



Fertilizer Quality: Effects of competition in rural markets

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**STAKEHOLDER
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Theme
**Shaping Sustainable
Futures: The Influence of
Policies, Programs and
Economic Factors in
Kenya's Agriculture and
Well-Being**



Introduction

- Fertilizer quality remains a key challenge in SSA
- Concerns over quality regardless of how fertilizer is accessed
- Competing chains through which farmers access fertilizer
 - Government
 - Private sector
 - Farmer associations
 - NGOs
- Quality affected
 - Information asymmetries
 - Market failures (incentives to provide bad quality)
 - Weak governance & industry regulation
 - Poor handling & storage

ROGUE OFFICIALS

Kenya: Government knowingly supplied fake fertiliser to farmers, agency says

By Victor Abusa

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EXPLAINER: How to identify real and fake fertiliser

Fertilizer Association of Kenya chair Bimal Kantaria says one cannot just say that the fertiliser is fake by just looking at it

NCPB sets in motion plans to compensate farmers for fake fertiliser

Business | By Titus Tso | Apr 24, 2024



How rogue traders made billions from fake fertiliser

Sunday, June 10, 2018 — updated on June 28, 2020

Home → Business and Economy

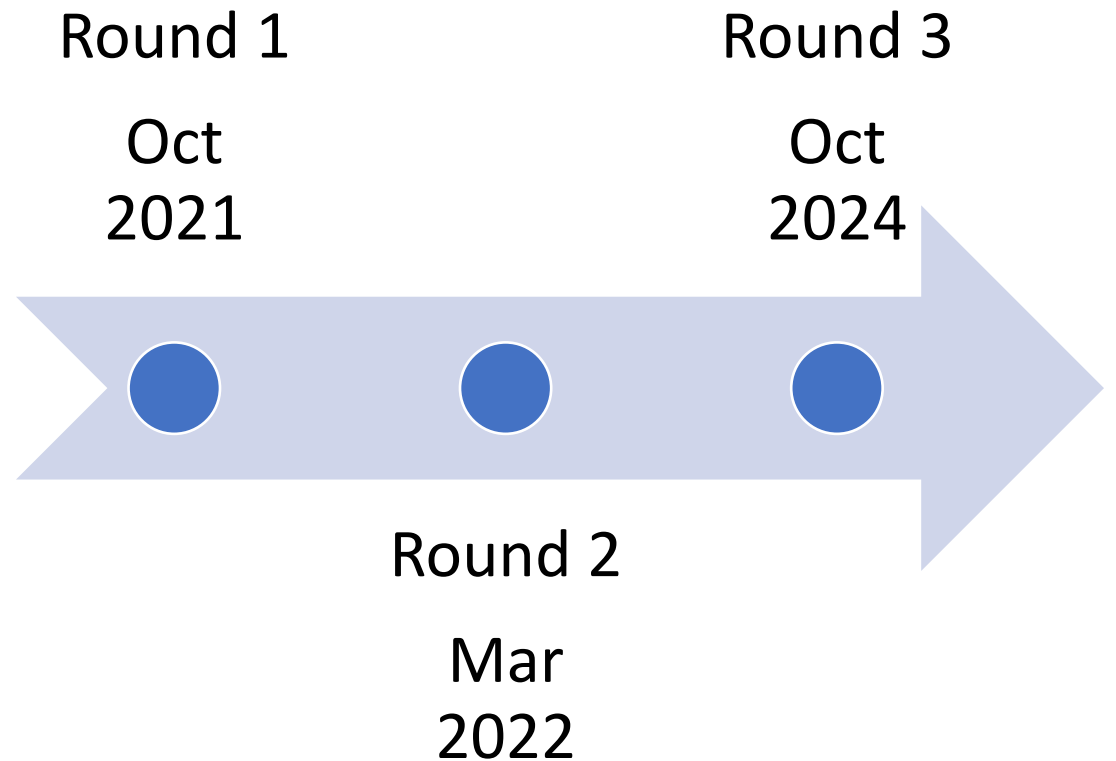
BUSINESS AND ECONOMY

Cereals board officials conspired with traders to sell fake fertilizer to farmers

