

# Markets for Lemons in African agriculture

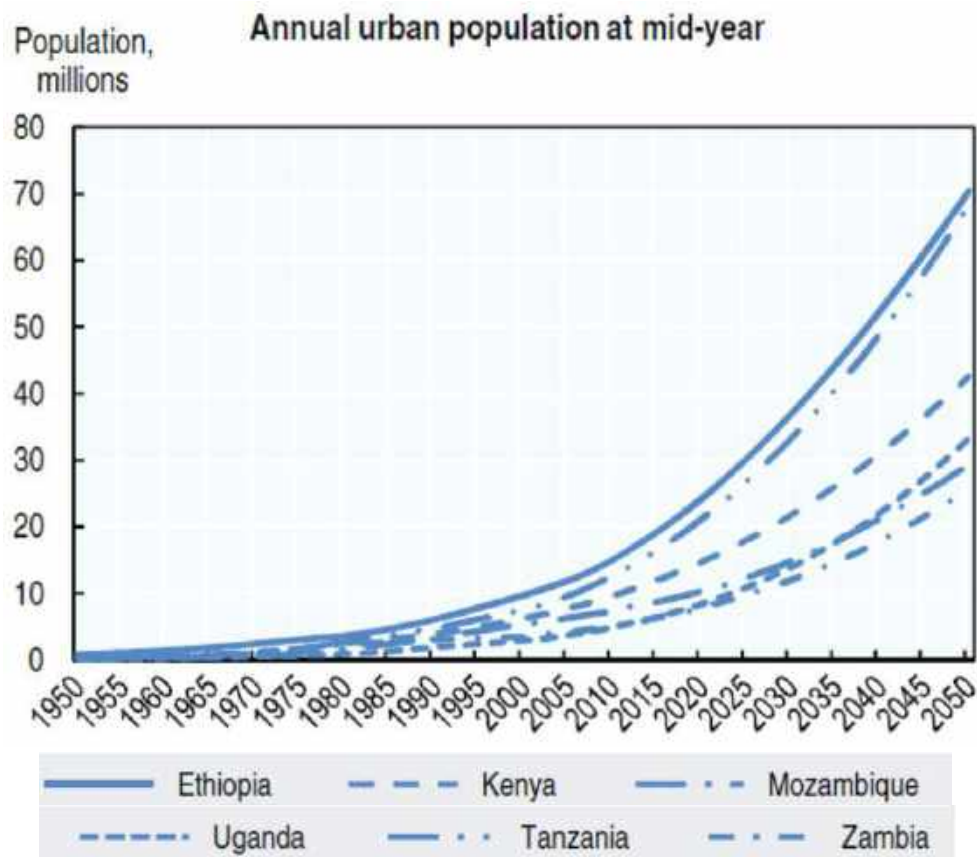
## Wheat in Ethiopia

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November 2018, FERDI

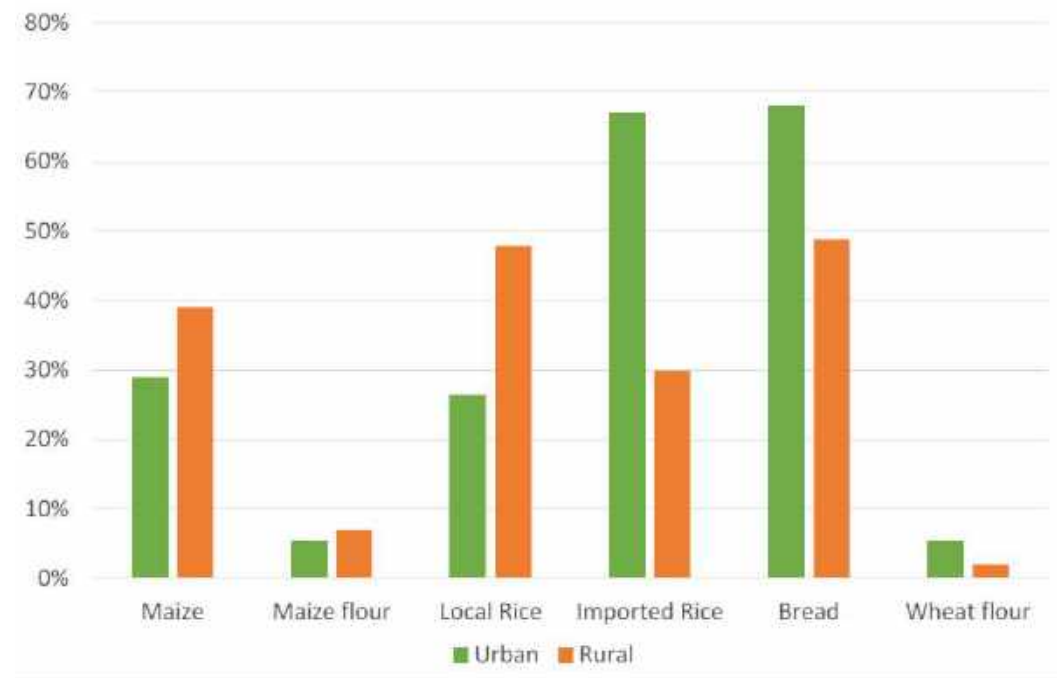


# Increased demand for -- quality -- staples



Source: Brookings, based on UN DESA (2014)

