

**The below assumes:**

- Calibration measurement is with a water bottle lid (CAP); 8 mL contains 540.6 g urea, 8g NPK
- It is assumed maize is planted with 75x30 cm spacing and Soybean with 60 x15cm, Groundnut with 60 x15cm, Cowpea 60x 15cm. Sorghum 75 x 30cm
- It is assumed grain prices per kg (ZMK): 2 maize; 8 Soybean; 8 Cowpeas; 2 Sorghum; 13 Bean.
- It is assumed 50 kg of fertilizer use costs (ZMK): 350 Urea; 400 NPK.
- Application rates are in kg/ha.

**Level 1 financial ability.**

- For maize, point dress 61 kg Kg/ha urea 6 WAP (1 CAP for 3.57 points).
- For Soybean, band dress 95 Kg/ha NPK applied at planting (1 CAP for 1 meter)
- For Cowpea, band dress 46 Kg/ha NPK applied at planting (1 CAP for 3 meters).

**Level 2 financial ability.**

- For maize, point dress 99 kg/ha urea 6 WAP (1 CAP for 24 points).
- For Bean, band dress 27 Kg/ha NPK applied at planting (1 CAP for 5 meters).
- For Cowpea, band dress 64 Kg/ha NPK applied at planting (1 CAP for 2 meters)
- For Sorghum, band dress 27 Kg/ha NPK applied at planting (1 CAP for 5 meters).
- For Soybean, band dress 144 Kg/ha NPK applied at planting (1 CAP for 1 meter).

**Level 3 financial ability (maximize profit per hectare).**

- For maize, Point dress 73 Kg/ha (1 CAP for 6 points) NPK at planting and Urea, 112 Kg/ha 6 WAP (1 CAP for 24 points).
- For Bean, band dress 42 Kg/ha NPK applied at planting (1 CAP for 3 meters).
- For Cowpea, band dress 75 Kg/ha NPK applied at planting (1 CAP for 2 meters)
- For Sorghum, band dress 50 Kg/ha NPK applied at planting (1 CAP for 3 meters).
- For Soybean, band dress 150 Kg/ha (NPK applied at planting (1 CAP for 1 meter).