Technology Adoption and Smallholder Commercialization: Panel Evidence from West Africa

Supplementary Information (SI) - Figures

Figure 1: Kernel density of selected outcome variables

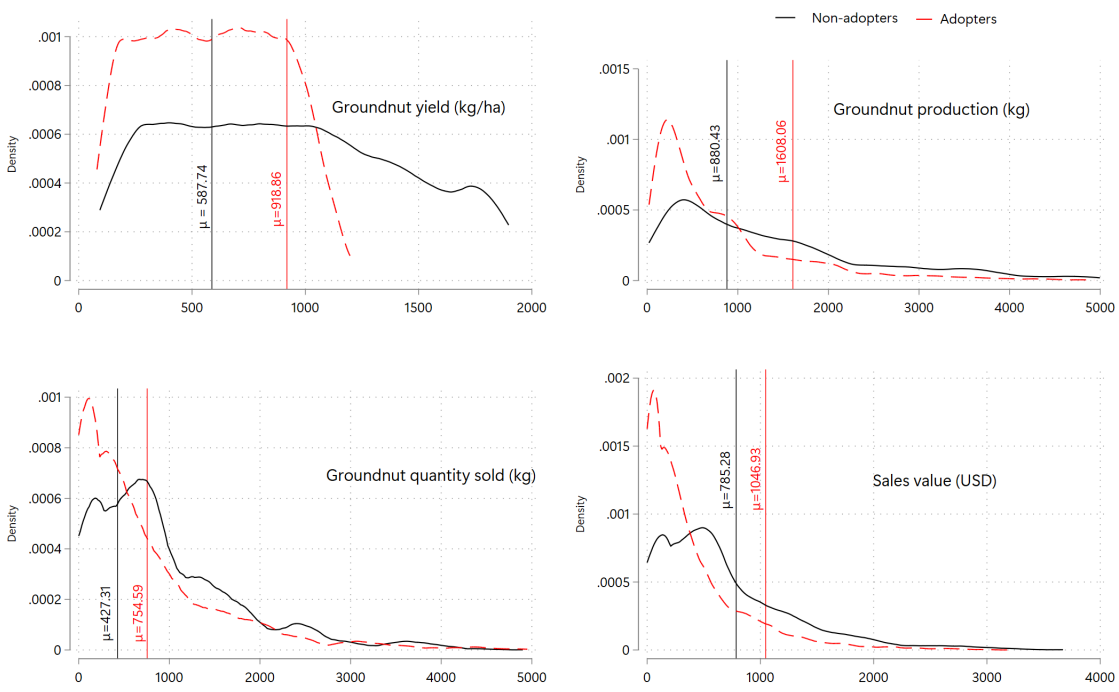


Figure 2: Adoption rate overtime

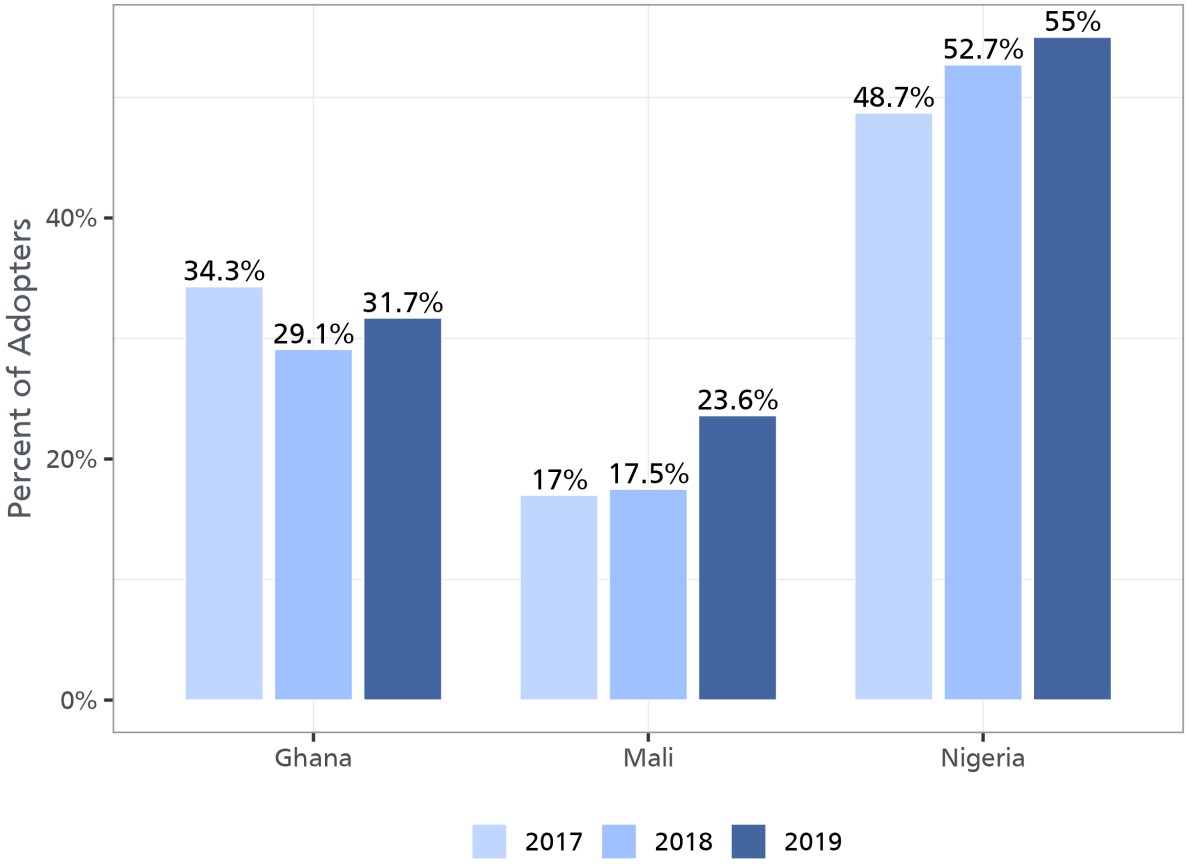
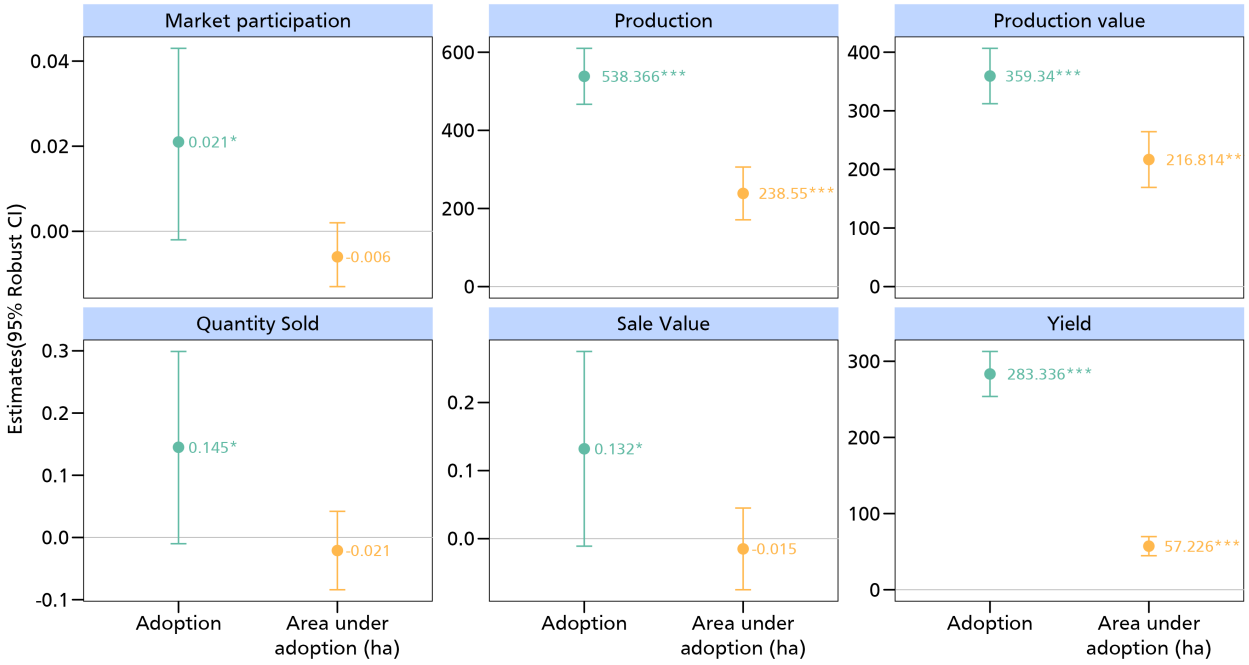
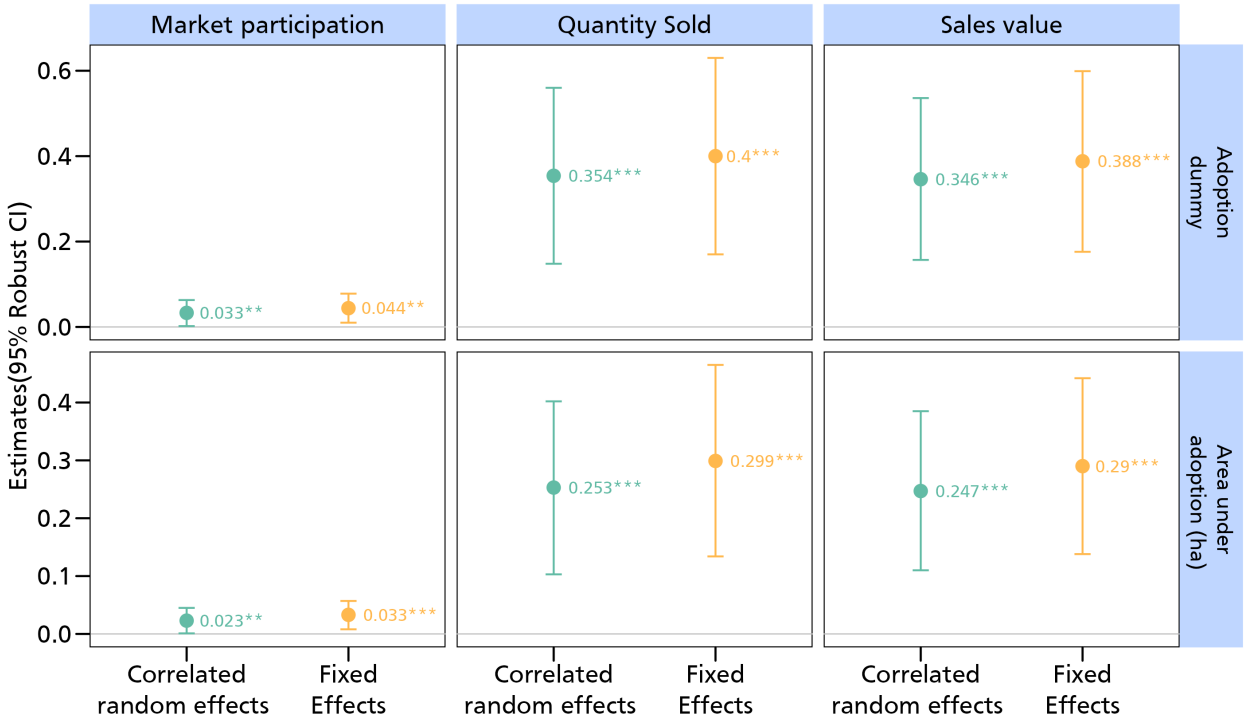