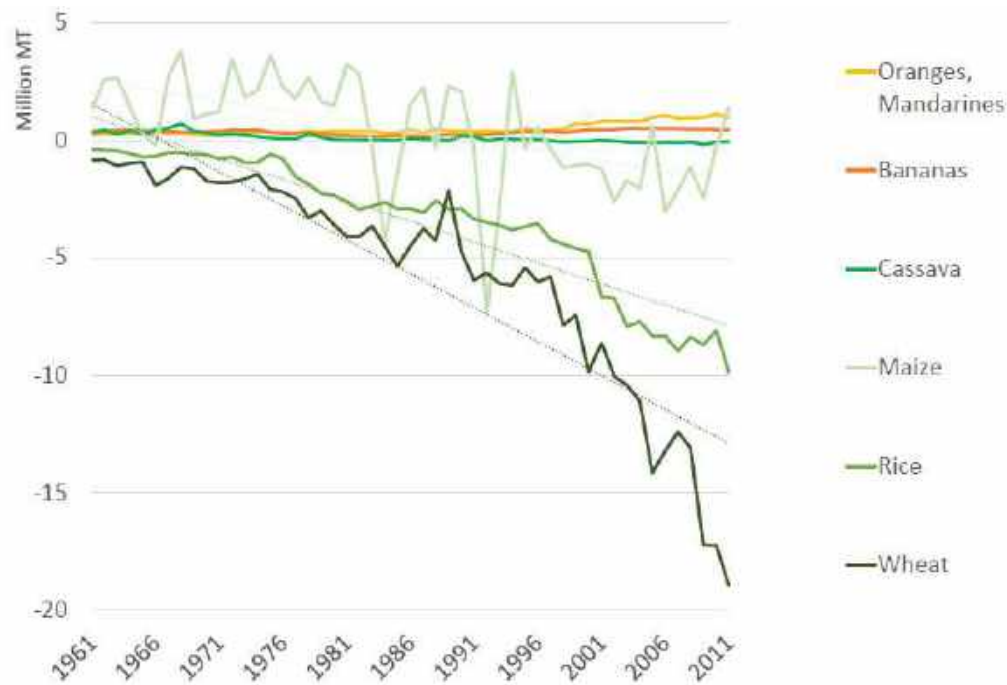
% hh having consumed food item at least once in past 7 days



Source: LSMS-ISA survey data for Nigeria

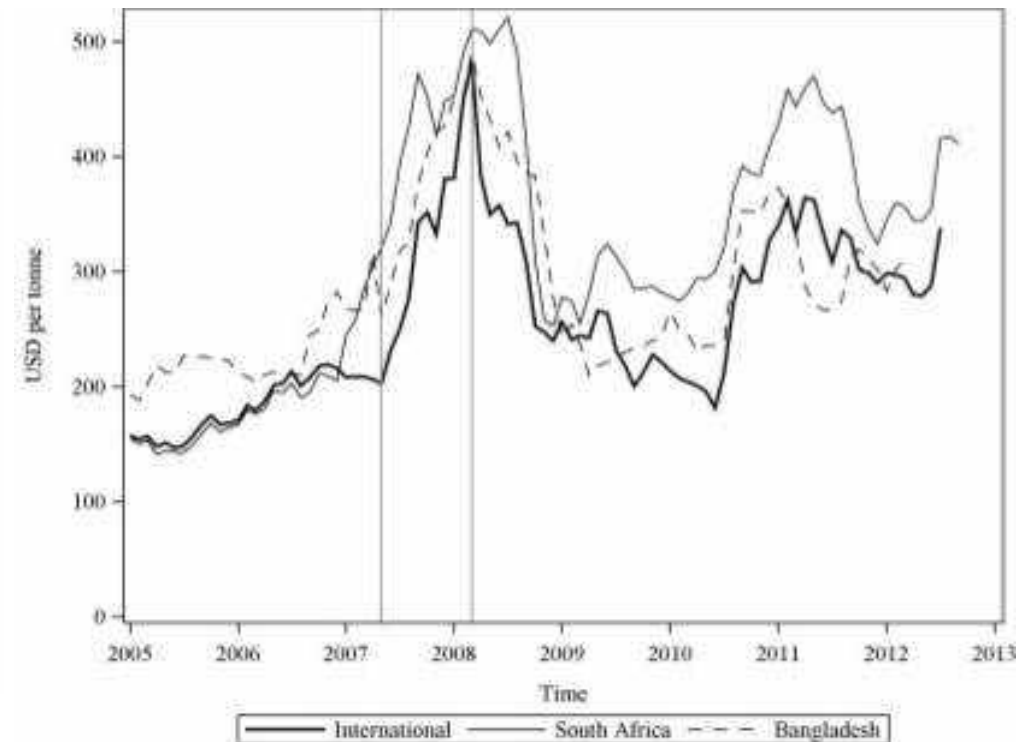
# Reliance on home production ?

