Out scaling climate smart Agriculture technologies in Malawi, Zambia and Zimbabwe

Piloting CSA technologies

Government of Malawi

Researching Soils, Crops and Water in Zambia

Ministry of Lands, Agriculture and Rural Resettlement

International Maize and Wheat Improvement Center

german cooperation
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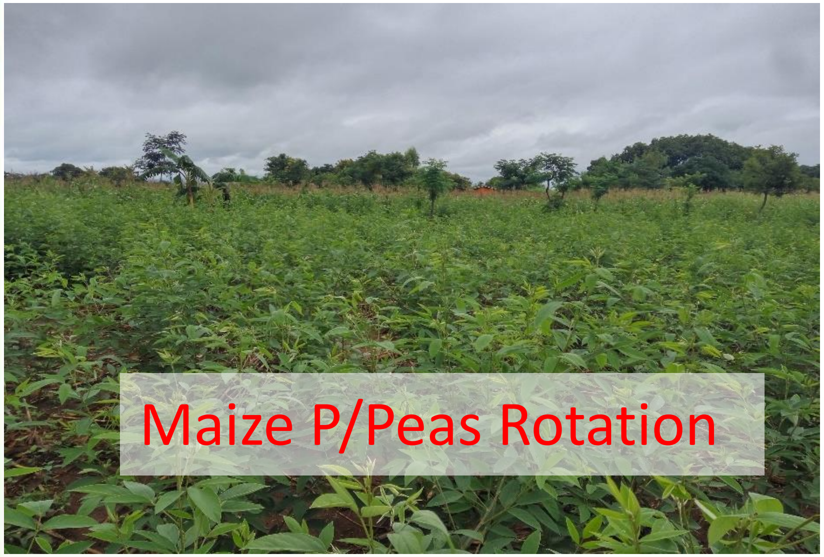
Project sites

