



Tropentag, September 20-22, 2023, hybrid conference  
“Competing pathways for equitable food systems transformation:  
Trade-offs and synergies”

## Influence of social status and secondary activity on willingness to pay for a basket of climate-smart innovations in Benin: A case study of high-stress tolerant maize varieties

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### Abstract

Since its inception, smart agriculture (SA) has been recognised as a major trend in advancing agricultural development. As a result, encouraging farmers to use mobile devices and digital technology in their farming practices has become a top political priority worldwide. In the agriculture sector, the adoption and diffusion process of innovations or technological innovations are old phenomena. Farmers are known to signal their social rank through their adoption behaviours. As climate change research and the agricultural services industry continually expand climate-smart innovations like high-stress tolerant maize (STMA) varieties to reach producers, understanding the link between High STMA varieties and social status can open the door to exploring new markets for agricultural producers. This study examined the influence of producers' social status and secondary activity on the willingness to pay for a basket of climate-smart innovations like high STMA varieties in Benin. High-status producers were surveyed to test our hypothesis that producers will not be motivated to pay more for a basket of high STMA varieties when they are already high status than when they have low status. The results showed that, on average, producers with below-normal annual income in Benin were willing to pay significantly more for a basket of high-stress tolerant maize varieties than producers with above-normal annual income. Civil servants and incumbent producers and merchants were willing to pay more for a basket of high STMA varieties than their artisan and non-professional counterparts. However, the level of formal education did not have a significant impact on willingness to pay. Finally, our hypothesis was confirmed that producers with below-normal annual income reduced or eliminated the need to enhance social status through higher bids for baskets of high-STMA in Benin.

**Keywords:** High-stress tolerant maize varieties, side activity, social status, Willingness to pay