Net exports, selected commodities, 1961-2011



Source: FAO

Wheat price (\$/ton)



# Issues of G&S for small-scale staple producers



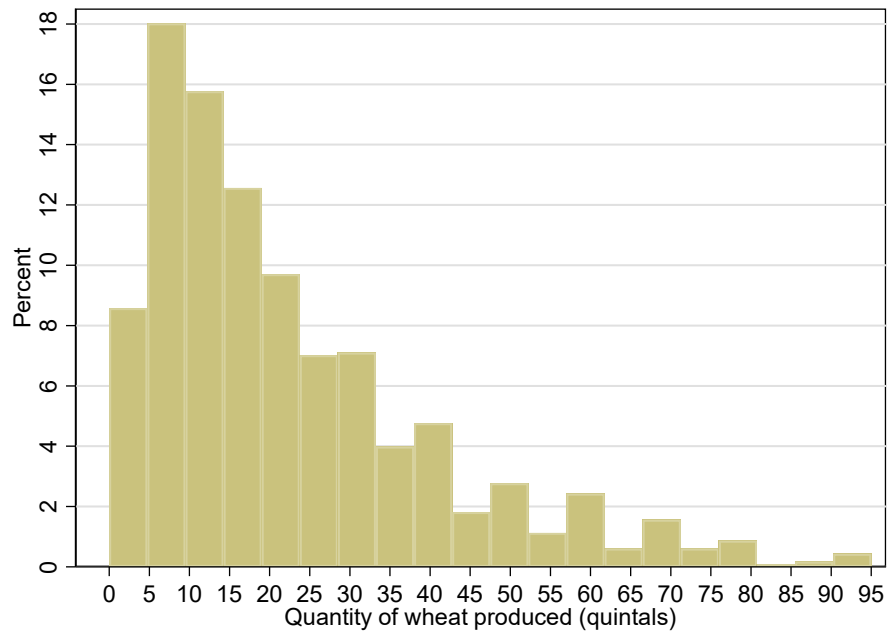
Source: 18 country diagnostic by IFPRI

- Export crops:
  - Clearly defined G&S
  - Explicit quality premiums
  - Compliance with G&S mandatory
  - Smallholder aware and capable
- Staple crops: when they exist, G&S based on international trade levels
  - Unattainable
  - Expensive to assess (given size of transaction)
  - Compliance with G&S voluntary
  - **Unknown**

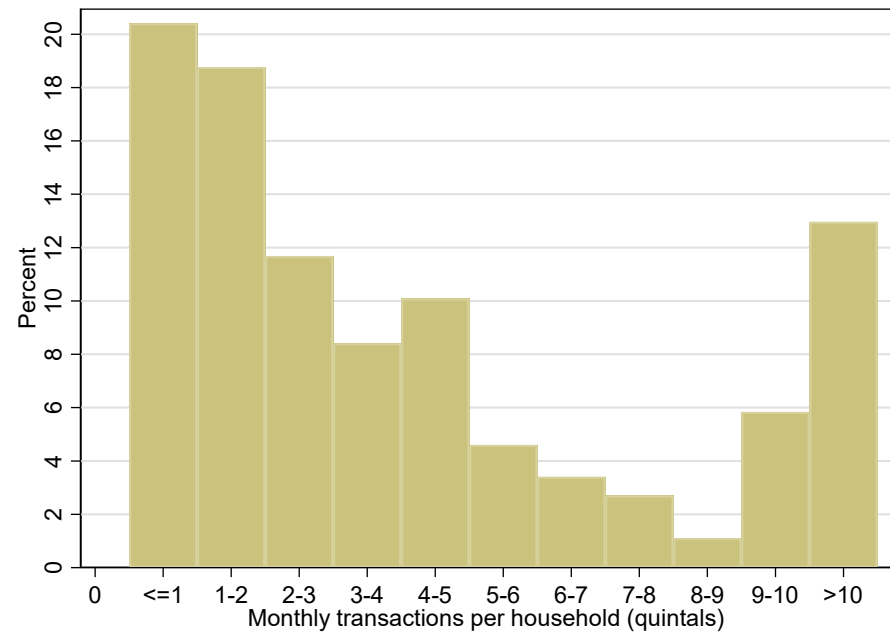
# The case of wheat producers in Ethiopia