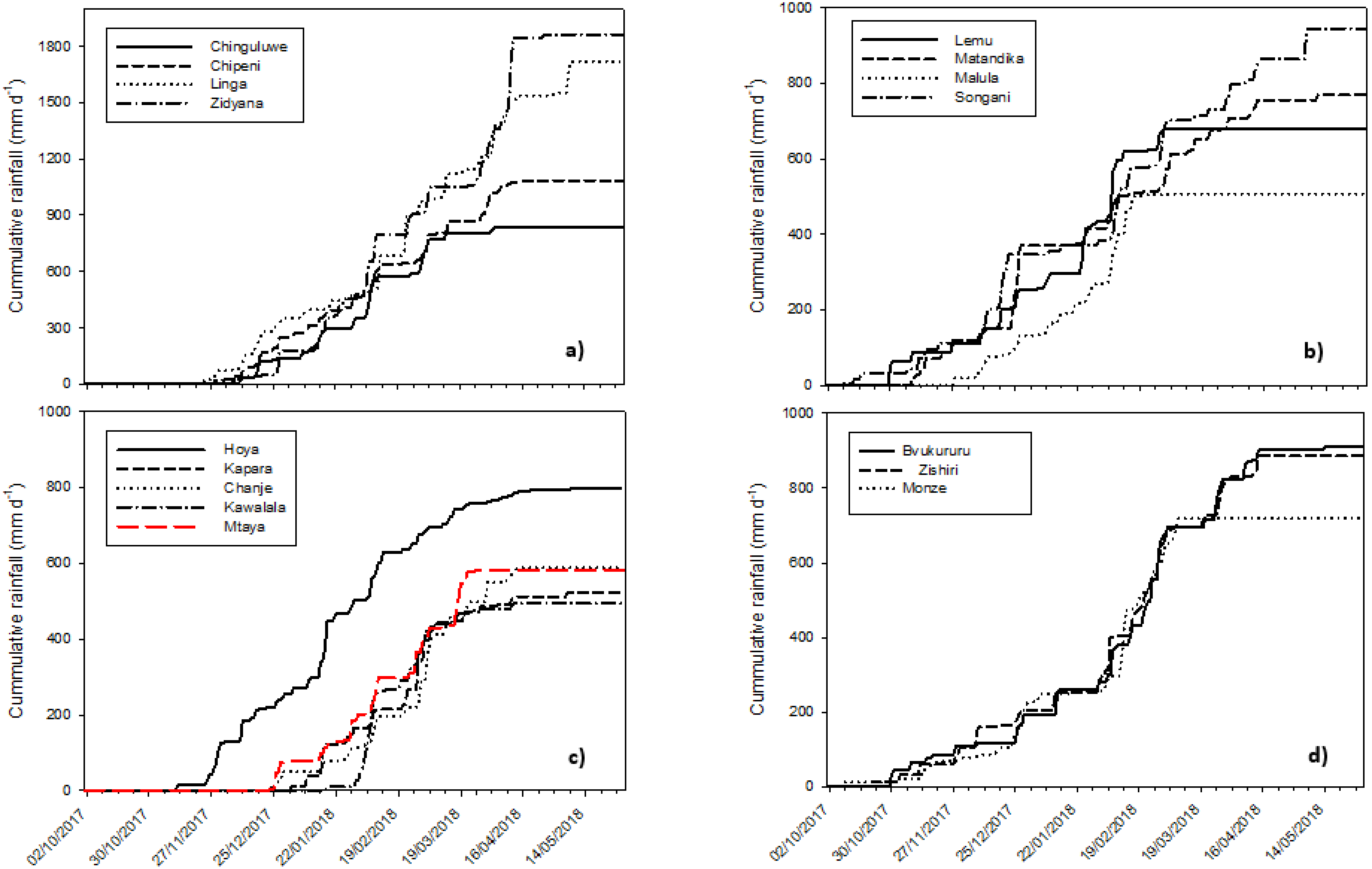
No	Country	District	Site	Latitude	Longitude	Altitude
1	Malawi	Zomba	Songani	-15.336	35.391	791
2	Malawi	Machinga	Matandika	-15.167	35.257	676
3	Malawi	Balaka	Lemu	-14.785	35.019	681
4	Malawi	Balaka	Herbert	-14.886	35.036	644
5	Malawi	Balaka	Malula	-14.961	34.999	622
6	Malawi	Salima	Chinguluwe	-13.697	34.226	682
7	Malawi	Dowa	Chipeni	-13.763	34.053	1170
8	Malawi	Nkhotakota	Mwansambo	-13.29	34.132	624
9	Malawi	Nkhotakota	Zidyana	-13.233	34.231	542
10	Malawi	Nkhotakota	Linga	-12.757	34.200	493
11	Zambia	Chipata	Kapara	-13.301	32.293	728
12	Zambia	Chipata	Mtaya	-13.344	32.312	767
13	Zambia	Chipata	Chanje	-13.234	32.479	882
14	Zambia	Sinda	Kawalala	-14.095	31.489	941
15	Zambia	Lundazi	Hoya	-12.071	33.08	1077
16	Zambia	Lundazi	Vuu	-12.161	33.026	1075
17	Zambia	Monze	Malende	-16.237	27.423	1098
18	Zimbabwe	Zaka	Zishiri	-20.168	31.281	1042
19	Zimbabwe	Zaka	Bvukururu	-20.175	31.380	1000

