

The below assumes:

Calibration measurement is with a water bottle lid (CAP); contains 8 mL, 5.6 g urea, 8 g NPK, 9.6 g NPS, and 10.4 g TSP

Plant spacing: maize at 75 x 30 cm; cowpea, bean and soybean with 60 cm row spacing; pigeon pea with 75 cm row spacing.

Grain values per kg (MZM): 20 for maize and sorghum; 30 for cowpea and soybean; 40 for bean and pigeon pea

50 kg of fertilizer use costs (MZM): 1500 for urea, TSP, NPK 12-24-12, and NPS 23-20-0-6.

Application rates are in kg/ha.

Level 1 financial ability.

Maize: point apply 40 kg urea at planting (1 CAP for 6.2 plants); topdress 48 kg urea (1 CAP for 6.2 plants).

Bean: band apply 27 kg urea at planting (1 CAP for 3.5 m).

Soybean: band apply 57 kg TSP (1 CAP for 2.6 m) and 25 kg NPS applied at planting (1 CAP for 6.4 m)

Pigeonpea: band apply 38 kg TSP applied at planting (1 CAP for 3.1 m).

Level 2 financial ability.

Maize: point apply 54 kg NPS (1 CAP for 2.2 plants) and 25 kg urea at planting (1 CAP for 11.9 plants); topdress dress 93 kg urea (1 CAP for 3.2 plants).

Sorghum: band apply 25 kg of urea (1 CAP for 3 m) and 38 kg TSP at planting (1 CAP for 3.1 m)

Bean: band apply 38 kg urea (1 CAP for 2.5 m) and 46 kg TSP at planting (1 CAP for 3.2 m).

Cowpea: band apply 51 kg TSP applied at planting (1 CAP for 2.9 m).

Soybean: band apply 70 kg TSP (1 CAP for 2.1 m) and 70 kg NPS applied at planting (1 CAP for 2.3 m).

Pigeonpea: band apply 60 kg TSP applied at planting (1 CAP for 2 m).

Level 3 financial ability (maximize profit per acre).

Maize: point apply 88 kg NPS (1 CAP for 5.8 plants) and 56 kg NPK (1 CAP for 7.6 plants); topdress dress 140 kg urea (1 CAP for 2.1 plants).

Sorghum: band apply 25 kg urea (1 CAP for 3 m) and 60 kg of TSP at planting (1 CAP for 2 m); topdress 25 kg urea (1 CAP for 3 m)

Bean: band apply 48 kg urea (1 CAP for 1.9 m) and 72 kg TSP at planting (1 CAP for 2 m).

Cowpea: band apply 85 kg TSP applied at planting (1 CAP for 1.7 m).

Soybean: band apply 120 kg NPS (1 CAP for 1.3 m) and 81 kg TSP applied at planting (1 CAP for 1.8 m).

Pigeonpea: band apply 82 kg TSP applied at planting (1 CAP for 1.4 m).

The below assumes: Calibration measurement is with a water bottle lid (CAP); contains 8 mL, 5.6 g urea, 8g NPK, 9.6 g NPS, and 10.4 g TSP

Plant spacing: maize at 75 x 30 cm; cowpea, bean and soybean with 60 cm row spacing; pigeon pea with 75 cm row spacing.

Grain values per kg (MZM): 20 for maize and sorghum; 30 for cowpea and soybean; 40 for bean and pigeon pea

50 kg of fertilizer use costs (MZM): 1500 for urea, TSP, NPK 12-24-12, and NPS 23-20-0-6.

Application rates are in kg/ha.

Level 1 financial ability.

Maize: point apply 90 kg NPS (1 CAP for 5.7 plants) and 65 kg NPK (1 CAP for 5 plants) at planting; topdress 50 kg urea (1 CAP for 6.2 plants).

Sorghum: band apply 60 kg NPS (1 CAP for 2.1 m)

Soybean: band apply 38 kg TSP applied at planting (1 CAP for 3.9 m)

Level 2 financial ability.

Maize: point apply 153 kg NPS (1 CAP for 3.3 plants) and 160 kg NPK (1 CAP for 6.2 plants) at planting; and topdress dress 50 kg urea (1 CAP for 4.4 plants).

Sorghum: band apply 25 kg urea (1 CAP for 3 m) and 49 kg of TSP at planting (1 CAP for 2.4 m); topdress 25 kg urea (1 CAP for 3 m)

Cowpea: band apply 36 kg TSP applied at planting (1 CAP for 4.1 m).

Soybean: band apply 77 kg TSP applied at planting (1 CAP for 1.9 m).

Level 3 financial ability (maximize profit per acre).

Maize: point apply 200 kg NPS (1 CAP for 2.6 plants), 84 kg TSP (1 CAP for 5.6 plants) and 150 kg NPK (1 CAP for 6.2 plants); topdress dress 82 kg urea (1 CAP for 3.6 plants).

Sorghum: band apply 100 kg of NPK at planting (1 CAP for 1.1 m); topdress 50 kg urea (1 CAP for 1.5 m)

Bean: band apply 29 kg urea (1 CAP for 3.2 m) and 49 kg TSP at planting (1 CAP for 3 m).

Cowpea: band apply 56 kg TSP applied at planting (1 CAP for 2.6 m).

Soybean: band apply 129 kg TSP applied at planting (1 CAP for 1.1 m).



Mozambique Fertilizer Use Optimizer: 900-1300 m elevation



May 2016

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Plant spacing: maize at 75 x 30 cm; cowpea, bean and soybean with 60 cm row spacing; pigeon pea with 75 cm row spacing.

Grain values per kg (MZM): 20 for maize and sorghum; 30 for cowpea and soybean; 40 for bean and pigeon pea

50 kg of fertilizer use costs (MZM): 1500 for urea, TSP, NPK 12-24-12, and NPS 23-20-0-6.

Application rates are in kg/ha.

Level 1 financial ability

Maize: point apply 38 kg NPS at planting (1 CAP for 13.5 plants); topdress 44 kg urea (1 CAP for 6.8 plants).

Cowpea: band apply 21 kg TSP at planting (1 CAP for 7 m)

Bean: band apply 22 kg urea at planting (1 CAP for 3.5 m)

Soybean: band apply 52 kg TSP (1 CAP for 2.8 m) and 44 kg NPS at planting (1 CAP for 3.6 m).

Pigeon pea: point apply 32 kg TSP at planting (1 CAP for 3.7 m).

Level 2 financial ability

Maize: point apply 112 kg NPS at planting (1 CAP for 4.6 plants); topdress 77 kg urea (1 CAP for 3.9 plants).

Cowpea: band apply 37 kg TSP at planting (1 CAP for 4 m)

Bean: band apply 37 kg urea at planting (1 CAP for 2.5 m)

Soybean: band apply 99 kg TSP (1 CAP for 1.5 m) and 44 kg NPS at planting (1 CAP for 3.6 m).

Pigeon pea: point apply 51 kg TSP at planting (1 CAP for 2.3 m).

Level 3 financial ability

Maize: point apply 168 kg NPS (1 CAP for 3 plants) and 25 kg NPK at planting (1 CAP for 17 plants); topdress 98 kg urea (1 CAP for 3 plants).

Cowpea: band apply 48 kg TSP at planting (1 CAP for 3.1 m)

Bean: band apply 48 kg urea (1 CAP for 1.9 m) and 27 kg TSP at planting (1 CAP for 5.4 m)

Soybean: band apply 120 kg TSP (1 CAP for 1.2 m) and 44 kg NPS at planting (1 CAP for 3.6 m).

Pigeon pea: point apply 64 kg TSP at planting (1 CAP for 1.8 m).