Monday, June 11, 2018 at 12:43 PM • by Jacob Oryango • 3 min read

Study design

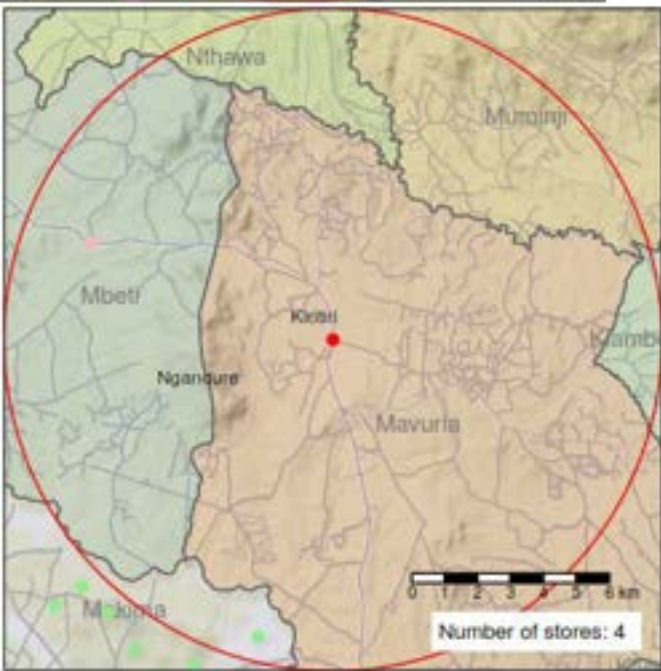
- Estimate the effects of competition on quality
 - Does the entry of a quality-conscious seller (brand reputation) improve the quality of inputs offered to farmers? Farmers beliefs on what they are purchasing
- Experimental design covering 100 markets (10 km radius) in western & central Kenya
 - Census – all agro-dealers in each market
 - Firm survey – 10 agro-dealers in each market
 - Mystery shopping – purchase seed & fertilizer and conduct lab test





Pilot location: Runyenjes

- Health Center
- Educational Center
- Agro-Dealers
- Places of Worship
- Police Station
- Pilot location



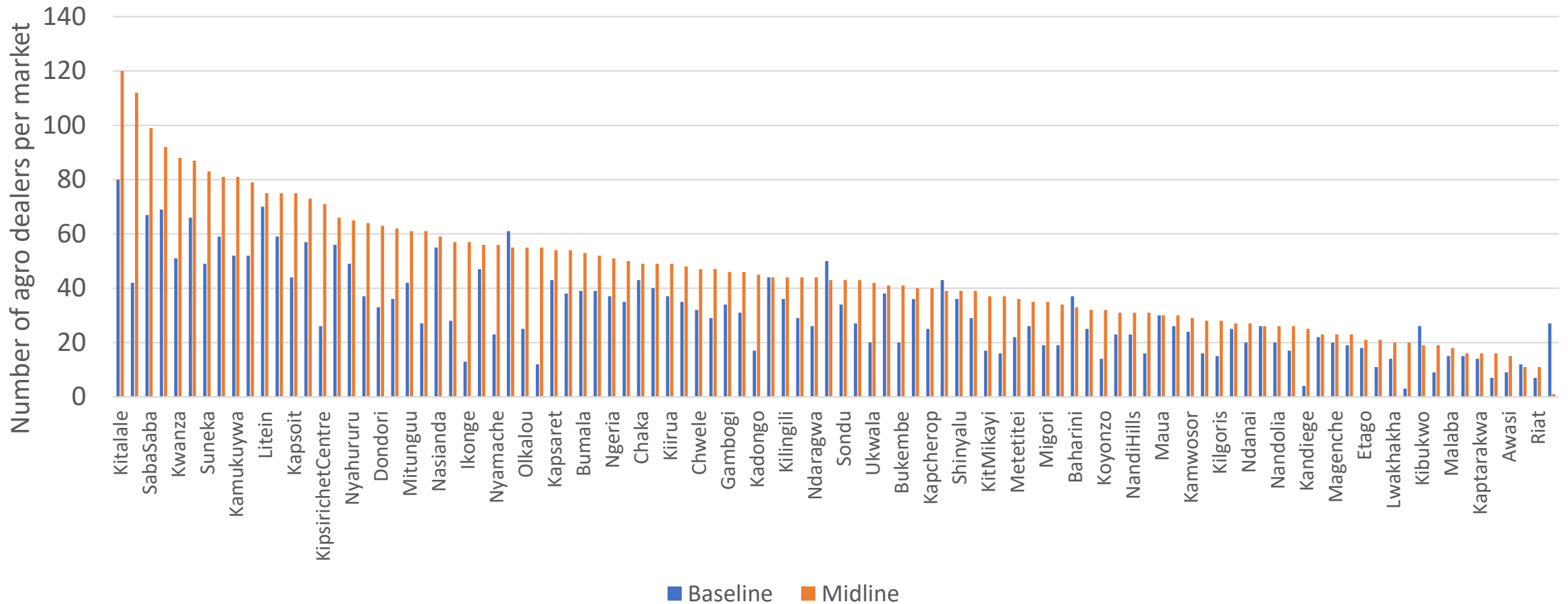
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Agro-dealers is highly competitive (45% new agro-dealers in midline)