What has been promoted so far

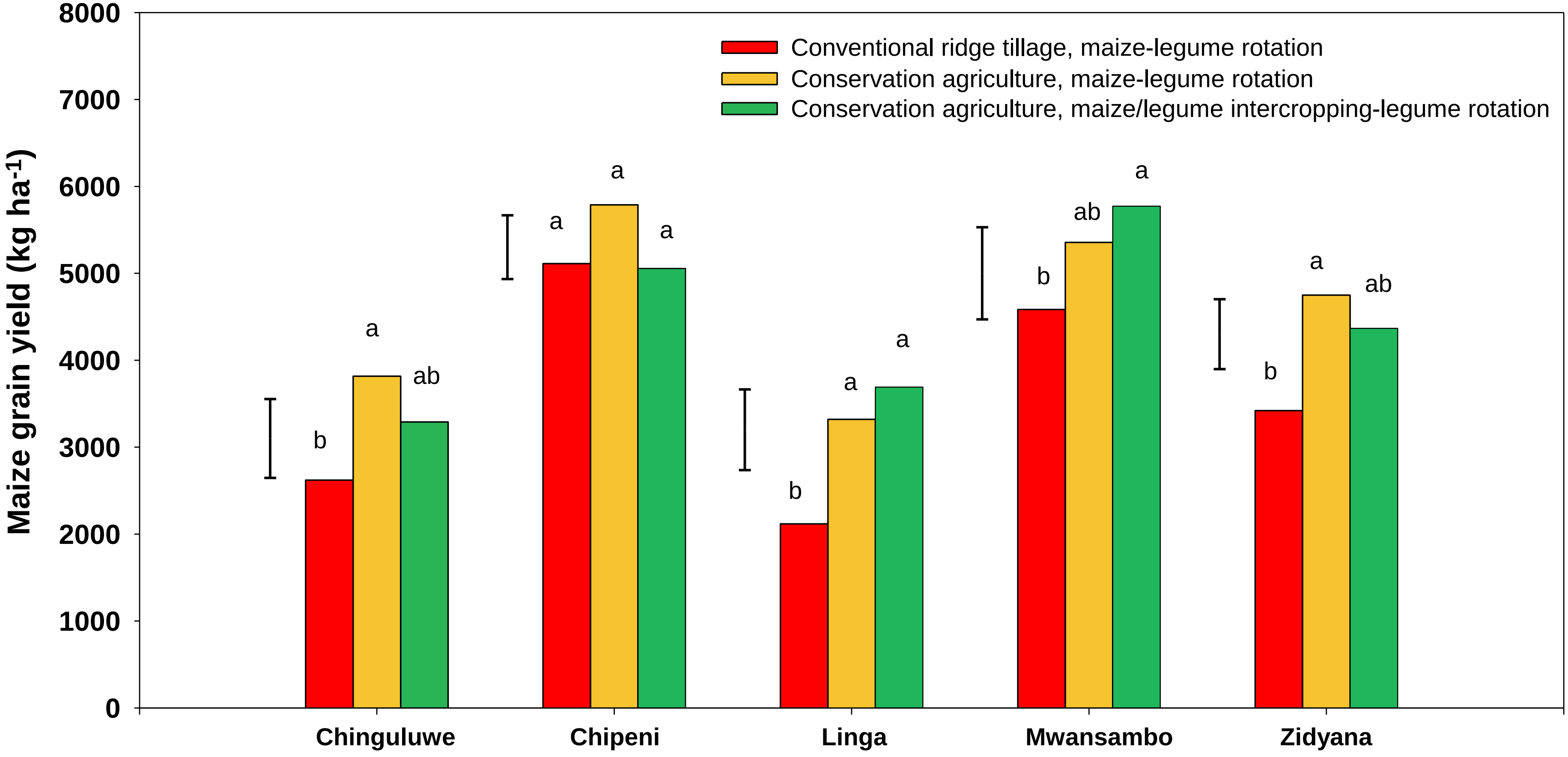


Piloted new CSA technology: