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# Health economic impacts and cost-effectiveness of aflatoxin-reduction strategies in Africa: case studies in biocontrol and post-harvest interventions

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# Abstract

Advances in health economics have proven useful in evaluating the cost-effectiveness of interventions, where the benefit usually takes the form of improved health outcomes rather than market outcomes. The paper performs health-based cost-effectiveness



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exceeds the cost of either biocontrol or the post-harvest intervention package to achieve those health benefits. The estimated cost-effectiveness ratio (CER; gross domestic product multiplied by disability-adjusted life years saved per unit cost) for biocontrol in Nigerian maize ranged from 5.10 to 24.8; while the estimated CER for the post-harvest intervention package in Guinean groundnuts ranged from 0.21 to 2.08. Any intervention with a CER > 1 is considered by the World Health Organization (WHO) to be ‘very cost-effective’, while an intervention with a CER > 0.33 is considered ‘cost-effective’. Aside from cost-effectiveness, public health interventions must be readily accepted by the public, and must have financial and infrastructural support to be feasible in the parts of the world where they are most needed.

Keywords: health significance risk assessment-modelling aflatoxins peanuts cereals

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