

Post-Harvest Losses, Intimate Partner Violence and
Food Security in Tanzania

Martin Julius Chegere

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Abstracts

Post-Harvest Losses Reduction by Small-Scale Maize Farmers: The Role of Handling Practices

Concerns about food insecurity have grown in Sub-Saharan Africa due to rapidly growing population and food price volatility. Post-harvest Losses (PHL) reduction has been identified as a key component to complement efforts to address food security challenges and improve farm incomes, especially for the rural poor. Effective investment in PHL mitigation requires clear knowledge of the magnitudes of the losses, the drivers of these losses at each stage, and the cost of mitigation. This study quantifies PHL experienced by maize farmers; analyses the role of post-harvest handling practices in PHL reduction; and conducts a cost-benefit analysis of adopting good PH handling practices. The study finds that maize farmers lose about 11.7 percent of their harvest in the post-harvest system. About two-thirds of this loss occurs during storage. The study also shows that good post-harvest handling practices are highly correlated with lower PHL. The cost-benefit analysis indicates that the adoption of most of the good practices is on average economically beneficial. The study discusses the puzzle of why some farmers still do not adopt them and points out some policy implications.

JEL Classification: Q18; Q12; D61; C25

Keywords: post-harvest losses; post-harvest management; small-scale farmers; cost-benefit analysis; fractional response model

How economically effective are hermetic bags in maize storage: A RCT with small scale farmers

Uncertainty about possible economic gains from technology to reduce post-harvest losses may hinder adoption and lead to inefficient choices and a suboptimal level of losses. This study analyses the impact and the economic effectiveness of two randomized interventions with small-scale maize farmers in rural Tanzania on post-harvest loss reduction. Farmers in the first treatment group were given training on post-harvest management practices; those in the second treatment were given the same training and were in addition provided with hermetic (airtight) bags for storing maize. We show that both interventions had a significant effect in reducing storage losses but not pre-storage losses. The intervention with hermetic bags improved the quality of maize grain as perceived by farmers, increased the market price of maize, and reduced the cost of storage protection using insecticides. We show that both interventions are economically feasible. We suggest provision of training on post-harvest management practices and motivation to use hermetic bags as policy options to reduce post-harvest losses among small-scale farmers.

JEL Classification: C93; Q18; Q16; D61

Keywords: Randomized Controlled Trial; post-harvest losses; training; hermetic bags; small-scale farmers; cost-benefit analysis

Intimate Partner Violence and Household Food Insecurity

Developing countries have high rates of intimate partner violence (IPV) against women. The human capital model of health demand predicts that, if IPV affects women's health, it will lower their health capital, which in turn will reduce their productivity, resulting in lower earnings and low production of commodities that enter their individual and household utility functions. In this study, I test the hypothesis that IPV affects household food insecurity in Tanzania. I use the violence data from the first wave of Tanzania's national panel survey, combined with food security data from the second wave. I do not find strong empirical evidence that abuse of women affects household food security in either rural or urban areas. The study suggests some further areas of research.

JEL Classification: J12; J24; Q18

Keywords: intimate partner violence; productivity; food security

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Contacts: Martin Julius Chegere, Department of Economics, University of Gothenburg, Box 640, SE 405 30 Gothenburg; Email: martin.chegere@economics.gu.se or chegeremartin@gmail.com