## Fact #1 – Small producers = small transactions

Production



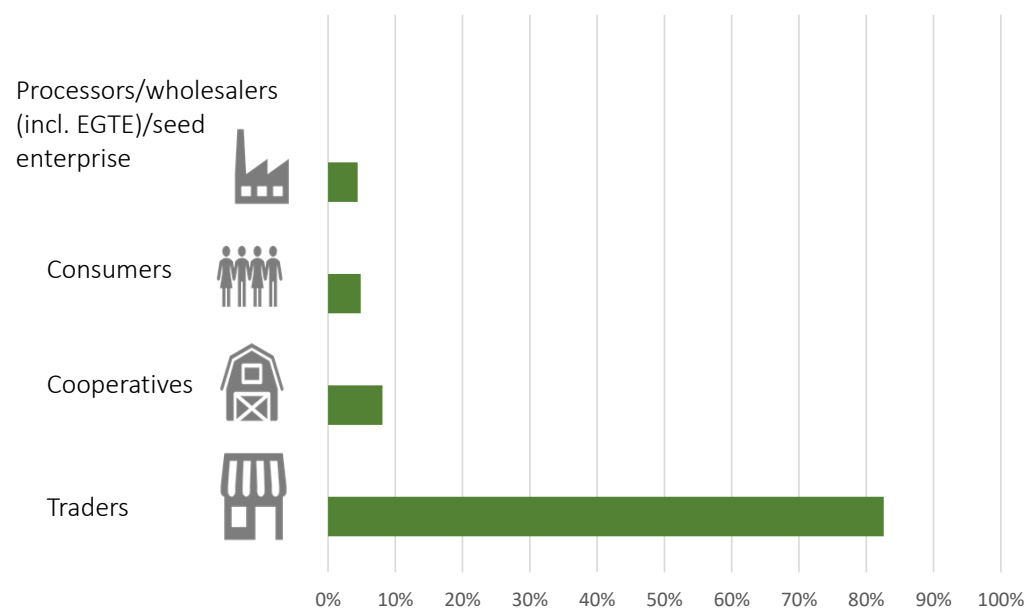
Transactions



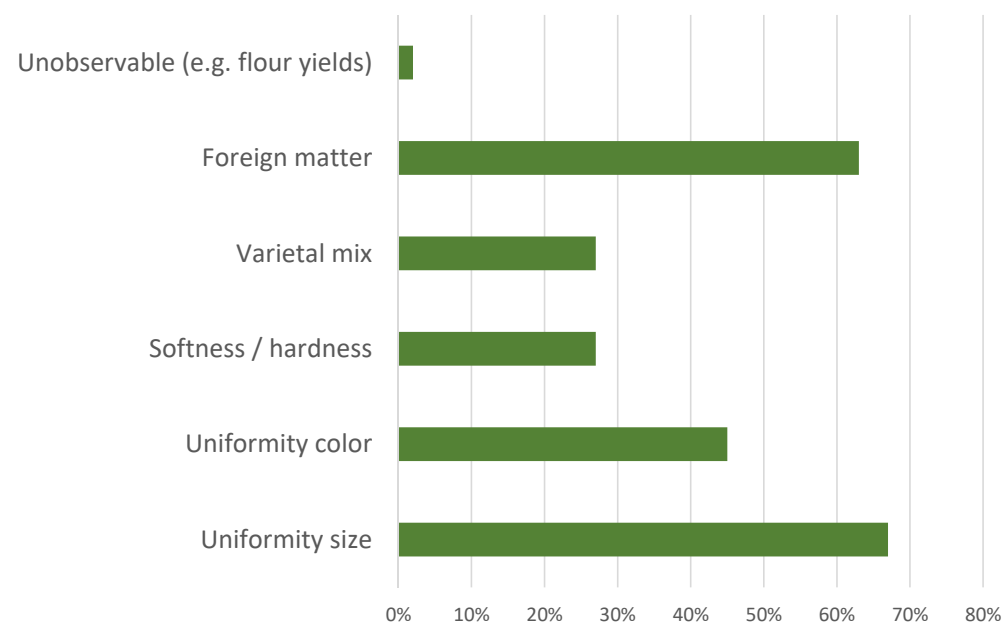
Source : IFPRI Wheat survey, 2015

## Fact #2 – Smallholders sell to aggregators with incomplete accounting of quality

Aggregated farmers production being sold to...