Doubled-up legume system

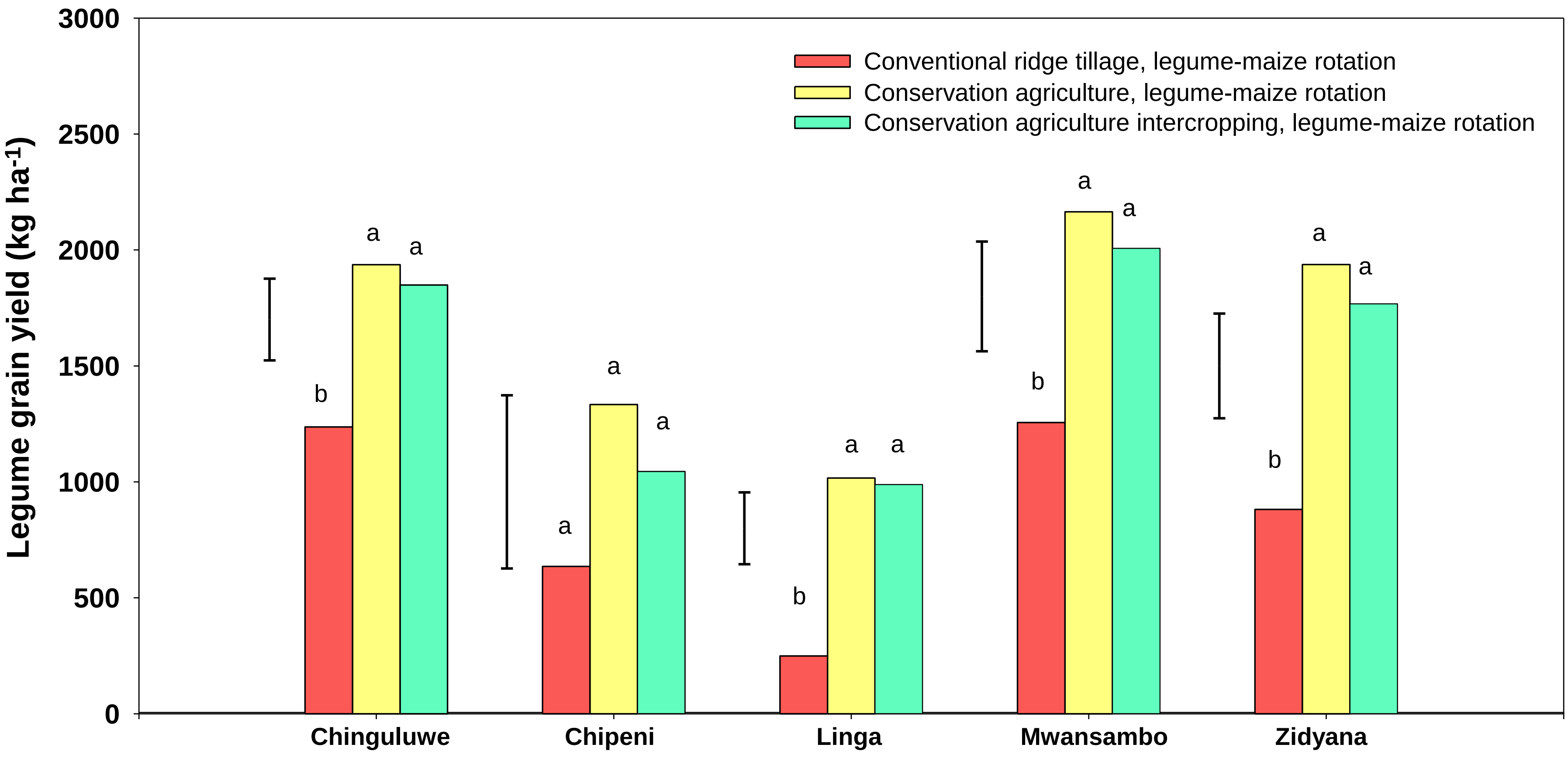
Rainfall in cropping season 2017/2018



