

A white Tata truck is driving on a narrow, muddy dirt road that winds through a dense, green forest. The road is very narrow and appears to be in poor condition, with deep ruts and mud. The truck is positioned in the center of the frame, moving towards the viewer. The surrounding vegetation is thick and vibrant green, suggesting a tropical or subtropical environment. The overall scene conveys a sense of isolation and the challenges of rural infrastructure.

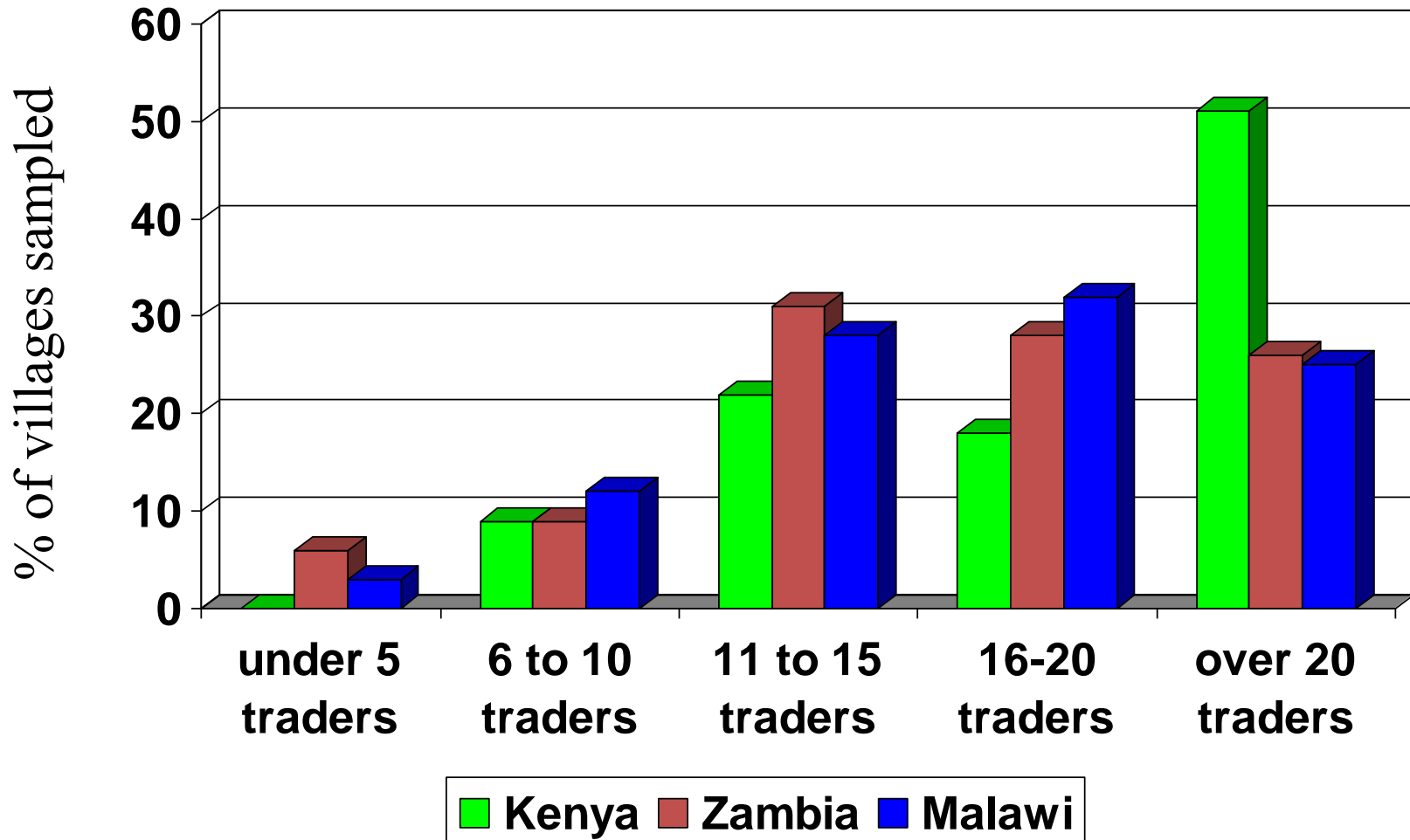
Farmers' Access to Markets and Services: Preliminary Findings

