

# DUAL-PURPOSE SORGHUM IN MALI

## Adoption Factors and Producer Perceptions



**DUAL-PURPOSE SORGHUM VARIETIES** appear as a viable option for better agriculture-livestock integration in the context of declining soil fertility affecting sub-Saharan Africa.

The objective of this study carried out in eight villages in the Sudanian zone of Mali was to determine the factors of adoption of dual-purpose sorghum varieties and identify the perceptions of producers. The methodology was based on individual surveys of 165 farms.

**RESULTS INDICATED** that ethnicity ( $P=0.000$ ), ownership of livestock ( $P=0.017$ ) and agricultural area ( $P=0.003$ ) have a strong correlation with the adoption of dual-purpose varieties. The Bambaras ethnic, with an average of 13 ha and 16.7 Tropical Livestock Units, appear to be the biggest adopters of dual-purpose varieties (56.6%).

The dual-purpose varieties are generally well perceived by producers: 80% of them observed that they have a higher level of yield than their old varieties and are more resistant to drought. The results of trials conducted in stations and on farms confirmed this with 1700 kg per ha for the dual-purpose variety against 836 kg for the local one, though some producers (42%) found that they have a shorter shelf life due to pest attack. According to 85% of respondents, the sweet and tender fodder of these varieties is highly appreciated by animals and children, which causes losses when the crop is still in the field and has led to the abandonment of dual-purpose sorghum varieties in some localities.

The results of this study show that the adoption decision of the producers does not depend only on the yield but on other factors such as the aptitude for conservation and the risks of losses by animals or children. The fact that children appreciated the dual-purpose sorghum varieties (they eat them like sugarcane) could also open up new uses, for example in school gardens, and new markets.

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