Figure 3: 2SLS estimates of the relationship between adoption and commercialization, production and yield



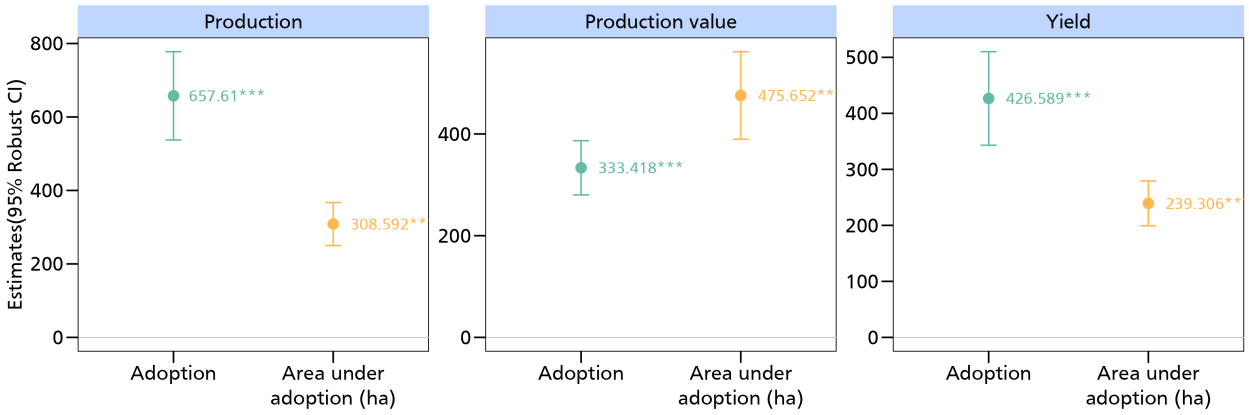
Note: Full models are reported in SM2-SM5. Robust standard errors in parentheses. Additional controls include age and educational level of the household head, dependency ratio, whether the household head is male, household size, cooperative membership, training, access to public and private extension, access to credits both in cash and kind, distance to nearest urban and village market, crop rotation, mixed cropping, labour, market price, input costs, area of cultivation, off-farm income and soil type (*** p<0.01, ** p<0.05, * p<0.1)

