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## Pastoralism and biodiversity in Burkina Faso and Niger: A review

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### Abstract

Burkina Faso and Niger are two landlocked countries in Sahelian West Africa. Pastoralism is one of the most important livelihood strategies in both countries and can play a central role in biodiversity conservation. This paper analyses the state of research on the relation between pastoralism and biodiversity in Burkina Faso and Niger. It draws upon a systematic review of 36 documents identified through the Web of Science. Literature analysis shows that the effects of pastoralism are rather mixed as they are context-specific and depend on many factors such as grazing intensity and livestock species. In general, pastoralism has a negative effect on plant species diversity, especially in terms of abundance, but with distinct effects on woody (trees and shrubs) and herbaceous species. Pastoralism can also impact the diversity of wild fauna. On the other hand, while there is a general trend towards the erosion of indigenous livestock genetic diversity, due inter alia to cross-breeding, pastoralism and traditional knowledge of pastoral communities result fundamental in the conservation of local, indigenous livestock breeds. Further research is needed to promote sustainable management of pastures and grasslands that ensures biodiversity conservation while preserving pastoral communities' livelihoods in Burkina Faso and Niger.

**Keywords:** agro-pastoralism, plant diversity, animal diversity, genetic diversity, species diversity, Sahel, West Africa.