchange of lifestyles through rural-urban migration, commercial trade, and human interactions facilitated by the improvement of roads (Macia et al. 2023).

In the Sahel, the Senegalese silvopastoral zone provides an excellent setting to study these current social phenomena upon which the future of pastoralism depends (Mauclair 2019; Mugelé et al. 2023). Young people's perception of pastoral practices deserve analysis to understand how they perceive the future of pastoralism. In Senegal, many young people explore new income opportunities in urban areas. These alternative income sources may eventually lead to visions and ambitions shifts. While such shifts might offer young people socio-economic stability, they could influence or destabilize pastoral activities (Ancy and al. 2020), which, as mentioned, heavily rely on the energy and vitality of youth. This could result in a transformation from traditional pastoralism to modern livestock farming, as well as changes in rangelands, both biophysical and in terms of the way they are used.

This study aims to explore how young people from pastoralist families view traditional livestock practices, particularly in comparison to urban income-generating activities. It will examine the influence of education (both

conventional and Quranic) on this shift, and how access to digital technology is reshaping pastoralism and creating new economic opportunities. The focus is on understanding what motivates young people to continue pastoral livestock farming despite the availability of other professional options.

Methods

We developed a concise questionnaire to collect qualitative data on young people's perceptions of pastoral livestock farming. We did not employ a sampling method, as our objective was not to conduct an exhaustive study but rather to explore preliminary insights that could serve as a basis for further investigation. The questionnaire was designed based on our field experience over the past few years of research in pastoral areas. Consequently, we included predominantly open-ended questions to broaden the scope of possible responses. To construct and deploy the questionnaire, we utilized the data collection tool **KoboToolbox**, which allowed us to design the survey and distribute it on platforms like smartphones. This approach enabled us to share the questionnaire via a simple link in unlimited quantities. By leveraging this method, we distributed the link as widely as possible and encouraged recipients to share it further. Through this snowball sampling strategy, we received referrals from participants who had already completed the questionnaire.

We also opted to share the link through social networks, particularly WhatsApp groups and direct contacts. This allowed anyone with basic literacy skills to complete and submit their responses. Additionally, we conducted several interviews via phone calls with herders whose contact information was shared with us but who could not read, write, or use WhatsApp. The collected data was stored on a **KoboToolbox server**, enabling secure storage during the collection process. These data were later downloaded in **XLS** format for processing in Microsoft Excel.

How young people perceive the pastoral livestock farming

Young people perceive pastoral livestock farming as offering limited prospects. Income during the dry season is low, mainly spent on livestock feed, while the rainy season provides slightly higher earnings, though still lower than urban jobs. This makes livestock farming less economically appealing compared to city employment, as highlighted by (Magrin and Raimond 2024) in other Sahelian cities. Incomes during the dry season are under 50,000 FCFA (*local currency*) per month (76 Euros or 83 USD), rising to 100,000 FCFA (152 Euros or 166 USD) in the rainy season. These earnings fluctuate based on season and family needs. Small ruminants are sold weekly, while larger ones are sold occasionally, often to cover feed costs. Thus, livestock income is unpredictable and doesn't provide stable financial security or savings.

For young herders, financial stability depends on herd size, which allows income diversification. Some with large herds or seeking alternatives secure steady income through livestock trading. Experienced herders engage in trading, either as intermediaries or resellers, often reinvesting profits to grow their herds. Trading is seasonal, particularly during the dry season, to cover feed costs. Livestock traders tend to be young people with strong negotiation skills from interactions with urban communities during Quranic studies. As in their early life in quranic schools, these young students spent mornings and evenings begging from passers-by in cities for their Quranic teacher, throughout their entire study period, which could last several years. In this way, they develop great ability to interact and negotiate with urban people. However, rural youth face challenges in urban environments, such as language barriers and unmatched attitudes, from the view of the urban habitants. Only those accustomed to urban life adapt successfully.

Moreover, many pastoral youths have diversified their income through other professions, such as working for international research institutions, accounting, teaching, and consulting, while maintaining their identity as pastoral herders. This diversity of activities encourages further analysis of what keeps young people engaged in livestock farming

Understanding what motivates young people from herding

Understanding the motivations of young people from herding families is crucial for predicting the future of pastoral livestock farming. Our research reveals that young people are drawn to pastoral livestock farming due to its deep connection to their cultural identity. Terms such as "tradition," "culture," and "Fulani" were often mentioned, reflecting the significance of this practice as a cultural heritage. Phrases like "It's about the cultural aspect and honoring our parents" highlight the pride in continuing a family tradition. This cultural identity, shaped by parental involvement in livestock farming, continues to be a source of pride for young people (Luque 2002), ensuring that pastoral practices are maintained across generations.

However, certain pastoral practices, particularly transhumance, face increasing criticism for their economic, physical, and social impacts. Transhumance restricts participation in community activities and prevents children from accessing education and families from receiving medical care. The need to find alternatives to moving entire families with herds has become urgent. Basic services such as schools and healthcare facilities must be accessible to these families.

