



BIOCHAR-PROSPECTS FOR AFRICA

YEBOAH*¹ E AND COVELL² P

1. CSIR-Soil Research Institute, Kumasi, Ghana
2. Forest Trends, USA

* eyeboah5@hotmail.com

Projected cereal yield in 2025

Region	Shortfall (million tons)
Sub-Saharan Africa	-88.7
East & Southeast Asia	-126.9
Middle East	-132.7

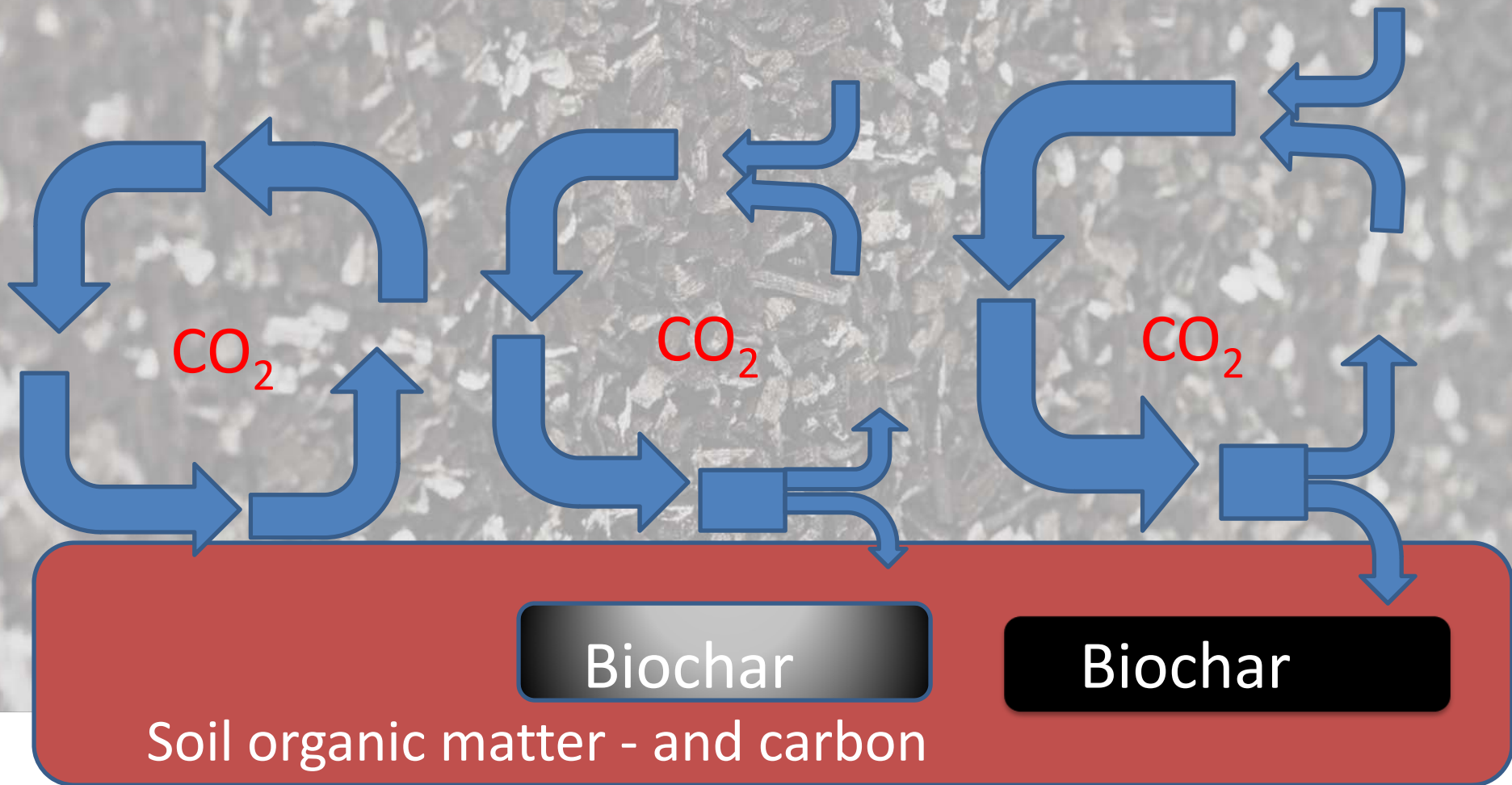
WHY BIOCHAR?