Antony Chapoto, Jordan Chamberlin, and T.S. Jayne

Presentation at the ACTESA-COMESA Policy Symposium

22 April 2011, Kigali, Rwanda

Number of traders buying maize from farmers in village – 2009 Maize Value Chain Study



- Could these market access figures be replicated if they were contained on nationally representative farmer surveys?

Objectives:

1. To report basic indicators of market access for smallholder farmers using nationwide farm household survey data
2. To track trends in market access
 - Kenya
 - Zambia

Indicators of access used in this study (Kenya):

Variable	Investment type
Km to point of maize sale transaction with private trader	Private
Km to nearest private fertilizer stockist	Private
Km to private veterinary services	Private
Km to public telephone (landline or mobile)	Private
Km to extension advice	Public / private
Km to a motorable road	Public
Km to a tarmac road	Public
Km to piped water source	Public
Km to health centre	Public
Km to electricity supply	Public

Findings

“How many private traders come into this village to buy maize from farmers?”

Province	Among maize sellers	Among non-sellers
Central	8	6
Copperbelt	16	17
Eastern	9	6
Luapula	11	11
Lusaka	8	7
Northern	9	8
NorthWestern	12	10
Southern	5	4
Western	3	2
National	9	7

Distance from farm to point of maize sale, Zambia

Distance to district town	Mean					
Most accessible 25%	3.61					
quartile 2	6.78					
quartile 3	7.33					
Most remote 25%	10.84					
Total sample	7.14					

Source: MACO/CSO Crop Forecast Survey, 2009-2010 Marketing Season

Distance from farm to point of maize sale, Zambia

Distance to district town	----- Percentile of households -----					
	Mean	10	25	50	75	90
		-----Kilometers-----				
Most accessible 25%	3.61					
Quartile 2	6.78					
Quartile 3	7.33					
Most remote 25%	10.84					
Total sample	7.14					

Source: MACO/CSO Crop Forecast Survey, 2009-2010 Marketing Season

Distance from farm to point of maize sale, Zambia

Distance to district town	----- Percentile of households -----				
	10	25	50	75	90
	----- Kilometers -----				
Most accessible 25%	0	0	0	1.6	8
Quartile 2	0	0	0	3	25
Quartile 3	0	0	0	3	35
Most remote 25%	0	0	0	3	60
Total sample	0	0	0	2	23

Source: MACO/CSO Crop Forecast Survey, 2009-2010 Marketing Season

Distance from farm to point of maize sale, Zambia

Distance to district town	----- Percentile of households -----					
	Mean	10	25	50	75	90
		-----Kilometers-----				
Most accessible 25%	3.61	0	0	0	1.6	8
Quartile 2	6.78	0	0	0	3	25
Quartile 3	7.33	0	0	0	3	35
Most remote 25%	10.84	0	0	0	3	60
Total sample	7.14	0	0	0	2	23

Source: MACO/CSO Crop Forecast Survey, 2009-2010 Marketing Season

Distance from farm to point of maize sale, Zambia

Bags sold	----- Percentile of households -----					
	Mean	10	25	50	75	90
		-----Kilometers-----				
< 5 bags	2.36	.00	.00	.00	1.00	5.00
5 - 25 bags	7.74	.00	.00	.00	3.00	30.00
25 - 50 bags	12.99	.00	.00	1.00	10.00	50.00
> 50 bags	16.97	.00	.00	1.00	21.00	62.00
All farms selling to private traders	7.12	.00	.00	.00	2.00	22.00

