



Improving the evidence and policies for better performing livestock systems in Ethiopia

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Principal Investigator

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Objectives

- 1) Understand the dairy value chain.
- 2) Understand consumption and markets of animal source foods.

Food safety, modernization and milk prices in Ethiopia

Bart Minten, Yetimwork Habte, Kaleab Baye, Seneshaw Tamru

Introduction

Modern marketing arrangements are increasingly being implemented to assure improved food quality and safety. However, it is not well known how these modern marketing arrangements perform in early stages of roll-out.

Methods

Primary data from a large-scale survey of the value chain supplying milk and other dairy products from rural areas to Addis Ababa

Recommendations

Modern value chains to better reward hygiene and food safety in these settings are called for.

Research gaps

- Used observational data only

Future opportunities

- Better understand consumer preferences for raw milk

1. Low adoption levels of hygienic practices by dairy producers and no differences between traditional and modern milk value chains.

2. Suppliers to modern processing companies do more milk testing

3. No price premiums for the adoption of improved practices (only through non-price mechanisms)

4. No price differences between branded pasteurized and raw milk

5. Modern retailers sell pasteurized milk at lower prices.

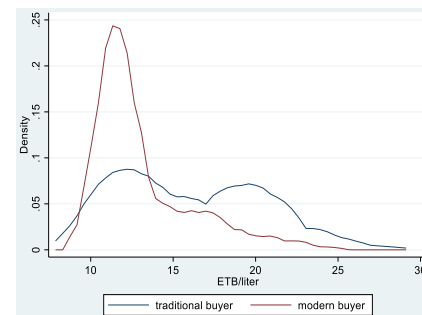


Figure 1: Price density function of producer prices for suppliers of modern versus traditional value chains

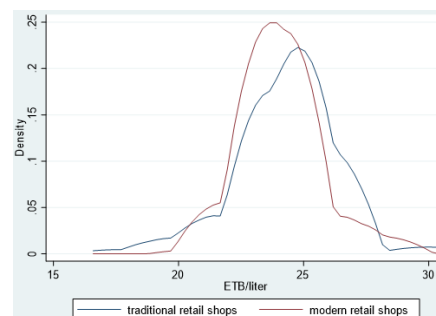


Figure 2: Price density functions for modern versus traditional retail markets in Addis Ababa

Dairy and COVID19 in Ethiopia

Agajie Tesfaye, Yetimwork Habte, Bart Minten

Introduction

- Understand the effects of the COVID-19 crisis on the dairy sector in Ethiopia

Methods

- A qualitative appraisal of the dairy value chain from rural producers to urban consumers in Addis Ababa (100 stakeholders interviewed)

Results

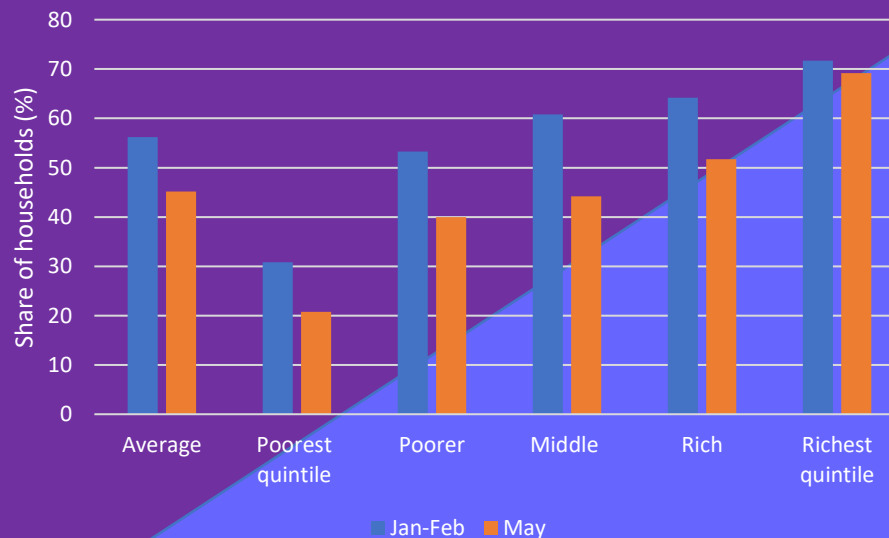
- More than half of the consumers in Addis Ababa reported to avoid the consumption of animal-source foods due to the COVID-19 risk. Those distributors, collectors, and rural farmers involved in the raw milk value chain severely affected by the COVID-19 crisis.
- Dairy production not yet affected.

