

# Food Loss in Agricultural Value Chains\*

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## Abstract

Food loss is endemic in agricultural supply chains in developing countries. Reductions in food loss can be attained through two methods: decreasing the perishability of crops through investments in storage technologies or decreasing the length of time it takes farmers to find buyers for their harvest. However, the lack of data and a robust theoretical framework limit our understanding of how the feedback between storage and search and matching frictions affects food loss. The goals of this paper are threefold. First, I conduct a survey and document patterns in crop disposition, storage practices, and food loss among farmers in Ghana. Second, I develop a model of agricultural trade that incorporates storage and frictional wholesale markets. Third, I estimate the model to analyze the counterfactual welfare effects of implementing agricultural policy at scale. To reduce food loss in Ghana to the level of the United States, storage technology would need to be improved by 70%.

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