Distance from farm to point of maize sale, Kenya

	10th	25th	50th	75th	90th	Mean
Distance from farm to point of maize sale to private buyer	0.0	0.0	0.0	0.0	2.0	1.4

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997							
2007							
change in km							

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	28.3						
2007	9.9						
change in km	-18.4						

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	28.3	9.8					
2007	9.9	2.7					
change in km	-18.4	-7.1					

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	28.3	9.8	15.9				
2007	9.9	2.7	3.8				
change in km	-18.4	-7.1	-12.1				

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	28.3	9.8	15.9	6.3			
2007	9.9	2.7	3.8	3.6			
change in km	-18.4	-7.1	-12.1	-2.7			

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	28.3	9.8	15.9	6.3	5.0		
2007	9.9	2.7	3.8	3.6	3.6		
change in km	-18.4	-7.1	-12.1	-2.7	-1.4		

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	28.3	9.8	15.9	6.3	5.0	3.3	
2007	9.9	2.7	3.8	3.6	3.6	2.4	
change in km	-18.4	-7.1	-12.1	-2.7	-1.4	-0.9	

Kms to nearest fertilizer seller, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	28.3	9.8	15.9	6.3	5.0	3.3	2.7
2007	9.9	2.7	3.8	3.6	3.6	2.4	1.3
change in km	-18.4	-7.1	-12.1	-2.7	-1.4	-0.9	-1.4

Kms to nearest veterinary services, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	8.9	5.2	6.3	4.6	5.1	3.5	2.9
2007	4.5	3.7	5.3	3.9	5.3	2.8	2.0
change in km	-4.4	-1.5	-1.0	-0.7	+0.2	-0.7	-0.9

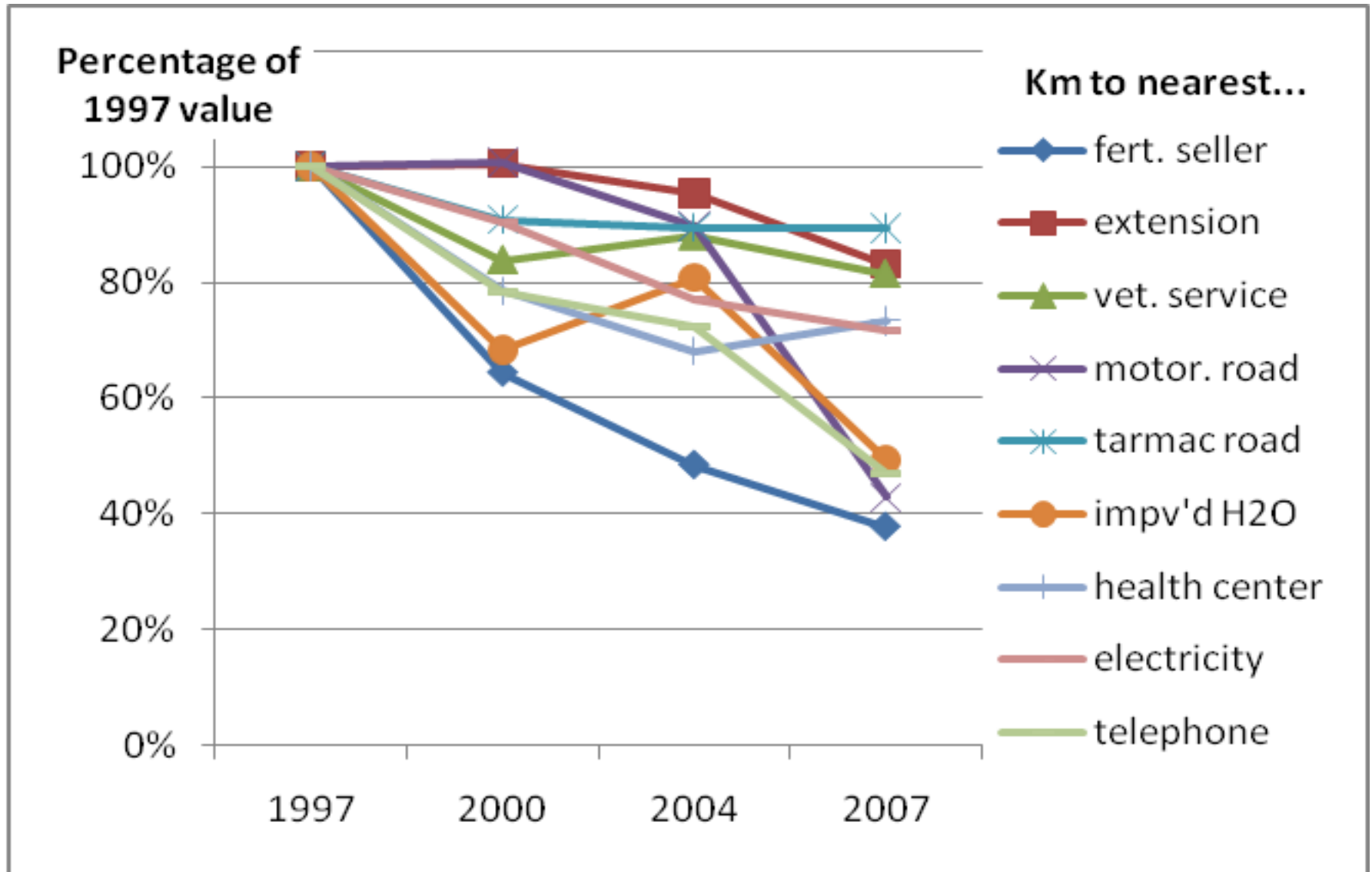
Kms to nearest tarmac road, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	8.3	14.9	5.8	7.2	8.3	8.2	5.6
2007	8.8	12.4	6.4	8.4	6.6	7.4	5.4
change in km	+0.5	-2.5	+0.6	+1.2	-1.7	-0.8	-0.2