- ❖ Plants use sunlight to make energy rich bonds that fix carbon from CO_2 to build and maintain biomass.
- ❖ Microbes release this energy from dead plant materials in soil and the carbon is returned to the atmosphere.
- ❖ This happens rapidly in tropical environment so although important plant nutrients are released, the contribution to soil structural properties provided by soil organic matter is short-lived .
- ❖ Prior stabilization of organic resources by charring prevents CO_2 release, builds soil carbon and promises enduring benefits to crop production

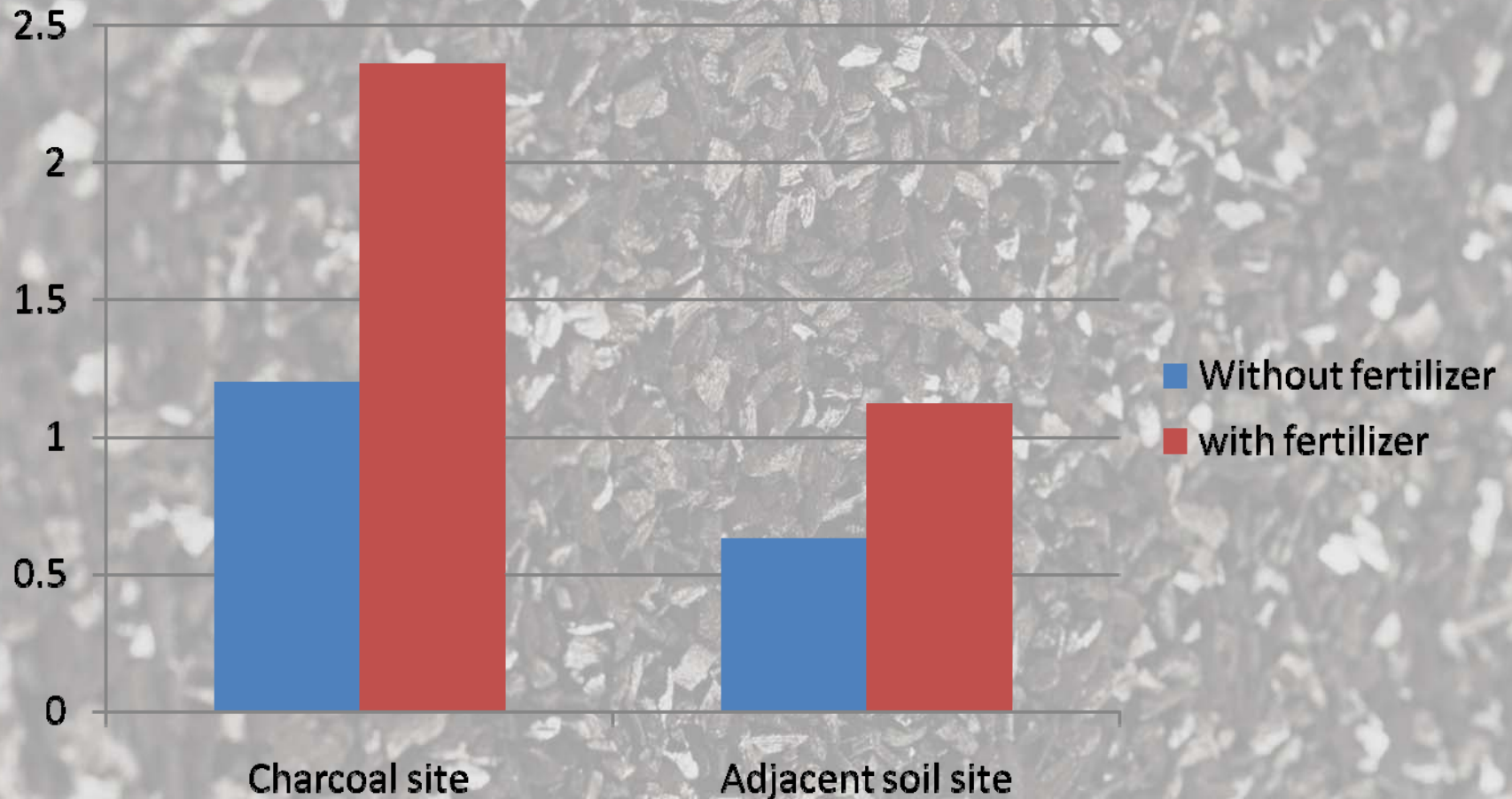
Default

Biochar

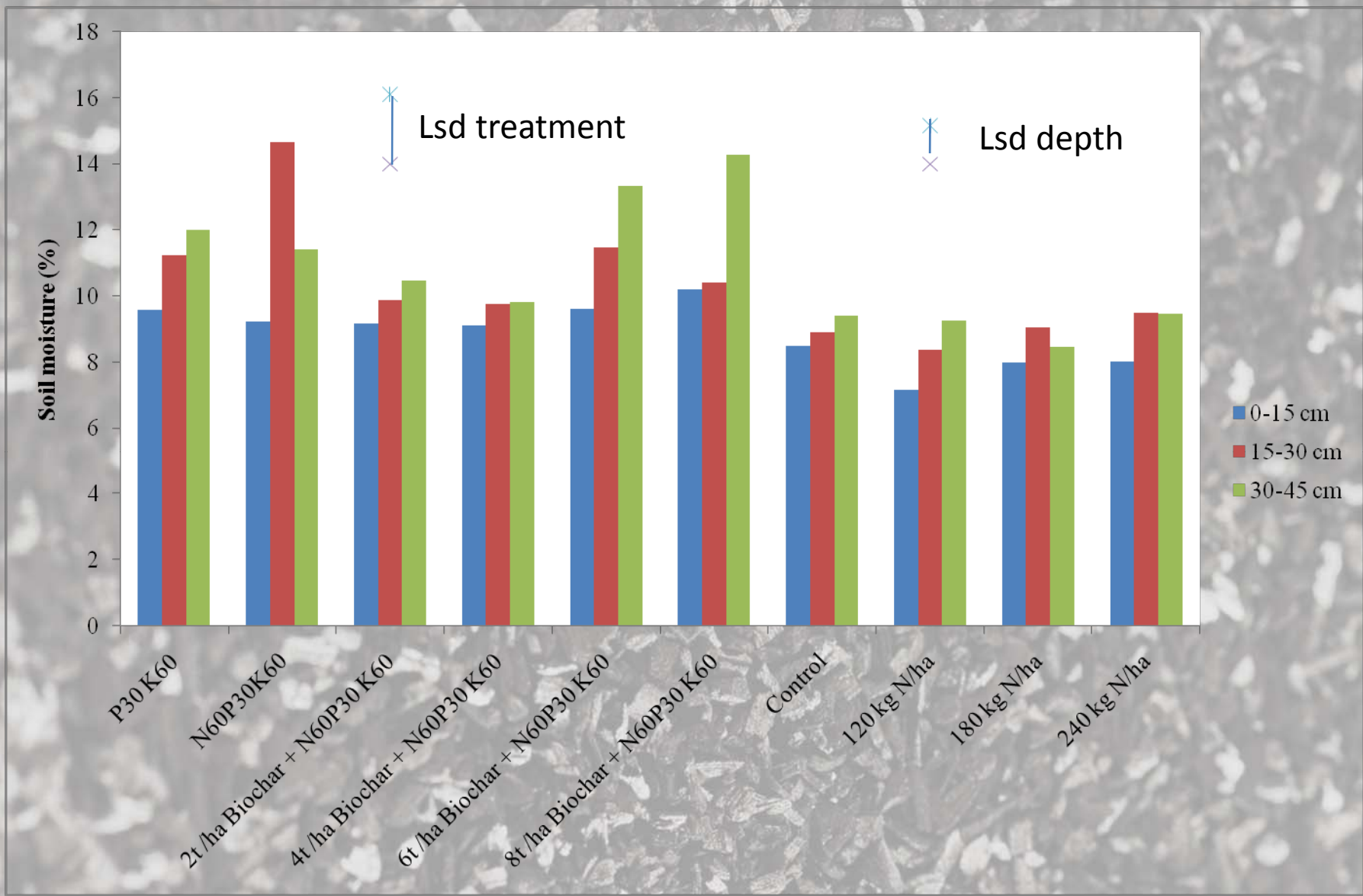
Biochar enhanced