Recommendations

- Close monitoring of the sector is required

Drop of 11% in share of households consuming dairy in Addis since start of COVID19 pandemic.

Heterogeneous effects: **strong drop in the demand for raw milk**, a steady consumption of pasteurized milk, and an **increase in purchases of powdered milk**; latter two are considered safer.



More Results

- Widely used feed prices – wheat bran and oilcakes in particular – did temporarily increase by 30 to 40 percent but prices came down because of the reduction in demand linked to the start of rain and the shift to grazing for cow feed for some producers.
- Prices of veterinary medicines increased also 20 percent since the COVID-19 crisis started, possibly because of interrupted international supply chains for such medicines.

Fasting and the dairy sector in Ethiopia

Authors: Eline d’Haene, Senne Vandevelde, Bart Minten

Introduction

The role of religion in shaping food choices, nutrition, and food value chains is not well understood.

Methods

Primary data from a large-scale survey of milk producers.

Results

Our results suggest that fasting habits are not a major explanation for the observed poor performance of Ethiopia’s dairy sector nor low milk consumption by children.

Availability and affordability – instead of fasting – are the main impediments to increased dairy consumption in Ethiopia.

Recommendations

To reduce the impact of fasting on the dairy sector in Ethiopia further, investment is called for in improved milk processing, storage, and infrastructure facilities.

Fasting reduces annual dairy consumption by 12 percent nationally.

Farms adapt to declining milk demand during fasting by **increased processing** of milk into storable products – fasting contributes to larger price swings for these products.

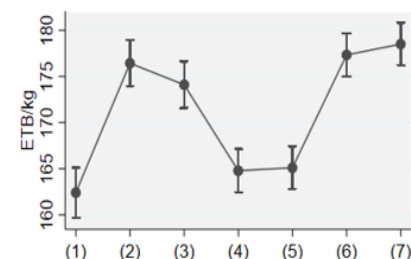
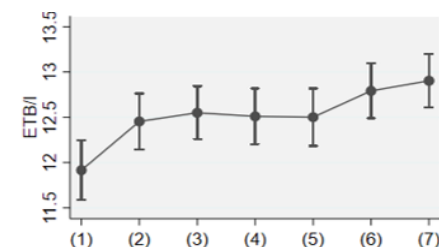
Fasting is associated with **increased milk consumption by the children of dairy farmers**, because of excess milk is available during fasting periods.

Fasting participation

	Observations	Participate in any fasting (%)	Number of fasting days	
			Average	SD
Young children (5 to 6 years old)	161	5.0	5.2	29.52
Older children (7 to 9)	356	22.7	34.1	65.97
Adolescents (10 to 19)	1,496	64.5	98.4	77.63
Adults (20 to 64)	1,744	88.5	140.4	57.91
Elderly (65+)	189	89.4	141.6	56.86

Fasting leads to large swings in butter prices, but not very much in milk prices

Milk



Increasing prices of nutritious foods in Ethiopia

Fantu Bachewe, Bart Minten, Kalle Hirvonen

Introduction

Prices of agricultural commodities are very important for consumption decisions.

Methods

Analyzed data from consumer price surveys from the Central Statistical Agency on 116 retail markets.

Results

Prices of nutritious products rapidly increasing; also for Animal Source Foods. Important as high price elasticities in Ethiopia. Noted price increases in last decade would have led to a 25% reduction in beef and dairy products consumption (ceteris paribus; but incomes increased to counterbalance).