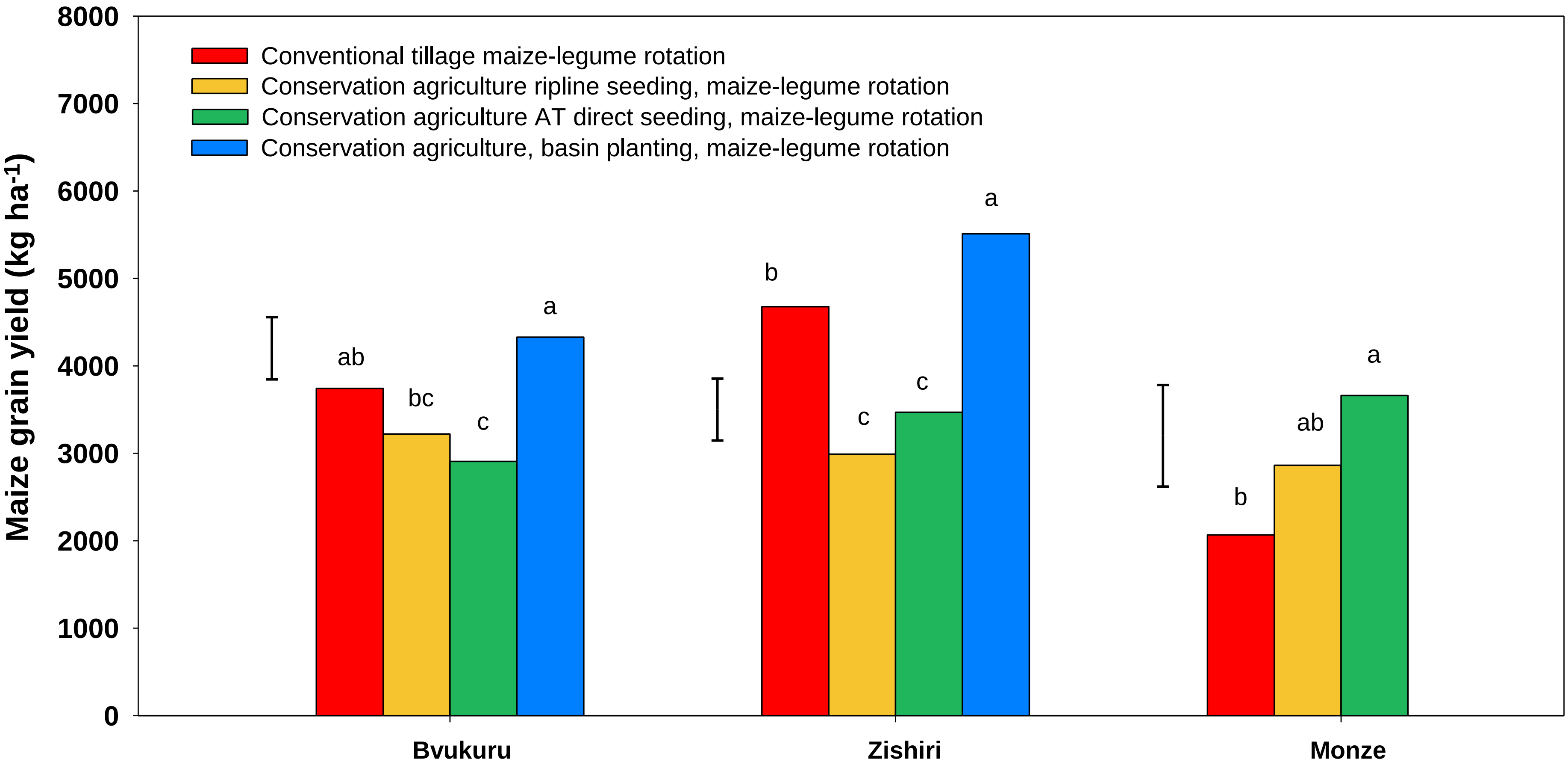
Central Malawi sites, maize yields, 2017/2018