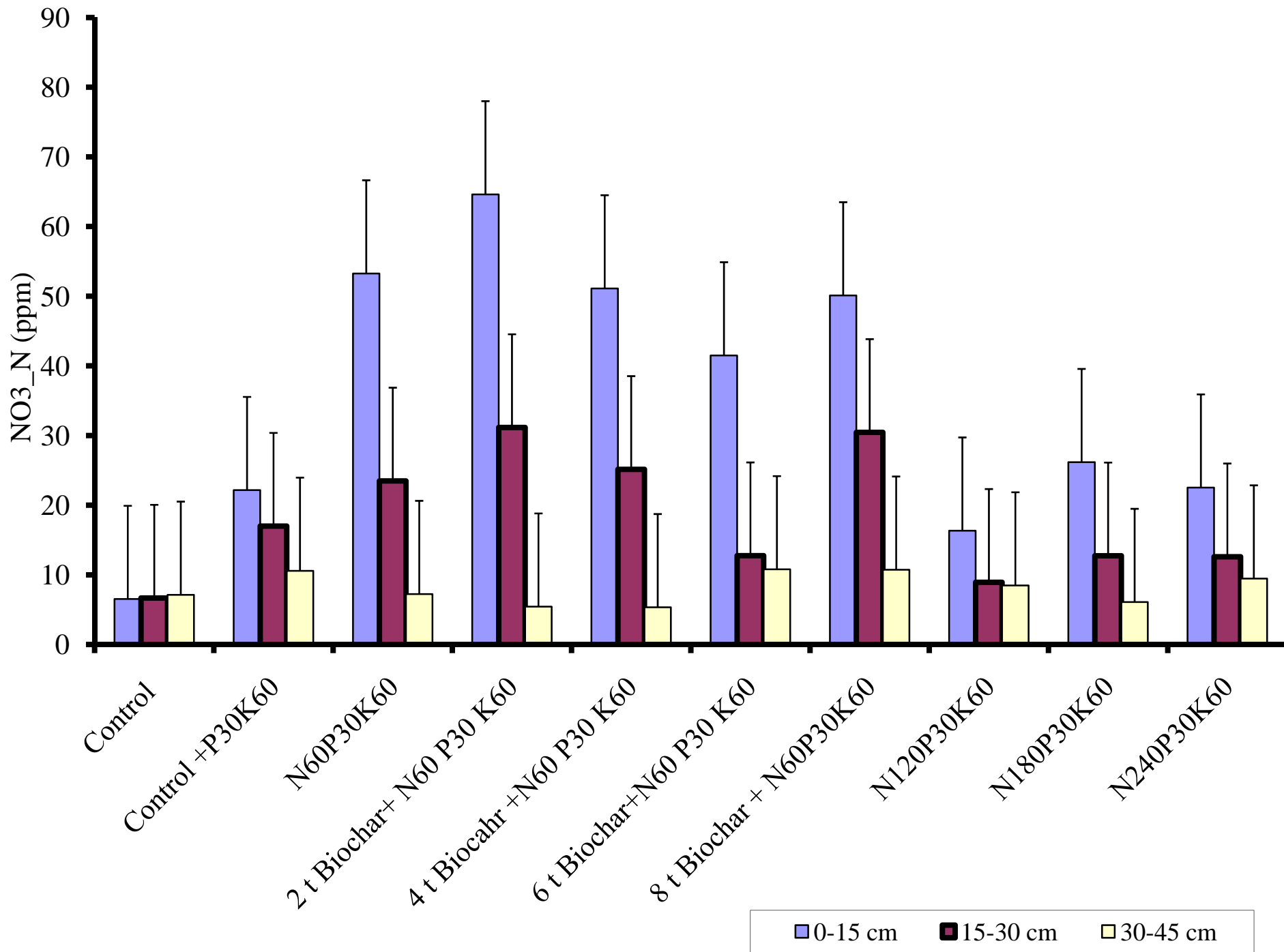


Maize grain yield (t/ha)



Source: Oguntunde et al, 2004 (Ejura, Ghana)





Conclusions

- ❖ Biochar is a single approach that addresses four of the major global challenges
- ❖ Farmers can benefit commercially from Carbon neutral foods

ACKNOWLEDGEMENTS

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