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MINISTRY OF AGRICULTURE

## IMPROVED MAIZE CRIB



**MALKERNS RESEARCH STATION**  
Crop Storage Section

# IMPROVED MAIZE

## SITING OF AN IMPROVED MAIZE CRIB

- a. The crib should be built on a well-drained soil so as to increase the life of the supporting timber and reduce the amount of humid absorbed by the grain.
- b. The crib should be built at least six meters (6 m) away from other structures, for free air flow and to avoid rats gaining entry via nearby structures.
- c. The crib should be built away over hanging trees so that rats may not gain access into the crib via the trees
- d. To ensure maximum air flow through the cobs, the crib should always have its long axis at the right angles to the prevailing wind.
- e. The crib should be away from moist areas like taps, furrows and cattle byre.

## CRIB CONSTRUCTION

Having selected the suitable site, the next step is to mark out the center of the upright poles on the ground and then digging the holes.

## DIGGING Holes

- a. Follow the marks, all holes are dug out to the depth of a minimum of 60 cm in good soils and 70 cm in soft soils.
- b. For single roofed crib the holes should be 60 cm at the front and 70 cm at the back to allow rain water or access dew to drop from the shorter side of the crib.



## THE CRIB

- a. LENGTH: the length of the crib can be of any size, depending on one's harvest. The distance between poles must not be than 1.5 m and not more than 1.8 m depending on the size of the beam i.e., the smaller the beam the shorter the distance.
- b. WIDTH: the width of the crib depends on the geographical regions or climatic conditions, i.e., Highveld width must be 1.5 to 1.8 m because the wind is cold.
- c. Middleveld must be 1.8 to 2.0 m because the wind is warm and less misty.
- d. Lowveld the width must be 2.0 to 2.2 m because of hot winds.
- e. **Note** the grain crops depends more on the wind than it does on sunshine for drying.



- e. BEAMS: beams should be placed at a minimum height of 90 cm above ground level so to prevent rats from entering into the crib.
- f. Rat guards: rat guards should be fitted as high as possible on each upright pole to prevent rats from climbing up the pole. The material used for rat guards can be from galvanized flat iron sheet or empty cans of baby milk. These should be at least 45 cm long. Nothing should be placed under the crib, for it will compromise the 90cm height from the ground.

Material for crib construction for 6 poles

Material	Dimensions	Quantity
Poles	3.6mx100-125mm	6
Beams	4.2mx100-125mm	2
Beams- top	4.2x 75-100mm	2
Rafters	3.0 mx75-100mm	3
Poles spp	2.1mx 50-75mm	4
Flooring	1.8m 50-75mm	50
Purlins planks	4.2m x 2x3	3
Corr. iron	3m x 0.55x85mm	7
Flat iron	1.8 x 0.4x925mm	1
Mesh wire	15mx50x1800 mm	1
wire	5kgx8GGE	1
Roofing scrw	Box of 100	1
nails	75mmx 1kg	5
Nails	125mmx1kg	6
Nails	150mmx 1kg	6