Figure 4: 2SLS estimates of the relationship between adoption and area under adoption and commercialization



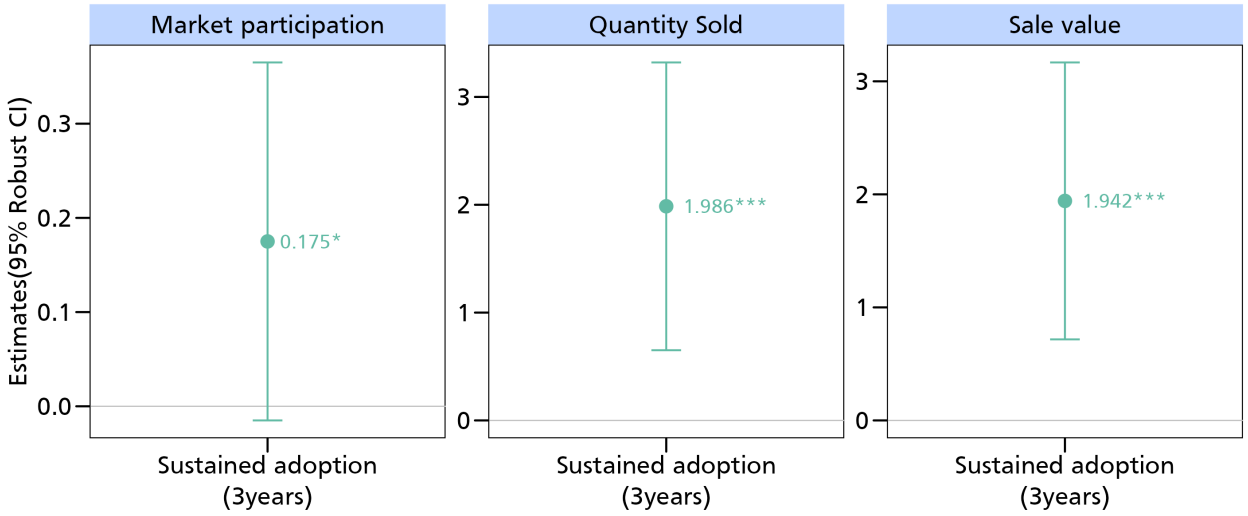
Note: Full models are reported in SM6-SM7. Robust standard errors in parentheses. Additional controls include age and educational level of the household head, dependency ratio, whether the household head is male, household size, cooperative membership, training, access to public and private extension, access to credits both in cash and kind, distance to nearest urban and village market, crop rotation, mixed cropping, labour, market price, input costs, area of cultivation, off-farm income and soil type (*** p<0.01, ** p<0.05, * p<0.1)

Figure 5: 2SLS estimates of the relationship between adoption, production and yields



