

The impact of reducing food loss in Ghana

For the economy, producers and consumers

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As stated in the Malabo Declaration by the African Union, Ghana aims to reduce losses in the food supply chain by 50 per cent by the year 2050. But what will be the impact of such a measure on the Ghanaian producers and consumers in the economy? And how would it affect the economy? The scenarios in this study hope to provide some answers by using the global economic simulation model - MAGNET.

Food Loss: At present (2014), and proposed reduction (2025)

Presently 52% of rice and paddy, 17% of maize, 28% of fruits, vegetables and nuts, 7% of oilseeds and 86% of fish production in Ghana is lost on farm, during harvest, postharvest handling and processing, and distribution. By the year 2025, Ghana proposes to cut these losses by 50 percent, so 26% of rice and paddy, 8% maize, 14% fruits-vegetables-nuts, 3% oilseeds, and 43% of fish production will be lost.

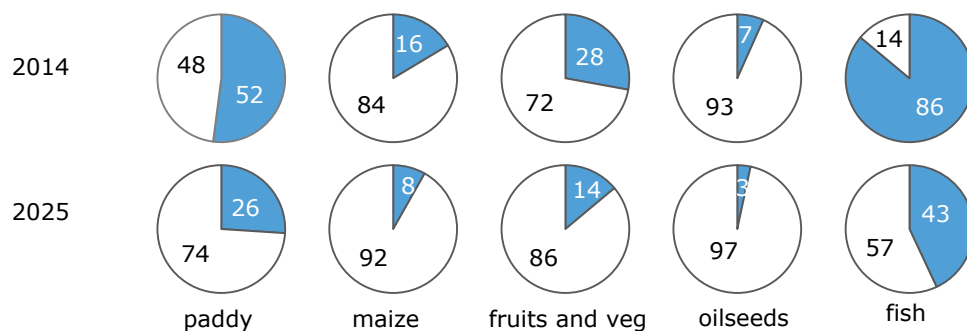


Figure 1: Food loss in the five commodity categories in 2014 and 2025.

Impact on Producers

The study looks at impacts of reducing food loss in 5 commodity categories at production, processing and distribution stages in the supply chain. Impacts on production volume, and total and per-unit costs of production are shown in Figure 2. While producers in all sectors get lower product price, revenues for rice and paddy producers increase due to substantial increase in output.

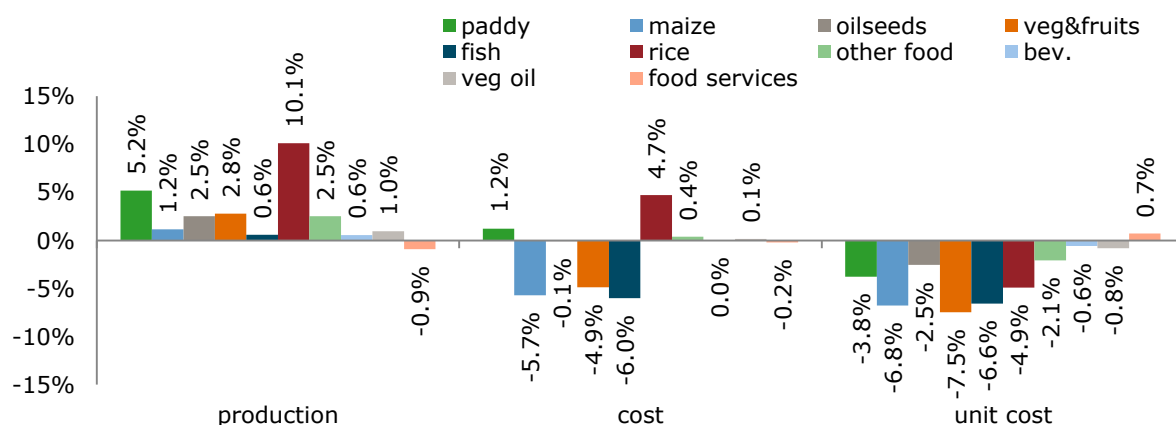


Figure 2: Impact on production, cost(Revenue) and unit cost (price) in Ghana

Impact on Consumers

Consumers get cheaper food (lower prices), and demand more food, however they might lose income if they work in primary sectors (paddy, maize, fruits-vegetables-nuts, oilseeds, fish production) and higher incomes in processing sectors (rice, other food, beverages, vegetable oil and food services). The impacts are shown in Figure 3.

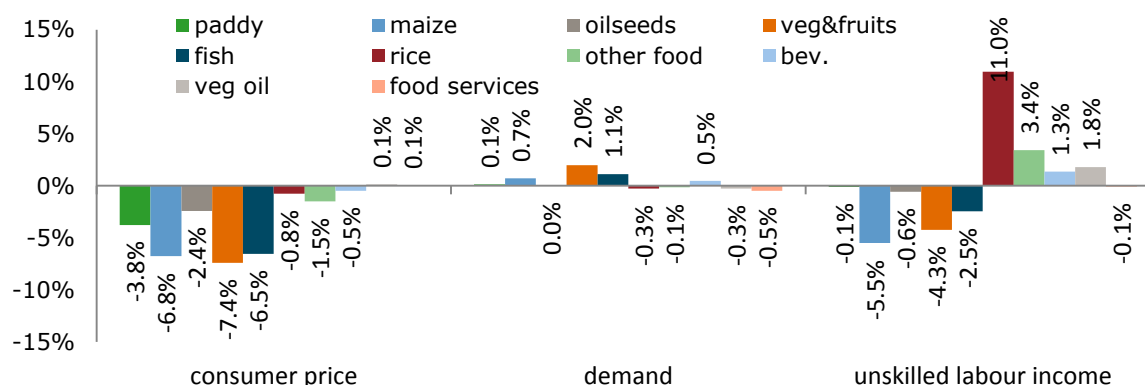
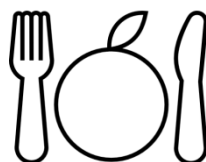


Figure 3: Impact on price, demand and unskilled labour income

Impact on Ghanaian Economy

When food loss is reduced by 50% for all 5 commodity categories, the study shows impacts on GDP, Trade balance, Welfare and calorie consumptions as follows. Ghanaian GDP increases by 0.8%. Ghana's Trade Balance for all 5 commodity groups also increases, with the maximum increase seen for paddy and minimum for oilseeds. Welfare in Ghana is seen to increase by about 19USD per capita by the year 2025. Calorie intake for the Ghanaian population is also seen to increase by 29 Kcal per capita per day.



Gross Domestic Product

+0.8%

Welfare

+19USD per capita

Calorie Intake

+29KCal per capita

Total Trade balance

-2.7%

Trade balance for Commodity groups

- Paddy (+39%)
- Maize (+15%)
- Fruits, vegetables and nuts (+23%)
- Oilseeds (+8%)
- Fish (+23%)

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