

Perception of livestock keepers about woody fodder in the diet of sheep within two communes in Koulikoro region, Mali



Mamadou Coulibaly^{1,3}, Drissa Coulibaly¹, Hawa Coulibaly¹, Regina Rößler², Baba Cissé¹

¹ Rural Polytechnic Institute for Training and Applied Research, Katibougou, Mali

² University of Kassel, Animal Husbandry in the Tropics and Subtropics, Germany

³ Institute of Rural Economy, Mali

Introduction

In Mali, livestock production plays a major socio-economic role, but faces various constraints, including degradation and scarcity of rangelands.

Leaves and pods of many woody species provide quality food for ruminants, especially during the hot dry season.

This study used a participatory approach to determine the role of fodder trees and shrubs in sheep production systems.

Material and Methods



Figure 1: Focus group discussion with agro-pastoralists

Ethno-botanical surveys were done with 130 agro-pastoralists using a structured questionnaire in ODK software.

Respondents were selected randomly in the urban community of Koulikoro and the rural municipalities of Méguétan and Doumba in Mali.

Data was complemented by a Focus group discussion (FGD) with 20 agro-pastoralists (Figure 1).

The survey data was processed and analysed with Excel and SPSS software.

Conclusion

The surveys identified five woody species as the most commonly used for sheep feeding.

These species will be investigated for their palatability and digestibility for better exploitation in farmers' feeding strategies.

Results

Most widely used tree species for feeding sheep are *Pterocarpus lucens* (Pt.L), *Pterocarpus erinaceus* (Pt.E), *Ficus sycomorus* (Fi), *Entada africana* (En), *Khaya senegalensis* (Kh), *Ficus itheophylla* (F.it) and *Sclerocarya birrea* (S.bir) (Figure 2).



Figure 2: Woody fodder crops, used most commonly for sheep feeding

Tree fodder is mainly exploited from the beginning of the dry season to the beginning of the rainy season (Figure 3).



Figure 3: Farmers' use of tree leaves for sheep feeding in different seasons of the year.

EaDS: Early dry season MDS: Mid dry season EnDS: End dry season BRS: Beginning of rainy season MRS: Mid rainy season ERS: End of rainy season







The SustainSahel project is coordinated by FiBL. It has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861974 (SustainSahel). The project runs from September 2020 to August 2025.