

## **1. Introduction**

Livestock is one of the most important sub-sectors of African agriculture. They are source of food, incomes, employment, and livelihoods for over 70 percent of smallholder farmers in sub-Saharan Africa. Moreover, they provide manure and draft power and are commodity for social functions and symbol of social status. Despite high economic and social importance, livestock productivity in Africa is low, mainly attributed to short supply and low nutritive quality of available feed resources. Feed shortage is severe during the dry seasons and leads to a sharp decline in livestock productivity. Feed associated challenges can be minimized significantly by planting improved forages because they produce high above ground biomass of high nutritive quality than local pastures.

Brachiaria grass is one of the few tropical forages with these qualities and is suitable to tropical and sub-tropical regions of Africa. Evaluations of Brachiaria grass for pasture improvement started as early as 1950s in Africa but its use for pasture improvement is very recent. Introduction of improved Brachiaria grass cultivars in Africa started in early 2000 primarily for research, and there have multiple introductions thereafter for research and development purposes. In 2014, some improved Brachiaria grass cultivars from South America were introduced to Kenya and Rwanda through the Climate-smart Brachiaria Program. They were evaluated in multiple locations involving farmers and four superior cultivars were identified for ruminant feeding. The cultivars have been integrated into mixed crop-livestock farming system; and the significant benefits of Brachiaria grass on livestock productivity (milk and meat

production) documented. Since then Brachiaria grass has been an important component of many livestock development projects and initiatives implemented by various National Agricultural Research Systems (NARS) organizations, non-governmental organizations, and private sectors across Sub-Saharan Africa.

As stated earlier, improved Brachiaria grass is a relatively new forage to African smallholder farmers and therefore, information on establishment and management of the grass is limited. This manual aims at providing information to farmers on establishment, management, and utilization of Brachiaria grass for improved livestock productivity and sustainable livestock production.