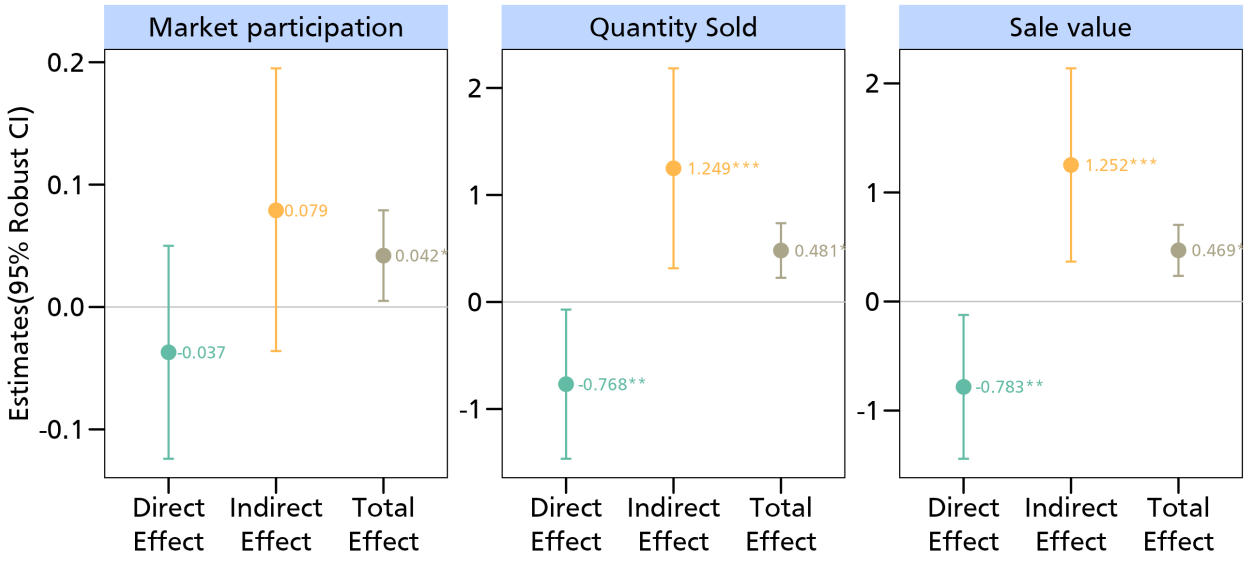
Note: Full models are reported in SM8. Robust standard errors in parentheses. Additional controls include age and educational level of the household head, dependency ratio, whether the household head is male, household size, cooperative membership, training, access to public and private extension, access to credits both in cash and kind, distance to nearest urban and village market, crop rotation, mixed cropping, labour, market price, input costs, area of cultivation, off-farm income and soil type (*** p<0.01, ** p<0.05, * p<0.1)

Figure 6: 2SLS estimates of the relationship between continuous adoption and commercialization



Note: Full models are reported in SM9. Robust standard errors in parentheses. Additional controls include age and educational level of the household head, dependency ratio, whether the household head is male, household size, cooperative membership, training, access to public and private extension, access to credits both in cash and kind, distance to nearest urban and village market, crop rotation, mixed cropping, labour, market price, input costs, area of cultivation, off-farm income and soil type (*** p<0.01, ** p<0.05, * p<0.1)

Figure 7: Linear IV mediation analysis of adoption and commercialization



Note: Full models are reported in SM12. Robust standard errors in parentheses. Additional controls include age and educational level of the household head, dependency ratio, whether the household head is male, household size, cooperative membership, training, access to public and private extension, access to credits both in cash and kind, distance to nearest urban and village market, crop rotation, mixed cropping, labour, market price, input costs, area of cultivation, off-farm income and soil type (*** p<0.01, ** p<0.05, * p<0.1)

Figure 8: Quantile estimates of adoption and sales value (IHS)

