

This chapter highlighted the food security concerns in sub-Saharan Africa, their contributing factors and possible ways of ameliorating the situation. It is recognised that Africa must embrace agricultural biotechnology to help counter famine, environmental degradation and poverty. Biotechnology does offer tremendous opportunities for increasing crop yields, reducing pest damage, protecting the environment and improving nutritional value of crops. An example of how tepary bean legume yield has been increased in semi-arid Kenya through biological nitrogen fixation has been illustrated. It has been demonstrated that higher yields of tepary bean are achieved by inoculation with a commercially available infective and effective *Rhizobium* strain R3254. This strain is able to increase yield over and above nitrogen fertiliser application. It therefore offers a cheaper alternative to the resource poor farmers of semi-arid Kenya who cannot afford the expensive artificial N fertiliser.