

**Supplementary Table S1.** On-farm grain yield ( $\text{g m}^{-2}$ ) for four treatments and four different planting lots, Doho, 2019. Planting lot 1 corresponds to the dry season, planting lots 2 and 3 were planted during the first rainy season and planting lot 4 during the second rainy season.

Treatment	Planting Lot			
	1 (January)	2 (March)	3 (April)	4 (August)
FP	324 (se=8.7, n=21 )	327 (se=14.2, n=8)	385 (se=6.0, n=45)	351 (se=6.3, n=40)
FIP	359 (se=10.5, n=14)	466 (se=27.9, n=2)	430 (se=8.4, n=22)	383 (se=9.5, n=17)
RAP	364 (se=8.7, n=21 )	397 (se=14.2, n=8)	433 (se=6.0, n=45)	385 (se=6.3, n=40)
RAP+NPK	445 (se=22.7, n=3)	422 (se=39.3, n=1)	501 (se=12.4, n=10)	451 (se=17.6, n=5)

The different planting lots had no significant effect ( $p>0.24$ ) on grain yield for the different treatments.

FP = farmers' practice, FIP = farmers' intensification practice; RAP = recommended agronomic practices without fertilization; RAP+NPK = recommended agronomic practices combined with NPK fertilization; se = standard error of means; n = number of fields planted for each treatment in a planting lot. Month in parentheses is the planting time for the lot.