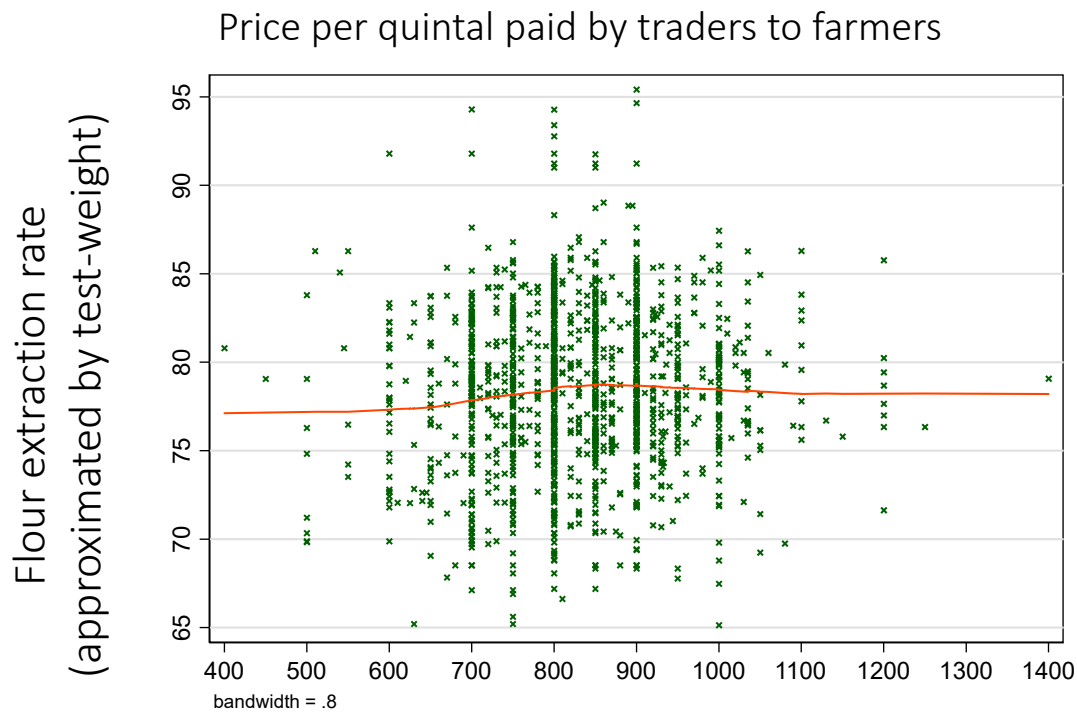


Quality attributes checked before sales

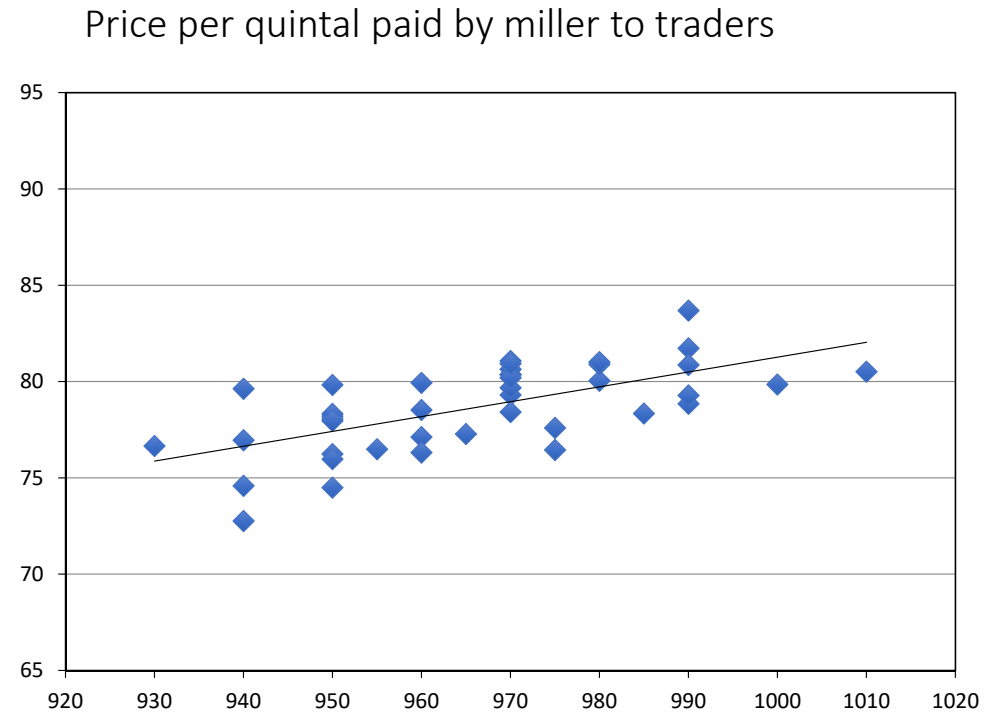


Source : IFPRI Wheat survey, 2015

# Fact #3 – Unobservable does not pay at bottom of value chain. Aggregation lowers average quality



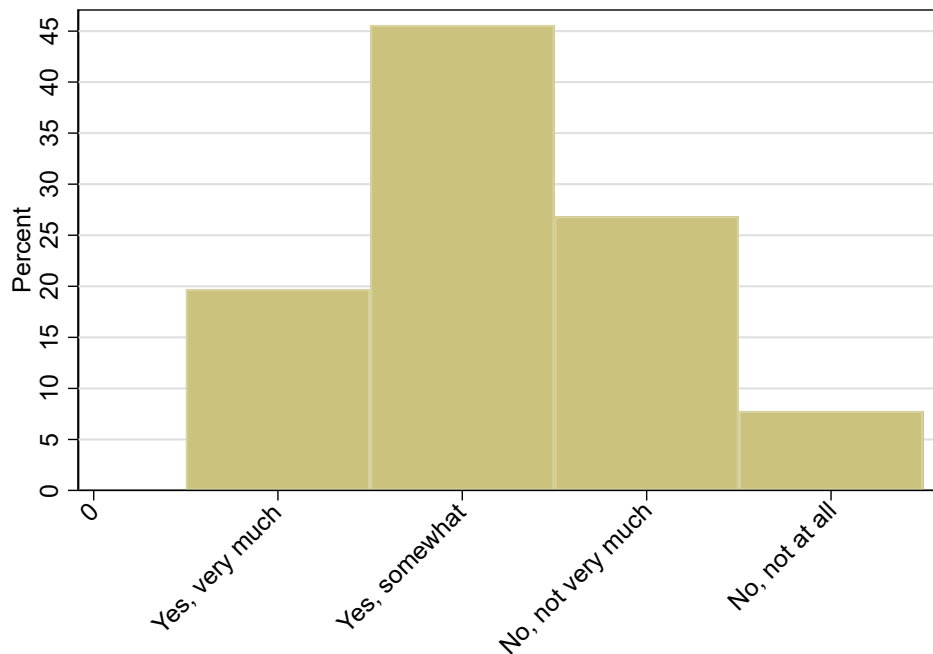
Source : IFPRI Wheat survey, 2015