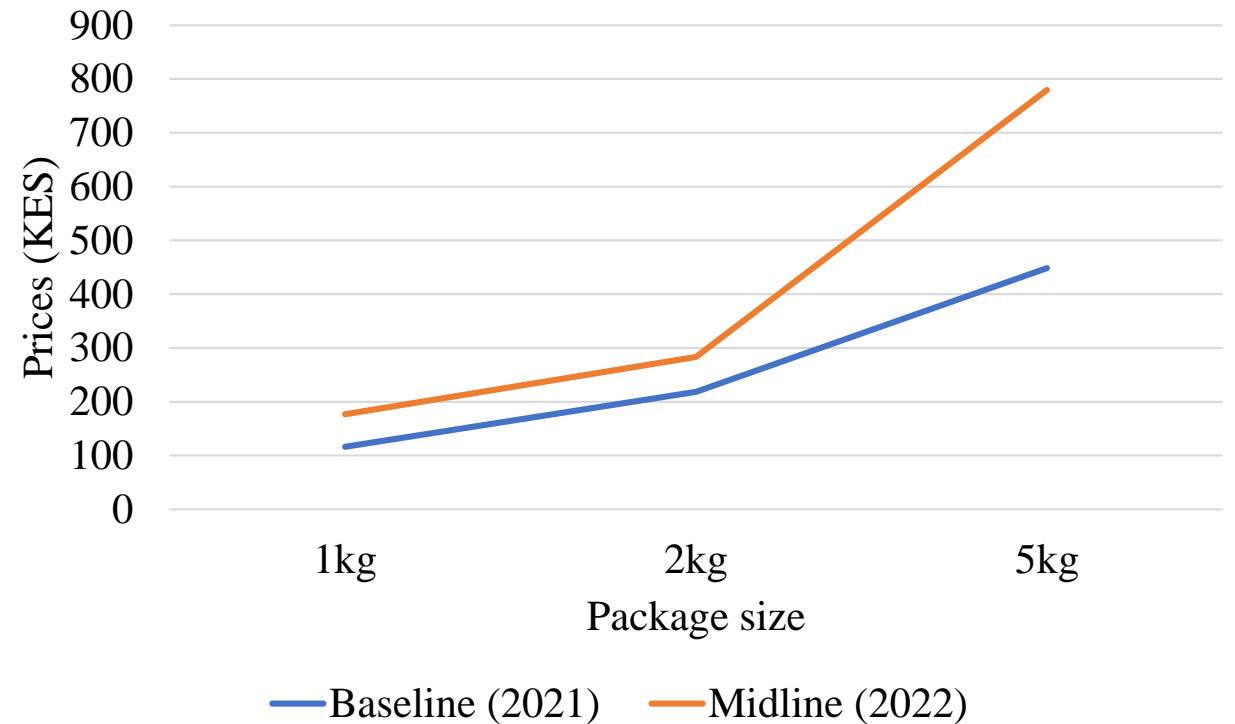


Policy & prices had an effect on access

Average number of bags stocked

	Baseline		Midline	
	Mean	S.E	Mean	S.E
Urea	912	124	500	300
NPK	1,161	221	4,000	
DAP	849	86	442	166
CAN	1,927	390	508	254
Foliar feed	1,938	458	327	66
Lime	1,750	407		
TSP	322	98	684	277
SSP	500		500	
Yara	1,200	580		
Baraka	737	223	430	147
Kenoch Panda power	150	50	55	46
Mavuno	1,260	266	841	119
Organic	517	130	116	31
Minjingu	1,500			
Winner	3		1,192	231

Fertilizer prices (KES per unit)



