Kenyans obtain most of their food, livelihood, employment and foreign exchange from the agricultural sector. Banana contribution toward this cannot be over looked. Recently banana has become an important cash crop, especially in Central and Eastern Kenya where income from traditional crops especially coffee has drastically reduced. However, banana industry is faced by many challenges among them lack of clean planting materials. Natural regeneration is inadequate and associated with high risk of pest and disease spread while tissue culture plantlets are priced above what will be affordable for many small-scale farmers who are the main, stakeholders.

Macropropagation technology relies on affordable and simple methodology and can be done easily, with adequate training. This has been used in other countries; Cameroon, and Nigeria to increase seedling at farm level. The question is whether this technology can be used to propagate local banana genotypes. To answer this, macropropagation chambers were set in different location in Central and Eastern districts namely; Mathioya, Kirinyanga East, Embu East, Meru Central and Imenti South. Fifteen corms of four different varieties (Kampala, Cavendish, Sweet banana and kiganda) were initiated in sawdust media in a chamber which humidity and temperature was increased.

Data was collected on earliness of sucker initiation and the number of suckers’ (plantlet) of the first 5 corms per variety. In all the six sites, there was a significance variety difference on the number of days from corm planting to sucker initiation; with Kampala variety taking shortest time and had more plantlets per corm while Sweet banana took the longest time and had few plantlets. The response clearly indicated that the 4 varieties can be propagated through this technology to boost seedlings availability, banana production and
food security in Kenya.