Source : Miller's administrative data in Addis Ababa, 2015

## Fact #4 – given unobservable quality, trust is important

Do you trust traders' scales?



Test : trained 540 farmers to assess validity of traders' scales using their body-weight



66%

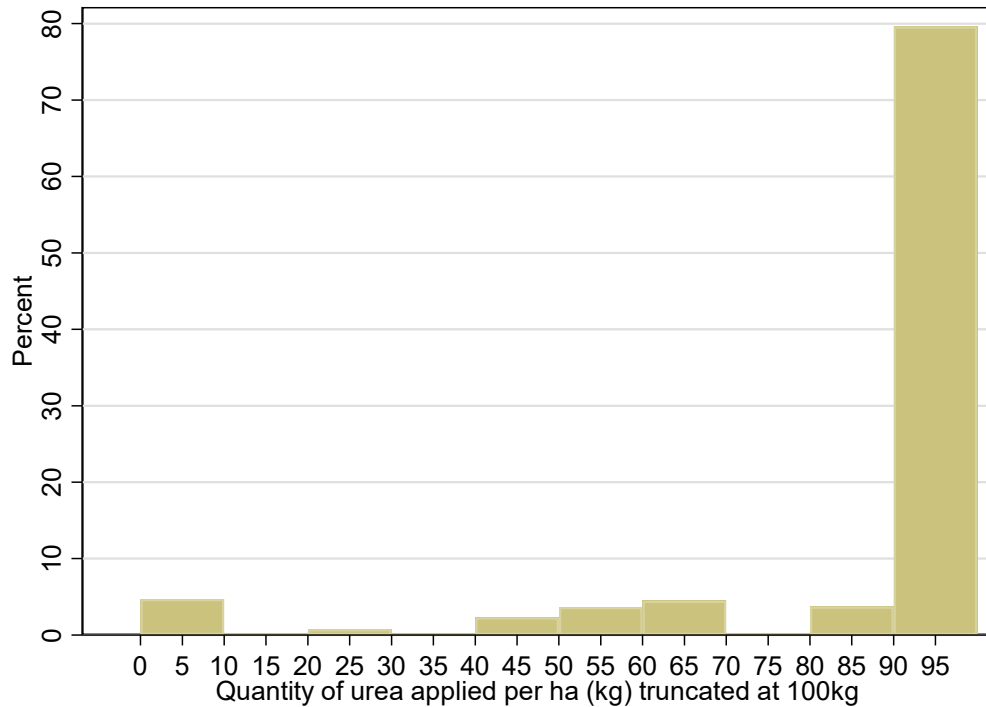
Found traders' scale to underestimate their body weight