Most young people interviewed, regardless of education, expressed the intention that their children would not follow in their footsteps due to the harsh realities of pastoral life and lack of access to essential services. This trend suggests that, without reform, pastoral livestock farming in the Senegalese silvo-pastoral zone may decline in the coming generations. However, as Ba (2023) suggests, adaptive changes in livestock farming practices could help sustain this system, despite the numerous challenges posed by agricultural expansion, grazing land shortages, and inadequate state support.

Discussion

The Fulani identity remains closely linked to pastoral livestock farming among young people, serving as a source of pride, as noted by Botte et al. (1999). However, many young people express a desire to transform pastoral practices, particularly transhumance, to improve their quality of life. This includes providing better living conditions for their families, which is difficult in remote, sparsely populated areas where transhumant herders must reside. The traditional "good herder" identity is gradually being replaced by a more modern identity focused on technology, urban networks, and material wealth, as observed by Macina et al. (2023).

State investments in pastoral hydraulics, like the densification of boreholes, have made new areas accessible, but they have also led to overgrazing due to an increase in livestock numbers. Many herders noted that the availability of water in the region has exacerbated the lack of pasture, a trend highlighted by Véron (2014). Degradation of grazing lands, proliferation of invasive species, and overexploitation of communal resources are major concerns. Combined with rising livestock populations and improved veterinary care (Véron 2014), these factors contribute to the environmental challenges facing the Senegalese silvo-pastoral zone, as noted by Ba (2023).

Results statement: Youth in Senegalese silvo-pastoral zone believe pastoral practices must change to improve the quality of life for families and children, ensuring access to basic services.

Conclusion

Pastoral livestock farming in the Senegalese silvo-pastoral zone is viewed by young people as an activity tied to their "Fulani" identity, yet its restrictive practices hinder participation in community life. While large-scale herders can earn significant incomes, young people see the potential to build "savings herds" with family or hired help, benefiting from rising livestock demand for festivals. With challenges like land degradation and shrinking pastures, young people express reluctance to continue these practices, questioning their long-term viability. However, we advance the need for a larger and quantitative study to gain a clearer understanding view of youth perceptions on the pastoral lifestyle and the pastoralism in the future.

Acknowledgments

We extend our gratitude to all the young people who identify as pastoral herders and who took the time to participate in this study, whether from the heart of the Ferlo region or from major Senegalese cities. This study would not have been possible without their support and consent. This research was conducted using personal resources, with no funding received from any donor. No conflicts of interest were reported among the authors of this article.

References

- Ancey V, Rangé C, Magnani S and Patat C (2020) Young pastoralists in towns and cities – Summary report. Supporting the economic and social integration of young pastoralists – Chad and Burkina Faso. Rome, FAO.
- Ba B (2023) Espace pastoral en contexte de décentralisation dans la zone sylvopastorale du Ferlo dans le nord du Sénégal, thèse de doctorat en Géographie, Université Gaston Berger de Saint-Louis, Senegal
- Botte R., J. Boutrais, and J. Schmitz, editors. (1999). Figures peules. Karthala, Paris, France
- Duboz, P., E. Macia, A. H. Diallo, E. Cohen, A. Bergouignan, and S. M. Seck. (2021). The good life in rural and urban Senegal: a qualitative and quantitative study. PLoS ONE 16(5) : e 0252134.
- Jenet A, Buono N, Di Lello S, Gomarasca M, Heine C, et al. (2017) The path to greener pastures: Pastoralism, the backbone of the world's drylands. SSRN Electronic Journal, 2017.
- Korbéogo G, (2016) « Variabilité socio-écologique, crise du pastoralisme et résilience des Peuls pasteurs du Gourma rural (Burkina Faso) », Vertigo - la revue électronique en sciences de l'environnement [En ligne], Volume 16 Numéro 1 mai 2016
- Luque, F M (2002) Entre l'identité et l'identification : un problème complexe de la recherche sociologique dans le domaine de l'interculturalité ; in sociétés 2002/2 n 76, 59-70.
- Macia, E, J Allouche, M B Sagna, A H Diallo, G Boëtsch, A. Guisse, P. Sarr, J D Cesaro, and P Duboz (2023) The Great Green Wall in Senegal: questioning the idea of acceleration through the conflicting temporalities of politics and nature among the Sahelian populations. Ecology and Society 28(1) :31
- Magrin G et Raimond C, (2014), La crise du Sahel est-elle une crise agraire ? in Sesam N 15, 2024
- Mauclaire M. Jouer avec l'espace (2019) forage et pouvoirs, une géopolitique locale au nord Sénégal. Géographie. Université Michel de Montaigne - Bordeaux III, 2019.
- Mugé R, Ninot O, Dia, N, N'Diaye et Diallo A. H., (2023) « La « crise » des pâturages dans le Ferlo : une commune tragédie des communs ? », *Bulletin de l'association de géographes français*
- Rosa, H. (2013). Social acceleration: a new theory on modernity. Columbia University Press, New York, New York, USA.
- Turner, M. D., T. Carney, L. Lawler, J. Reynolds, L. Kelly, M. S. Teague, and L. Brottem. (2021). Environmental rehabilitation and the vulnerability of the poor: the case of the Great Green Wall. Land Use Policy 111 :105750.
- Véron J B. (2104) Les dynamiques du pastoralisme au Sahel, article de revue, Afrique contemporaine N 249, Pages 11-19, 2014.