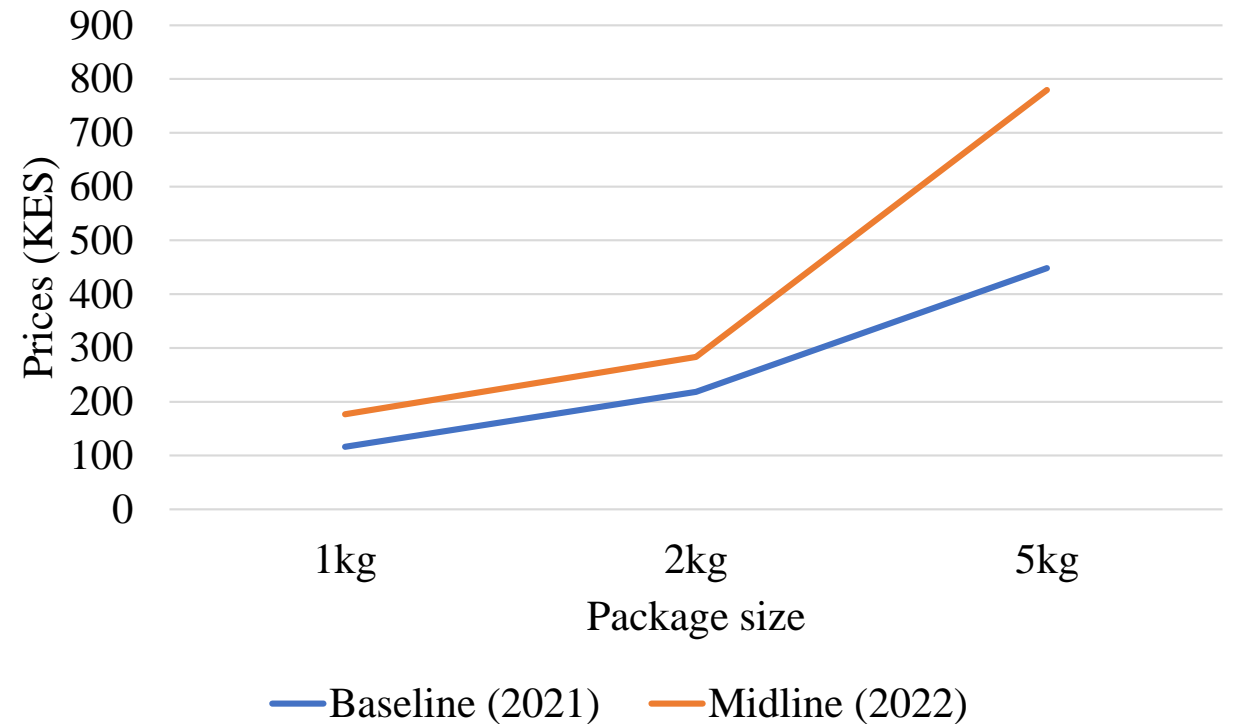
- Agrodealers reduced the volumes stocked for all brands except NPK & TSP
- Rebagging of fertilizer increased by 52% in the midline