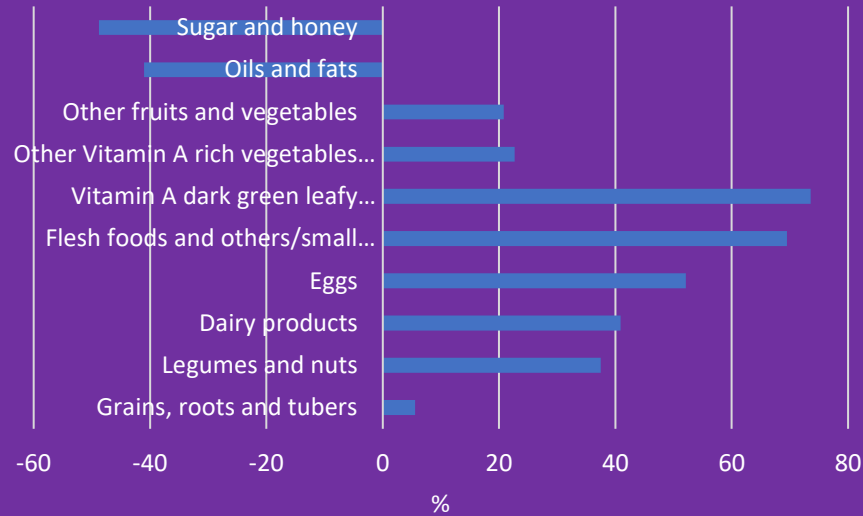
Recommendations

More attention required to production of nutritious foods as to keep prices low. in these other sectors

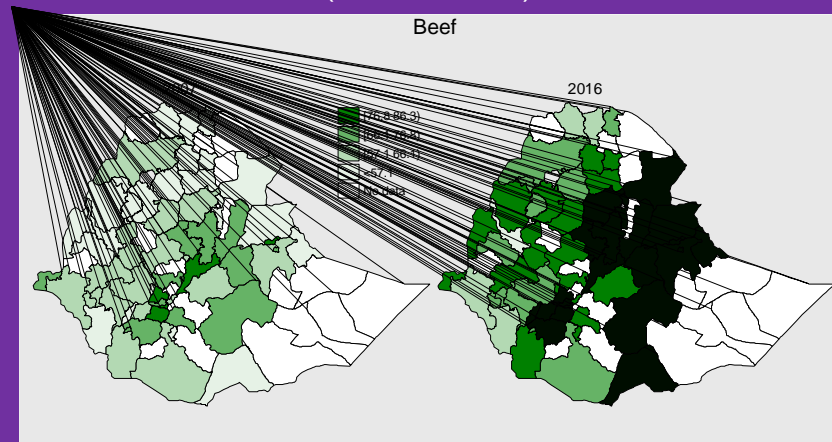
Research gaps or future opportunities

Supply issues in the face of rapidly increasing demand; Costs increases in livestock rearing (wages, land, feed); International price influence.

Price changes (2018 compared to 2015, %)



Real prices by zone for beef (2007 – 2016)