by **3kg** on average

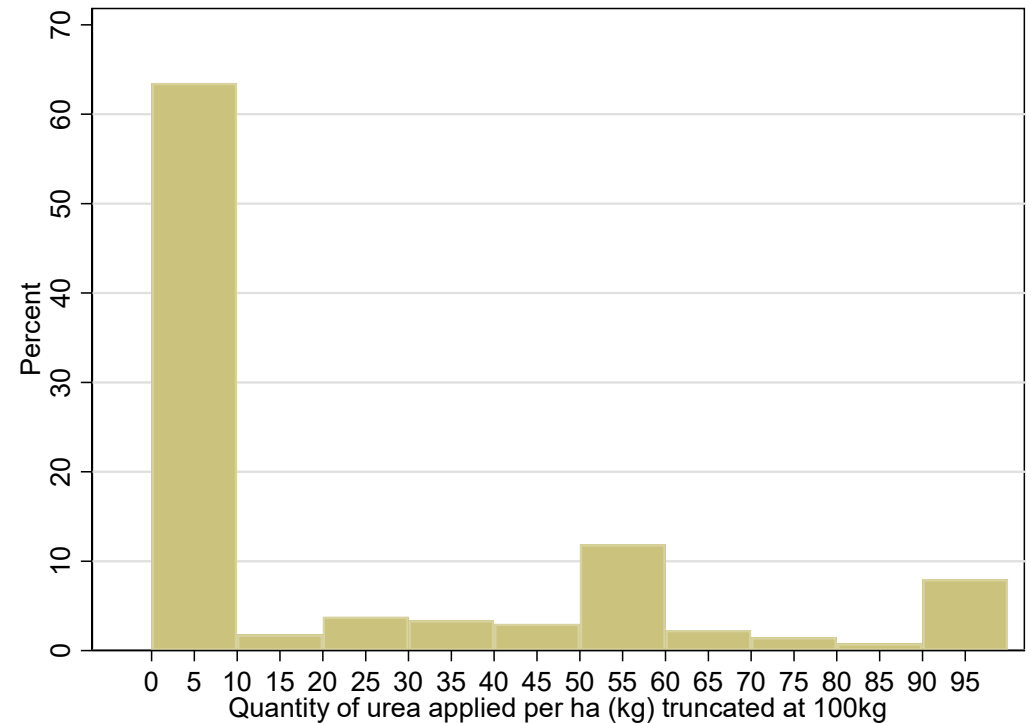


# Fact #5 – Low investments to enhance unobservable quality

East Gojam and North Shewa: poor soil quality,  
N → ↑ yields



Bale and Aris: good soil quality  
N → ↑ (unobservable) quality

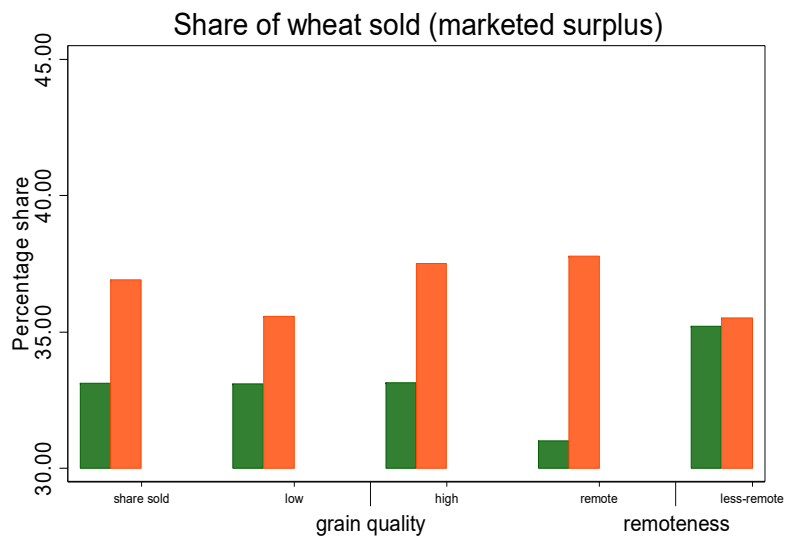


# Reducing information asymmetries

One way to fix market issues: reduce information asymmetries

- Interesting case: farmers miss information about the quality of their own product
  - Quality partly depends on some factors potentially unknown to farmers (e.g. soil quality)
- What happens when farmers learn about the quality of their own product?
  - Diffuse simple test-weight measures through video-mediated extension in Ethiopia
  - Collect sample for wheat from each farmer to independently assess quality





15% farmers in treatment group did check the (unobservable) quality of their grain

Farmers sell more and obtain better prices upon finding that their wheat is of higher quality (flour extraction rate).

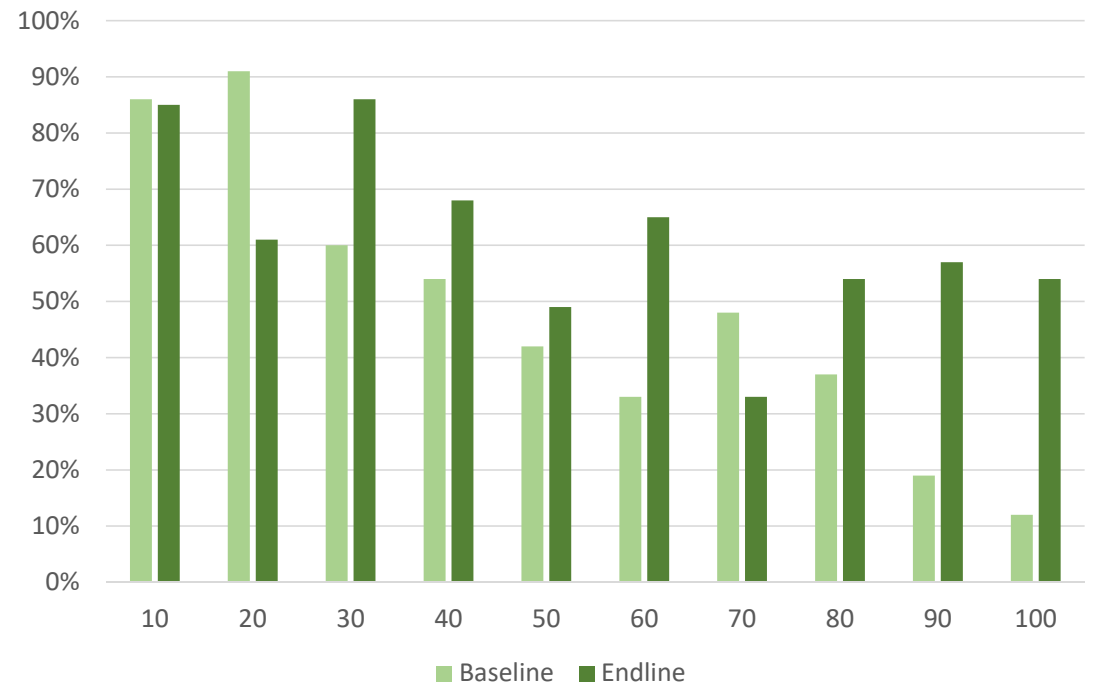


Farmers tend to sell less through cooperatives when the revealed quality of their wheat is higher (aggregation issue)

