Effects of different types of manure and composting techniques on carrot (*Daucus carota*) and bean (*Phaseolus vulgaris*) yield

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INTRODUCTION
A prerequisite to increasing the quality and quantity of organic manure is to know the agronomic effectiveness and economic efficiency of various types of available manures and composts. There are two types of manure predominantly used in Kangari, i.e. fresh farmyard manure (Boma) and dry manure swept from Masai grazing areas (Masai). Masai manure is mainly used in the tea plantations and arabicum flower beds, but some farmers consider using it also in their annual food crops. Composting is a relatively new technique in Kangari sub-county. Besides the broadly recommended 63-days composting (in heaps), we take the opportunity to try out box composting, which is said to reduce duration until compost maturity to 14 days. However, box composting requires building material and is more laborious than the 63-days composting.

OBJECTIVES
To increase quality and quantity of organic manure available to organic farmers.

MATERIALS AND METHODS

Experimental Design
The trial is designed in a randomised complete block design (RCBD) (mother trial), 2 different manure components each with 3 treatments replicated 3 times. Baby trials have each farmer being a replicate. Experimental plot sizes are 3.5 m x 3.5 m.

RESULTS

![Graph showing yields kg/ha for carrot and beans](image)

Kangari mother trial

CONCLUSION
Masai manure should be applied directly without composting to conserve nutrients, while Boma manure should be composted for 63 days to increase nutrient availability.