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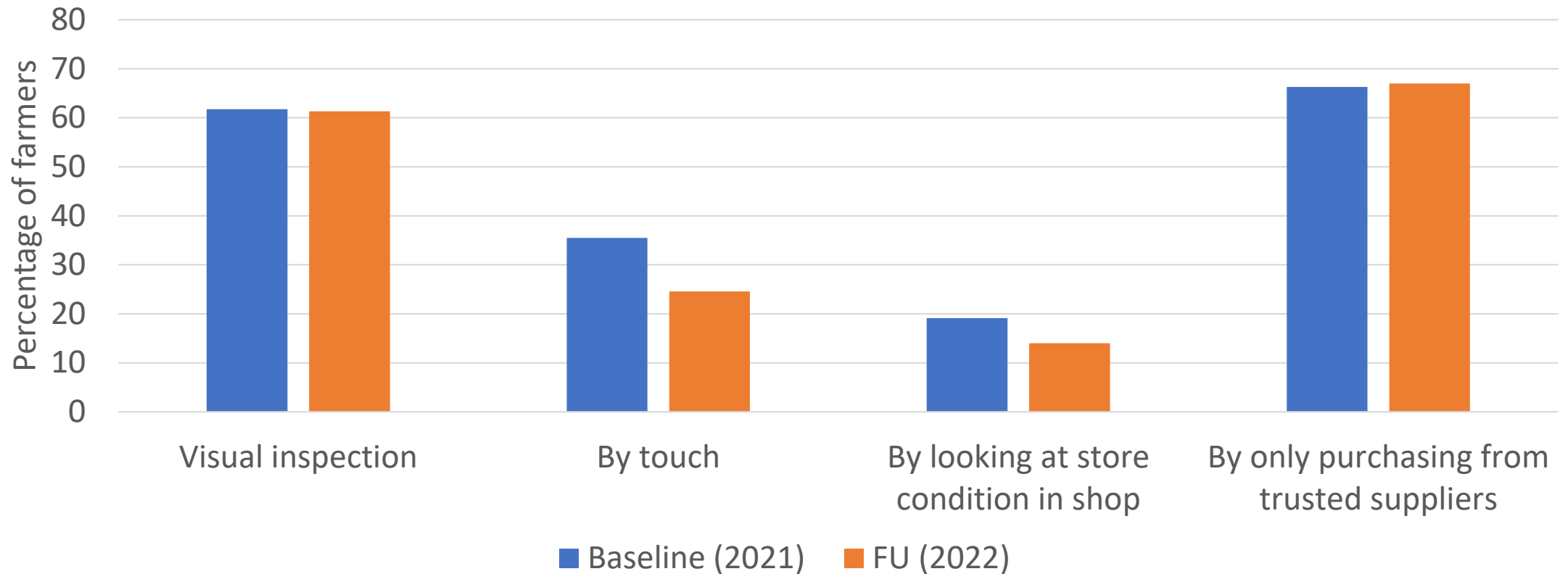
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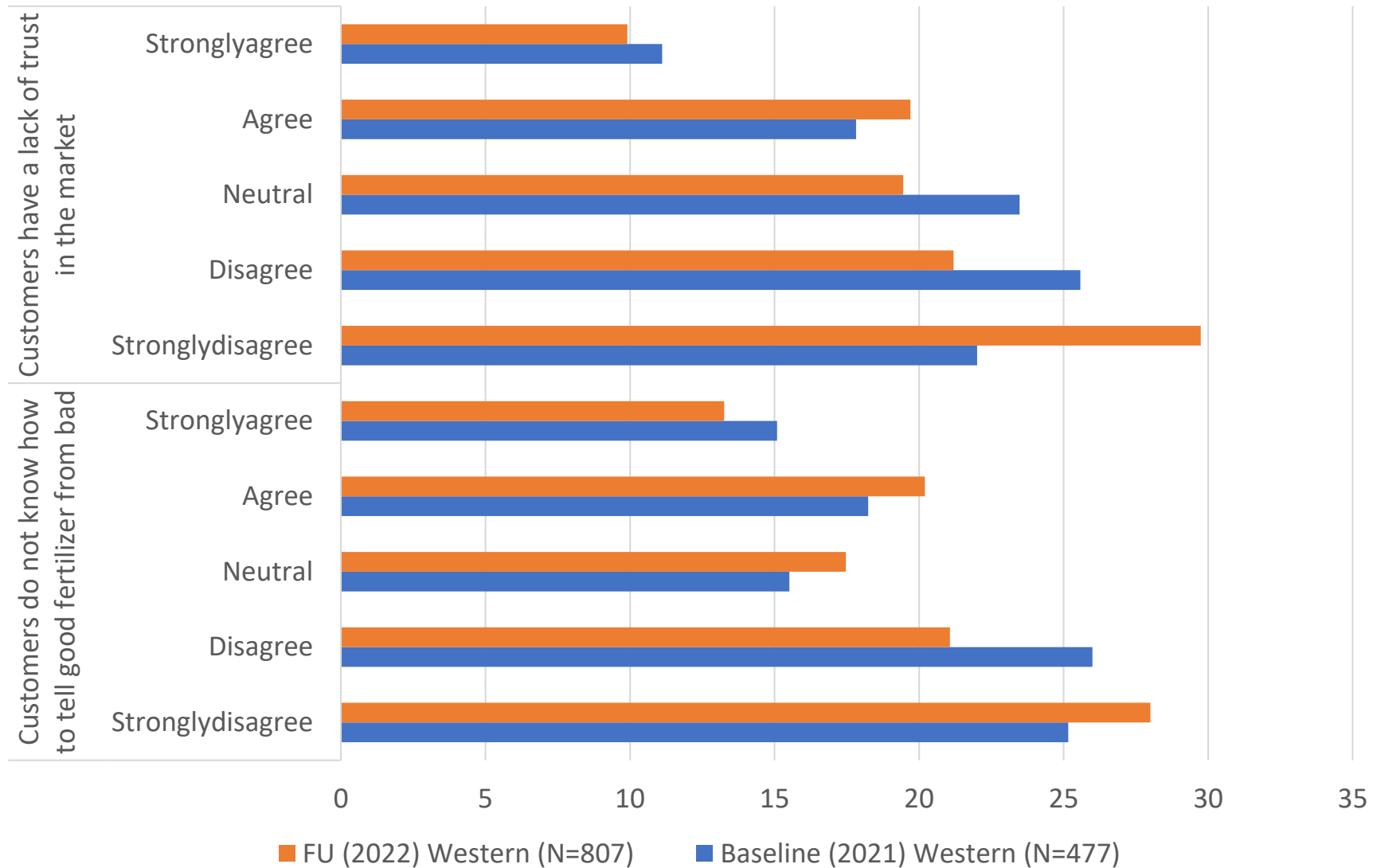
- **Agrodealers reduced the volumes stocked for all brands except NPK & TSP – mainly displaced by fertilizer subsidy**
- **Rebagging of fertilizer increased by 52% in the midline**