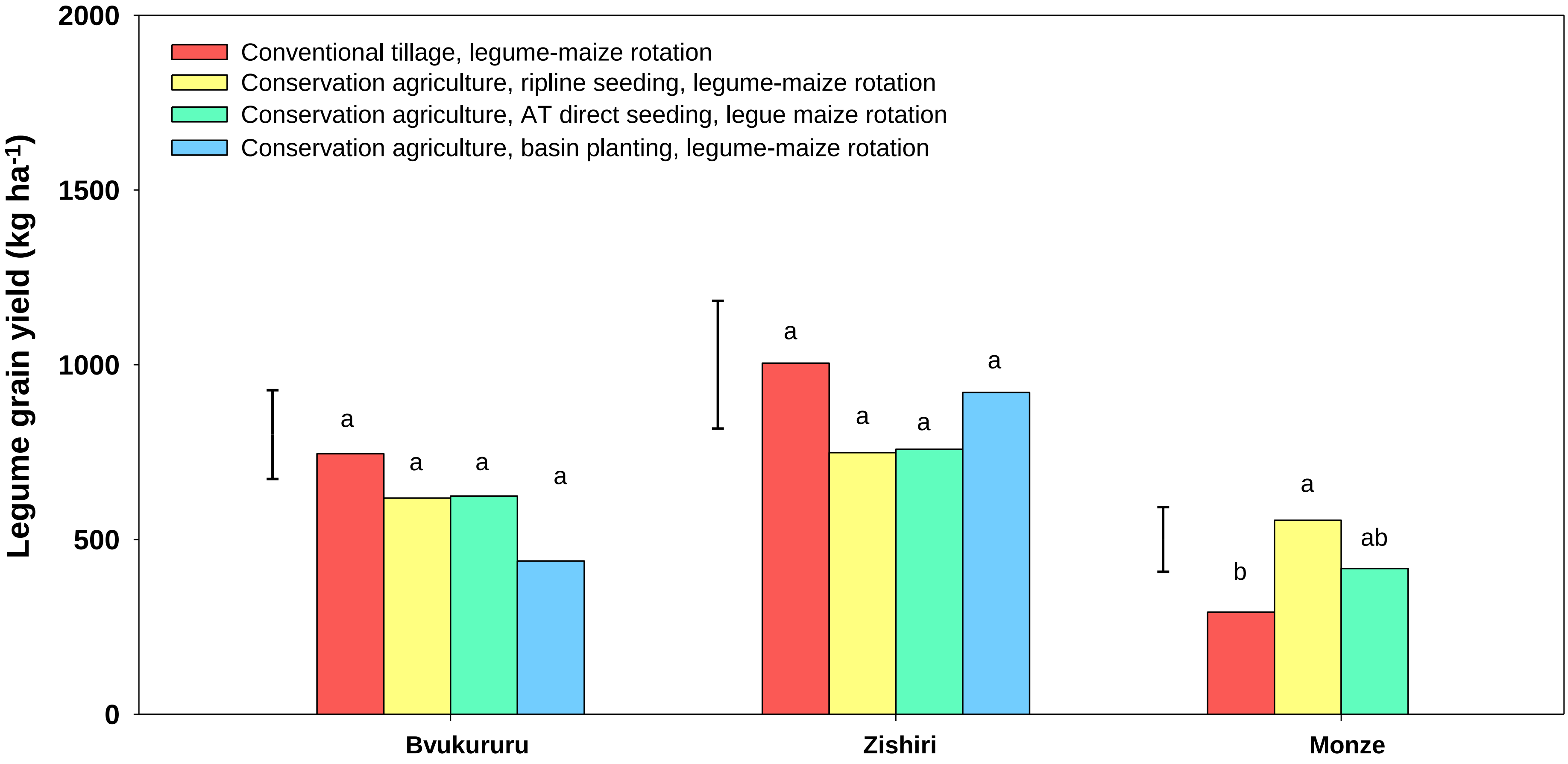
Central Malawi sites, groundnut yields, 2017/2018