Higher investments in quality enhancing inputs in following years

- Strong reaction to a rather light-touch intervention.
- Producers react strongly to quality signals and adapt their relationship to markets
- Increased willingness to pay for independent quality certification

Would you be willing to pay « X birr » per quintal for an independent quality and weight certification service? (%)

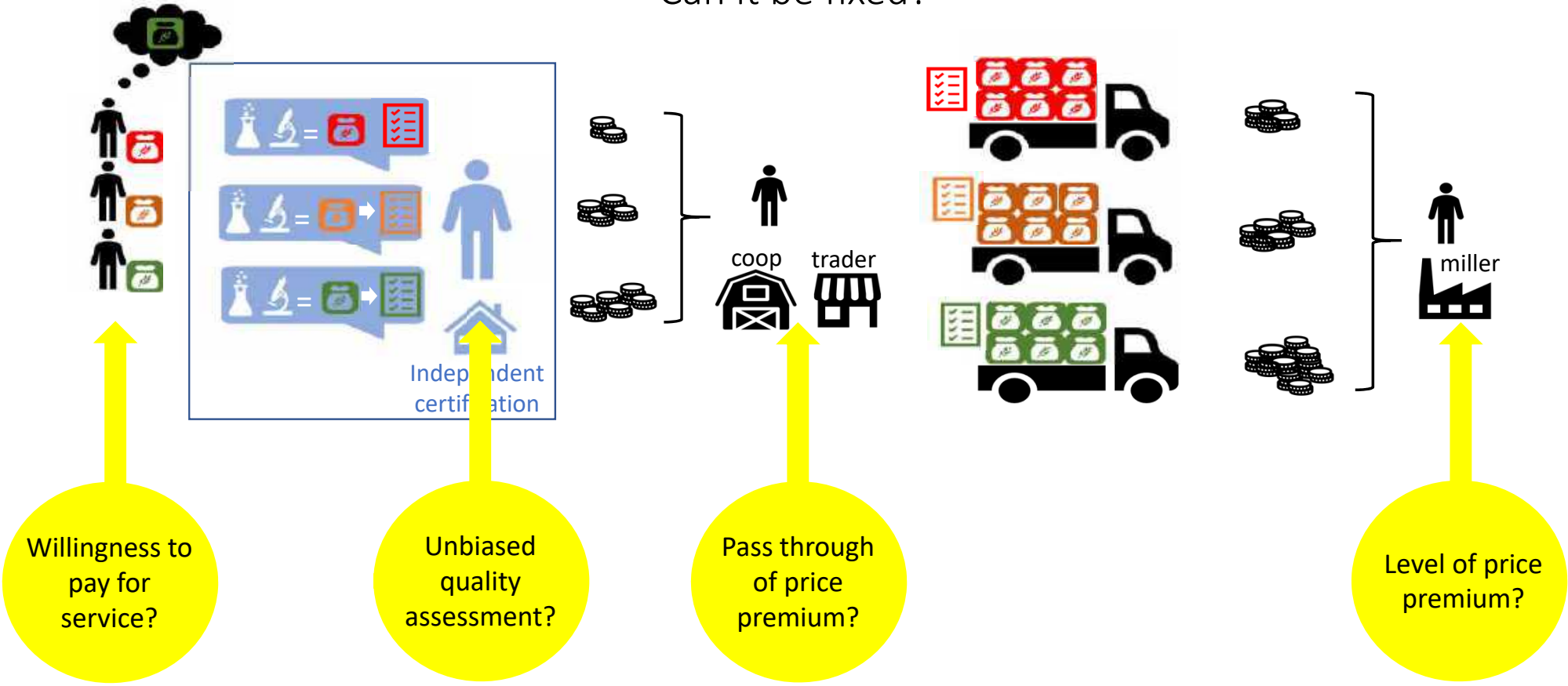


Source : IFPRI Wheat survey, 2015

# Current organisation of the Wheat value chain in Ethiopia



Can it be fixed?



Willingness to pay for service?

Unbiased quality assessment?

Pass through of price premium?

Level of price premium?

# Conclusion

- Inclusive value chains : where small farmers can participate without needing protection from costly trade policies
- Supply-side intervention (inputs, extension etc.) will not work unless clear incentive from output markets.
- “Small” → necessary aggregation → potential incentive dilution
- “Fixing” output markets for small scale farmers requires more piloting and learning.