

ADOPTING THE PFUMVUDZA  
CONCEPT ON MAIZE  
AND TRADITIONAL GRAINS



Pfumvudza is an approach from Foundations for Farming that is based on key principles of conservation agriculture. To achieve high yields all operations must be done to a high standard, without wastage (precision farming). Using the Pfumvudza input pack; it is possible to feed a family for a year from a minimum investment. The concept is a sustainable way of crop production intensification, whereby farmers concentrate resources on a smaller piece of land, resulting in higher productivity from lower investment, hence higher profit margin.

**Plot size**

The demonstration plot size should be 16m x 39m (624m<sup>2</sup> which is approximately 0.06ha).

Inter-row spacing of 75cm

In-row spacing of 60cm

Row length of 16m

Hole dimensions should be 15cm by 15cm by 15cm

Hence digging 28 holes per row, with two maize plants per each planting hole, making a total of 56 plants per row

Therefore 1456 planting holes with a total of 2912 plants

A total of 52 rows, with each row producing a 20L tin of maize grain (one 20L per week for 52 weeks=1 year), with the assumption that each plant produces one cob

The plot should give approximately 1 tonne translating to a yield of 15t/ha

**The Benefits**



The precision and attention to detail results in an optimum plant population

The removal of weeds at short intervals when they are still small, greatly reduces weed pressure.

Placing three seeds in each planting hole, and later thinning to two, ensures the plants has the required two plants per planting hole.

The small land size ensures that the farmer is able to provide supplementary irrigation (water by hand) where water is available during dry spells, thus enhancing the resilience of the production



**Mulching is key**

**Input Pack**



2kg seed



12kg lime



16kg basal fertilizer

16kg top dressing



Insecticide for fall armyworm

**Recommendations**

Precision is extremely important when marking the planting station as this will ensure that planting is done at the same spot every year, allowing the plants to benefit from residual fertility. It is recommended that a farmer does two plots where possible; one for household consumption and the other for income.