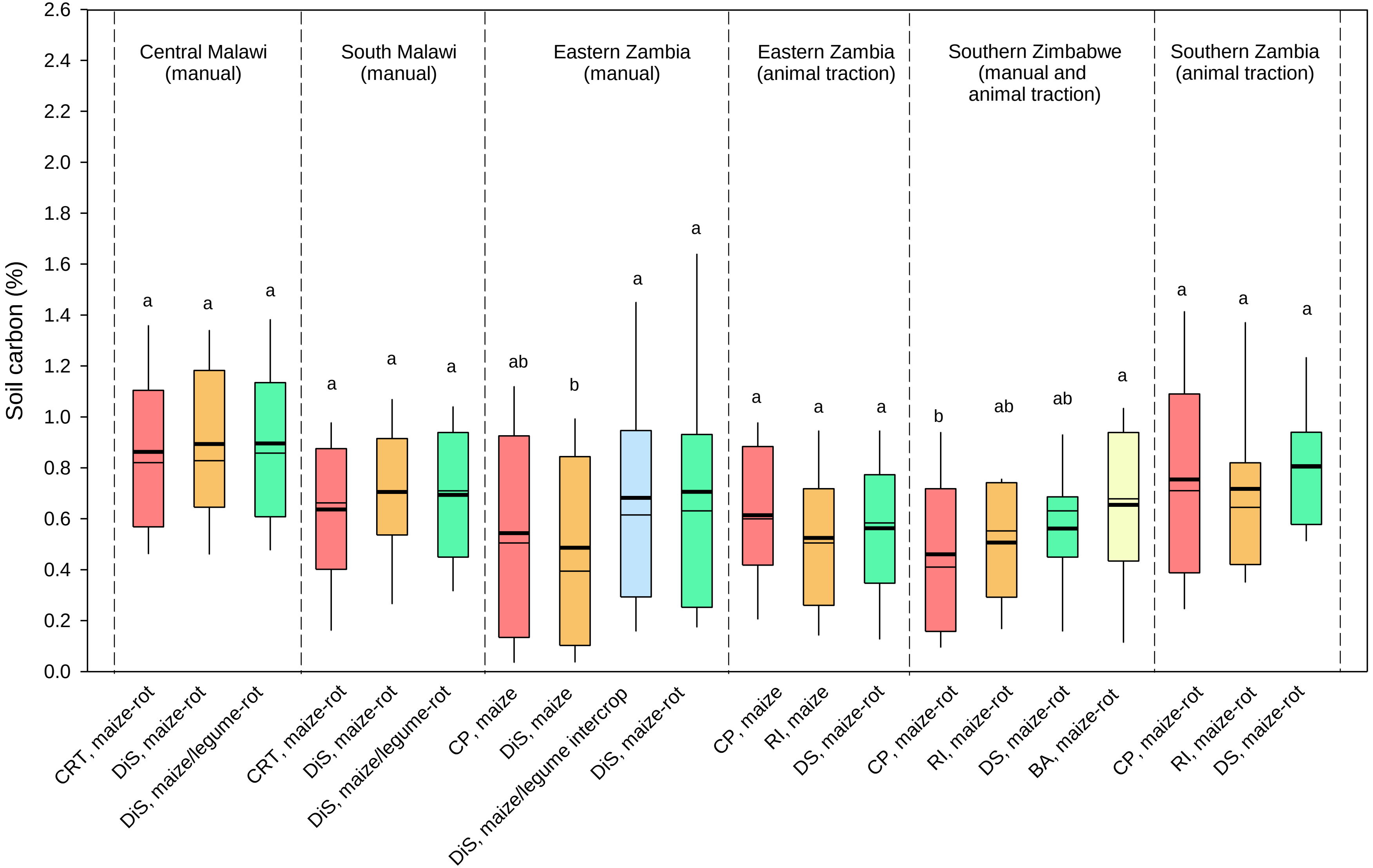
Southern Zimbabwe/Zambia sites, maize yields, 2017/2018



Southern Zimbabwe/Zambia sites, cowpea yields, 2017/2018



Soil carbon measurements 2017/2018



Conclusion

- Generally CA treatments outperformed the conventional practice
- In some sites those yield difference were not significant
- Groundnut yields generally favourable to CSA in 2017/2018 – cowpea yields more variable
- Soil carbon: only in two agro-ecologies there was a significant carbon benefit
- Need for a strong diversification component to increase soil carbon (Powlson et al. 2016)
- More results are available in the Pilot Report

Thank you for your interest!

Government of Malawi

TLC Malawi

ZARI Zambia Agriculture Research Institute
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