

Innovative, Affordable drip irrigation for small scale farmers

DJM Marais
Agra Professional Services



Introduction



Small holder can play important role in food security

Crop production throughout year

Most technologies for crop production unsuitable for small farmers

- Scale
- Cost

Drip irrigation – water use efficient system

- widely adopted by large scale farmers
- The MOB kits designed for small scale farmers.
 - Improve on vegetable production
 - Limited water
 - Limited Cash
 - Labour requirements to water
 - Easy to install and to maintain.



Challenges in farming

Climate change

Increase in Population

Financing

Why irrigation Farming

Increase production on available land

Increase value of agriculture produce

Continues production through out year.

Better prices

Drip water use efficient



Advantages of drip Irrigation kits

- Uses water efficiently
- Easy to install and maintained by the farmer
- Viable investment at affordable cost
 - Choice between different kits/products
 - Choice of crop to plant
- Saves time, labour and energy.
 - No need to water with buckets or pipes
 - Weeds are limited because only water at base of the plant
- Ideal for home gardens, in rural and urban areas.
 - Increase income having a crop all year, possible to plant 3 crops
 - Ideal for planting high value crops
 - Uses land efficiently
 - ideal for women and youth
- Support sustainable land resources



The Products

Bucket kit

- Irrigates an area up to 30 m².
- Can be planted with up to 200 seedlings depending on crop.
- Using a 20 to 25 litre container.
- Possible to earn up to N\$ 3000/year depending on choice of crops.



Drum kit

- Irrigates an area up to 150 m².
- Can be planted with up to 1000 seedlings
- Using a 220 litre container.
- Possible to earn up to N\$ 9000/year depend on choice of crop



Tank kit

- Irrigates an area up to 300 m²
- Can be planted with up to 2000 seedlings
- Using a 1000 litre tank
- Possible to earn up to N\$ 18000/year depending on the choice of crop.



- Kits operate by the force of gravity
- Reservoirs are lifted 1.3 metres above the ground to provide enough pressure
- Kits has a CU of 91%
- Dripper lines can be adjusted
- Fertilizers and plant control remedies can be added to the container



