**version **



**Burkina Faso South Sudan Savanna FERTILIZER USE OPTIMIZER 3**

**Paper**

**The below assumes:**

* Measurement is with a Lafti water bottle lip that holds 7.5 ml and about 5.25 g urea and 8.25 g DAP, TSP or KCl, or with a Gino tomato cup of 70 ml bottle to hold 50 g urea and 77 DAP, TSP or KCl.
* It is assumed maize and sorghum are planted with 80 cm row spacing band application; soybean, cowpea, and groundnut 40 cm; and rice 20 cm.
* It is assumed grain prices per kg: 126 maize; 142 sorghum; 119 rice, Groundnut 310, Cowpea 290, Soybean 143.
* It is assumed 50 kg of fertilize: 25000 CFA urea and KCl; 26000 CFA TSP and 42000 CFA.
* **Broadcast width: 4 m; WAP =** Week After Planting

**Level 1 financial ability.**

* For maize band apply 54kg/ha urea (water bottle lid for 1.2 m) at 6 WAP
* For sorghum, band apply 67 kg/ha of DAP (water bottle lid for 1.1 m) at 2 WAP.
* For lowland rice, broadcast apply 36 kg/ha of urea (water bottle lid for 7 m) at panicle initiation
* For Groundnut band apply 36 kg/ha of TSP (water bottle lid for 2.9 m) at 2 WAP

**Level 2 financial ability.**

* For Rice, lowland, broadcast 44 kg/ha urea (water bottle lid for 5.8 m) at 2 WAP and 44 kg/ha at panicle initiation (water bottle lid for 5.8 m).
* For Maize band apply 53 kg/ha of urea (water bottle lid for 1.2 m) at 2 WAP and again at 6 WAP
* For sorghum, band apply 100 kg/ha of DAP (water bottle lid for 0.8 m) at 2 WAP.
* For Groundnut band apply 32 kg/ha of DAP (water bottle lid for 2.4 m) and 39 kg/ha TSP (water bottle lid for 2.7 m) at 2 WAP

**Level 3 financial ability (maximizes profit per ha)**

* For Rice, lowland, broadcast 50 kg/ha urea (water bottle lid for 7.6 m) and 21kg/ha KCl (water bottle lid for 17.9 m) 2 WAP; broadcast 81 kg/ha urea at panicle initiation (water bottle lid for 4.7 m).
* For Maize band apply 50 kg/ha of urea (water bottle lid for 1.3 m) at 2 WAP and 39 kg/ha of DAP (water bottle lid for 0.6 m) at 6 WAP; band apply 81 kg/ha urea at 6 WAP (water bottle lid for 0.8 m)
* For sorghum, band apply 100 kg/ha of DAP (water bottle lid for 0.8 m) at 2 WAP.
* For Groundnut band apply 100 kg/ha of TSP (water bottle lid for 1.1 m) 2 WAP