Ethiopia's transforming dairy sector

Bart Minten, Yetimwork Habte, Agajie Tesfaye, and Seneshaw Tamru

Introduction

Document the transformation processes of the dairy sector in Ethiopia

Methods

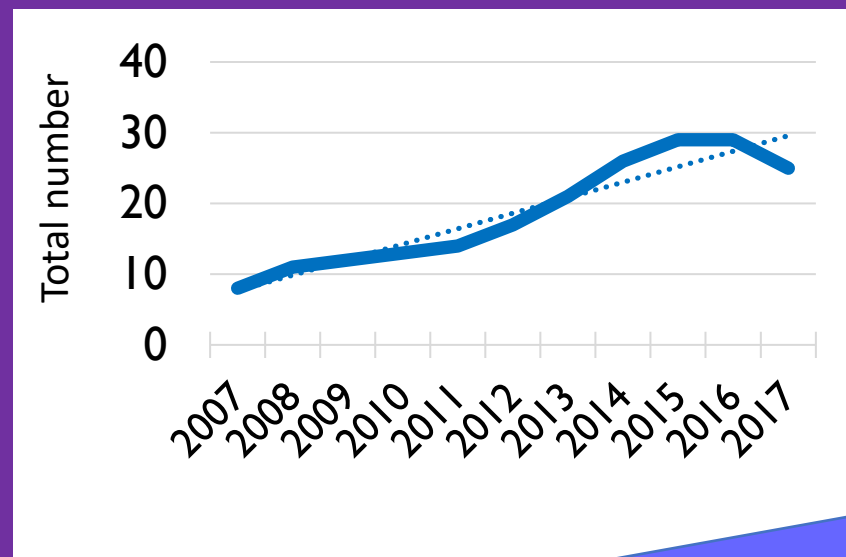
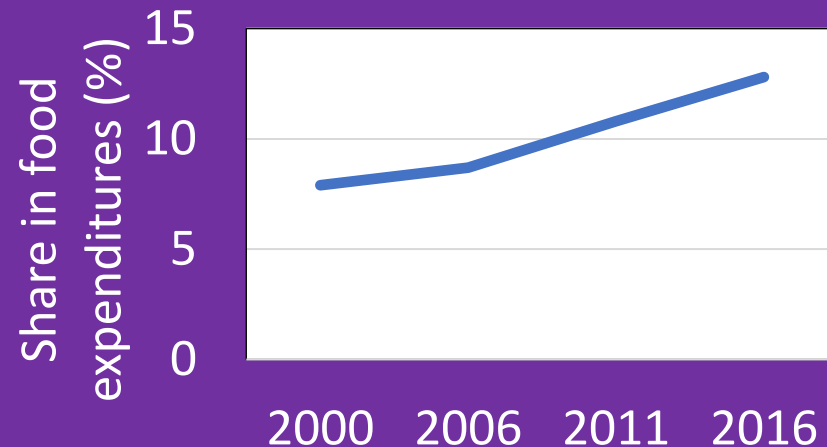
Administrative data, secondary data, and primary data from a large-scale survey of milk producers

Results

Downstream: a rapid increase in expenditures on dairy products by urban consumers, especially among the better-off.

Midstream: the number of dairy processing firms in Ethiopia tripled, supplying a significant part of these dairy products. The number of dairy traders increased rapidly as well, with competition between them becoming more intense over time.

Increase of dairy expenditures by households in Ethiopia



More Results

Upstream (at the production level):

- improved access to livestock services,
- higher adoption of cross-bred cows,
- a shift from grazing to commercial feeds,
- an increase in milk yields,

And also:

- expanding liquid milk markets,
- a sizable urban farm sector supplying almost one-third of all liquid milk consumed in the city,
- an upscaling process with larger commercial dairy farms becoming more prevalent.

Recommendations

- More effort around artificial insemination is needed; adoption is improving but low.
- Given the large returns to milk yields associated with the use of commercial pre-mixes, creating an enabling environment for these formal feeding firms to flourish seems needed.
- More attention should be paid to urban farming (has important environmental and health considerations).
- More effort is needed to further stimulate productivity growth through improved input use leading to higher productivity levels in the sector.

Inclusiveness in access to livestock services in Ethiopia

Bart Minten, Yetimwork Habte, Agajie Tesfaye, Seneshaw Tamru

Introduction

Access to livestock services influences adoption of improved practices in dairy.

Methods

Administrative data and primary data from a large-scale survey of milk producers

Results

Significant improvements in livestock extension and health animal service delivery and in the reduction of distances to walk to get medicines for livestock over the last decade. While the situation of more remote and relatively smaller farmers has improved, they benefit however significantly less.

Recommendations

More effort is needed to include remote and smaller farms in service delivery.

Remote farmers are **significantly less serviced** by public extension and animal health workers; however **significant improvements** for all over time

Smaller farms are also less served