Kms to nearest electricity, Kenya

	Coastal Lowlands	Eastern Lowlands	Western Lowlands	Western trans	HPMZ	Western Highlands	Central Highlands
1997	4.3	9.8	4.2	4.9	7.7	3.7	1.5
2007	4.0	6.6	2.6	3.6	5.6	2.7	0.5
change in km	-0.3	-3.2	-1.6	-1.3	-2.1	-1.0	-1.0

% changes in mean kilometre distance to various services



Rapid growth in rural cell phone ownership, Kenya

	% of households that own a phone			
Agro-Ecological Zone	1997	2000	2004	2007
Coastal Lowlands	4.0	0.0	16.0	61.3
Eastern Lowlands	1.4	1.4	18.6	52.4
Western Lowlands	0.0	0.7	17.0	41.2
Western Transitional	0.0	0.0	10.1	37.8
High Potential Maize Zone	0.6	1.2	22.0	60.4
Western Highlands	0.0	0.8	14.0	50.4
Central Highlands	1.2	3.7	19.4	66.5
Marginal Rain Shadow	2.7	0.0	18.9	67.6
Total Sample	0.9	1.3	17.9	55.0

Percentage Change in Average Distance to all services/markets, 1997-2007

	Private	Public
High potential zones	-34%	-30%
Low potential zones	-57%	-34%

Conclusions

1. Farmers have many possible options for selling their staples right in their villages
 2. Median distance travelled from farm to point of maize sale = 0 in both Kenya and Zambia
 3. In Kenya, access conditions have improved for most areas and for almost all indicators for which data was consistently collected over the 1997-2007 period
 - access to motorable roads and clean water supply especially evident since 2004
- It will be interesting to determine whether these access conditions in Kenya and Zambia pertain more generally throughout the region

Thank you

