

**Management response to Ex-post Impact Assessment of Fertilizer Microdosing as a
Climate-Smart Technology in Sub-Saharan Africa**

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CCAFS Program Management Committee

Management response statement:

This is a relatively good ex-post Impact Assessment (ep-IA) that uses survey results to conduct a statistical analysis of the impacts of micro-dosing on crop yields and food security among adopters and non-adopters in eight semi-arid districts of Zimbabwe. It shows positive impacts of adoption on self-reported food security. The study could be published in a peer-reviewed journal. The inclusion of gender and other social differentiation variables is good. It may be useful for future ep-IAs to use these type of multi-district randomized samples to estimate net impacts at the national scale (i.e. a higher level of impact), preferably with a small analysis of the policy and market mechanisms that enable scaling up and out. Also, to be more relevant for CSA, estimates of impacts on net GHG emissions would be helpful and interesting to a wide audience. Finally, CGIAR ep-IAs are expected to include a monetary calculation of the ratio of benefits (of the impacts) to project costs.

Notes on the study:

- Relatively good
- Confined to impacts at the site level (which SPIA defines as outcomes)
- Essentially sound regression analysis to compare adopters and non-adopters – indicators include yields and food security

Interesting findings:

- “Among adopters, the adoption of microdosing led to about 47 percentage points more likelihood of being food secure compared to the counterfactual case (not adopting microdosing).” (based on self-scoring on a 1-5 scale from always enough to eat to never enough to eat)
- “Adopters have on average higher asset values, more labour supply and bigger land sizes.” – i.e. poverty effects may not be as strong as hoped?
- “Female headed households were less likely to microdose their crops, probably due to poor access to information by women” – possibly the only gender-disaggregated statement in the full set of ePIAs!