

Transhumance in protected areas in Benin

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Introduction Every year, protected areas and regions in West Africa receive transhumant herds. This movement of herds from the dry zone (the Sahelian region) to more humid coastal zones is a tradition for the Fulani people. In general, protected areas in West Africa are located at the border of the Sahelian zones through which most transhumants must pass. This periodic movement has an impact on natural resources and the people in the reception zones, especially around and in the protected areas. The objectives of the study were to define and describe the type of transhumant cattle breeding systems around these protected areas, to deduce impacts on population and environment of this system and to provide suggestions for better management of cattle breeding and transhumance around protected areas

Materials and methods Data were mainly collected by interviewing all stakeholders (farmers, herders, breeding and forestry administrators, rangers) and conducting a survey of the cattle. A spatial study of rangelands (Boudet, 1991) was conducted in order to estimate their carrying capacity and to assess the impact of cattle, especially transhumant cattle, on rangelands in the study area in two national parks (Pendjari and W). Data analyses were performed by Arcview®, Excel ®and Minitab®.

Results and discussion Fulani specialise in cattle breeding around the northern Benin protected areas. Farmers rarely breed cattle. For Fulani, cattle play a social, cultural and economic role, but for farmers avoiding breeding their cattle is mainly a way to save money. Compared with Pendjari national park, the number of cattle received in the W national park increases each year. Transhumants come from drier countries of Africa. Reasons for mobility are diverse, according to foreigners or national herders. During the rainy season, cattle move essentially to avoid conflicts with farmers and the high humidity of the rangelands. In the dry season, herders move to find water and forage for their cattle. Table 1 shows the carrying capacity of rangelands in the two protected areas and the number of cattle that can be supported.

Transhumance has both negative and positive impacts on the natural resources and on livelihoods (Sournia, 1998). Transhumance leads to the degradation of grasslands (tree and herbaceous strata) and creates conflicts between cattle and wildlife. It also creates conflicts between the different socio-professional groups living around protected areas.

Table 1 Carrying capacity of grasslands and supported capacity in protected areas, Benin

Protected area	Carrying capacity (ha/TLU per year)	Corresponding need in land (TLU/ha per year)	Number of supportable cattle	Number of cattle present
Pendjari	0.6	1.7	435	> 4,335
W	0.82	1.43	149,923	> 286,347

Conclusion This study shows that the protected areas in West Africa receive cattle herds from many other countries each year. These herds impact on local communities and natural resources. To solve the problem or to improve management, a participatory approach should be adopted involving every stakeholder.

References

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