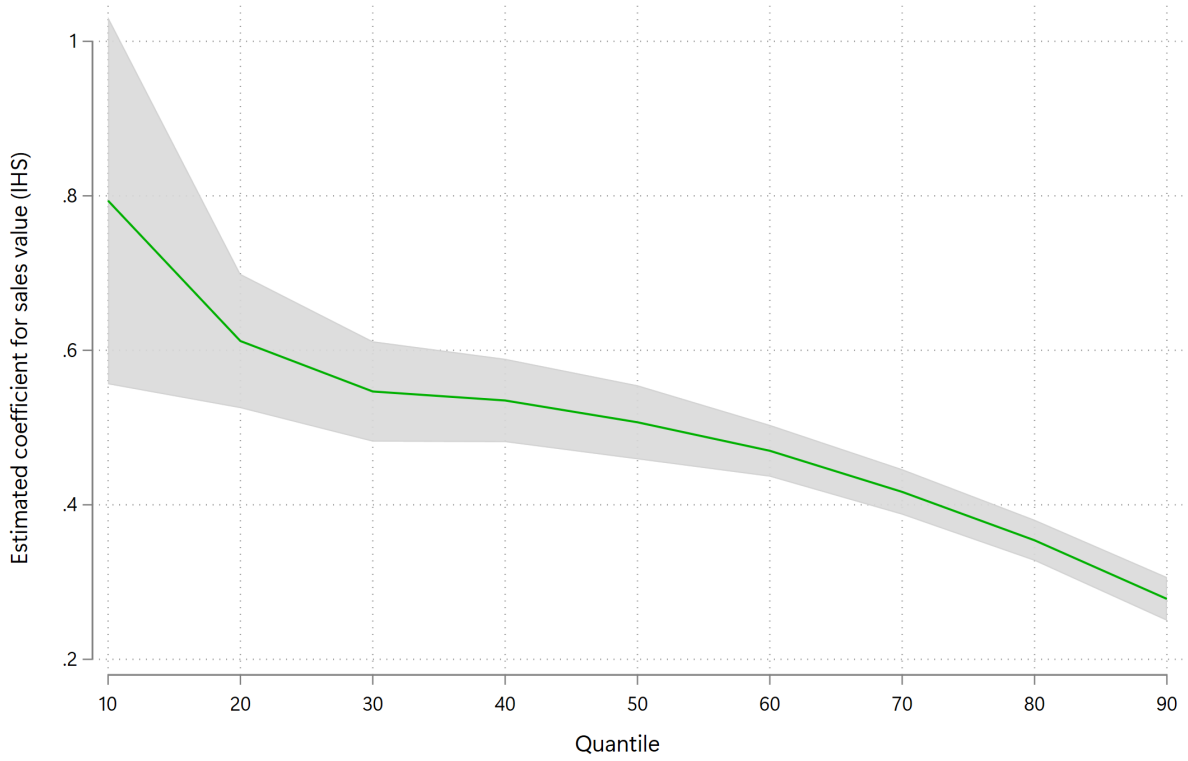
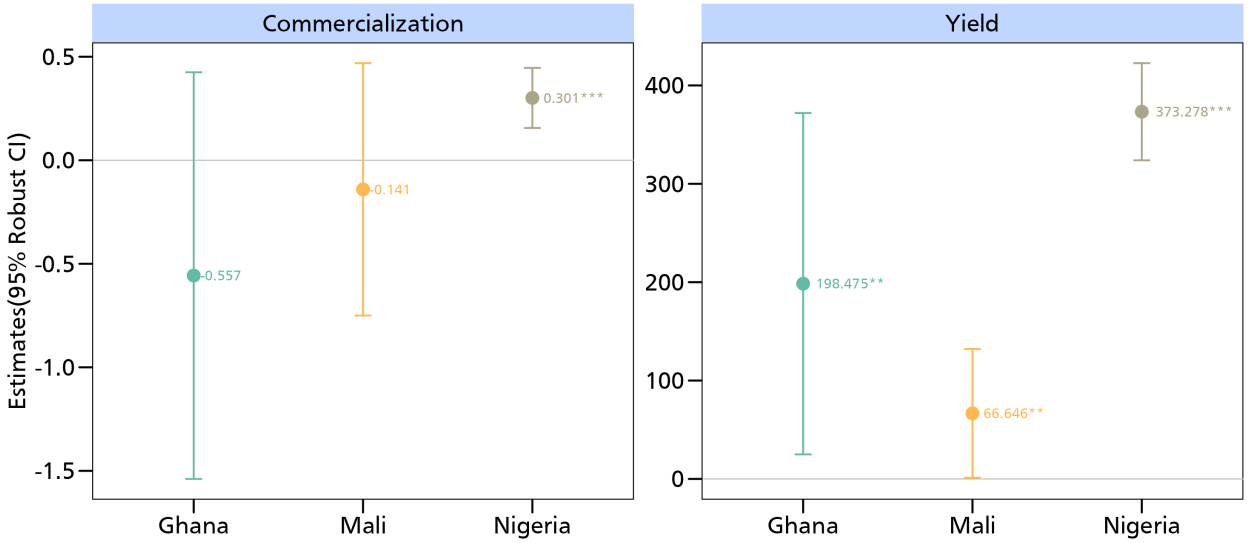


Figure 9: 2SLS estimates of the relationship between continuous adoption and commercialization and yield across countries



Note: Full models are reported in SM16. Robust standard errors in parentheses. Additional controls include age and educational level of the household head, dependency ratio, whether the household head is male, household size, cooperative membership, training, access to public and private extension, access to credits both in cash and kind, distance to nearest urban and village market, crop rotation, mixed cropping, labour, market price, input costs, area of cultivation, off-farm income and soil type (*** p<0.01, ** p<0.05, * p<0.1)