Farmers rely on trust to identify quality fertilizer

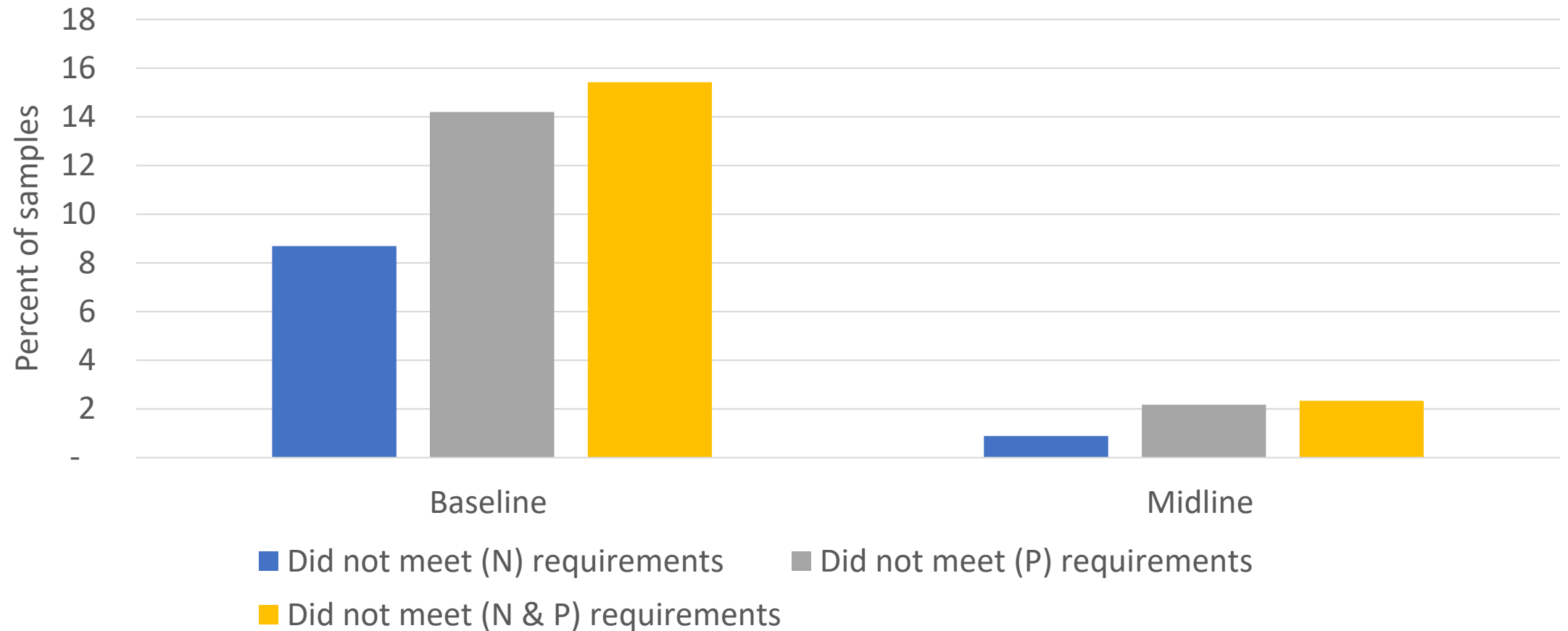
How do you ensure that the quality of mineral fertilizer is good before you purchase it from a supplier?



Farmers perception on quality



Fertilizer quality improved in the midline



Lessons & next steps

- We see evidence of quality improvement due to competition
- Competition also triggered the likelihood of agro-dealers to credit offers to farmers
 - No effect on pricing
 - No change in profits for agro-dealers
- Finalise follow survey
- Analyse survival rate for agro-dealers
- Investigate data on identity suppliers and competitors

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