

SOME ISSUES IN THE FULLY-WASHED COFFEE CHAIN IN RWANDA

February 9th 2015

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Questions

MAIN QUESTIONS

- Is FW coffee profitable for Rwanda?
 - YES

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- If yes, why only 35-40% of coffee is exported as such?
 - LOW CAPACITY UTILIZATION

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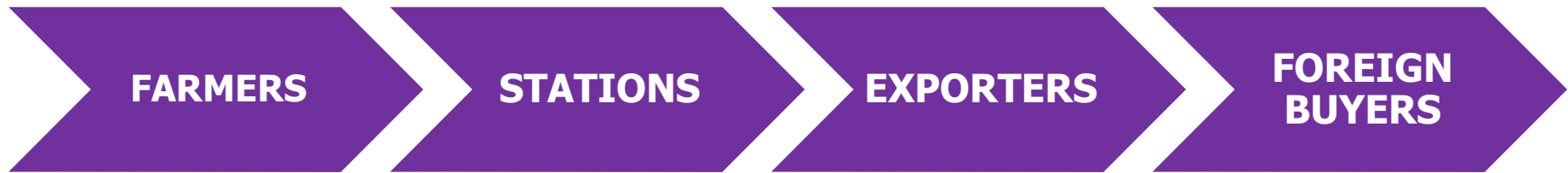
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- Why does this happens?
 - MKT FAILURES, ESPECIALLY IN SOURCING & FINANCE

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 - LOW CAPACITY UTILIZATION
- Why does this happens?
 - MKT FAILURES, ESPECIALLY IN SOURCING & FINANCE
- *What can be done about it ?*
 - TODAY'S CONFERENCE

COFFEE WASHED CHAIN



COFFEE WASHED CHAIN

What is (and *isn't*) the subject of the study?



DATA

- **Survey of 178 CWS**
 - **Managers**
 - **Workers**
 - **Farmers**
 - **Collectors**
- **Administrative datasets from NAEB**
 - **Export contracts**
 - **Sourcing and prices**
 - **Quality samples**
 - **Stations census**
 - **2009 coffee census (at the farmer level)**
- **GIS data matched to all data above**
 - **Roads, rivers, rainfall, soil, drainage, ...**

AGENDA FOR TODAY

- 1. Comparison of FW and ORD value chains**

- 2. Dispersion in Efficiency, Capacity Utilization and Management**
 - **Competition**
 - **Access to finance**

- 3. Links to the conference agenda**

VALUE ADDED ALONG THE CHAIN

Table 1: Profits along the Coffee Value Chain (\$ per kg of Green Coffee)

	<i>Product 'Sold'</i>	<i>Value added (inputs for 1kg of green coffee)</i>	
		FWC	ORD
Farmer	Cherries	2.20	1.60
Labour	Labour	0.65	n/a
Financier	Capital	0.50	0.50*
Transport/procurement		0.25	0.25*
Other costs		0.15	n/a
CWS Profit	Green Coffee	0.40 [†]	n/a
Exporter cost	Green Coffee	0.30	0.30
Additional Exporter profit from ORD		n/a	0.40
Export price, FOB		4.45	3.05

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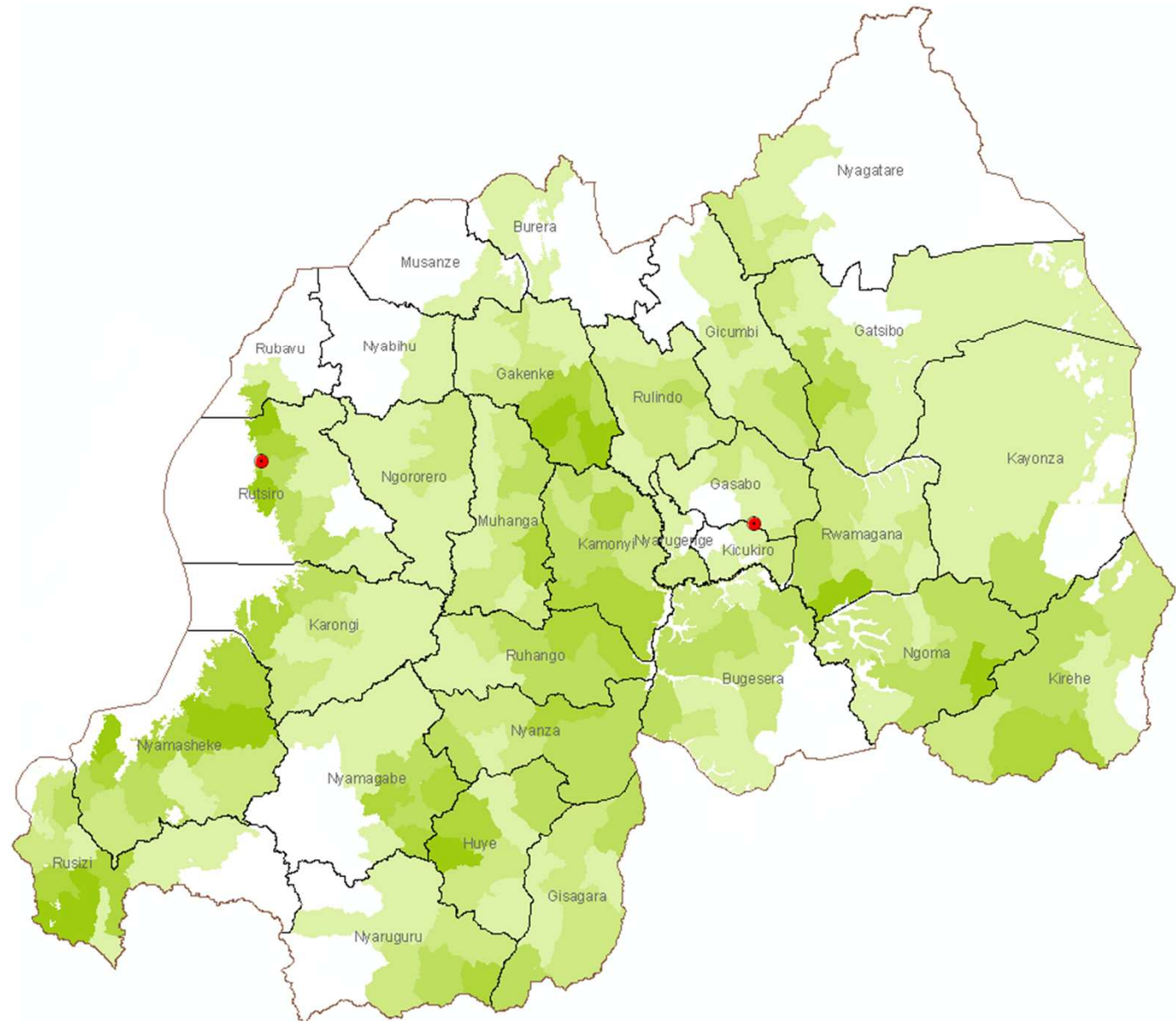
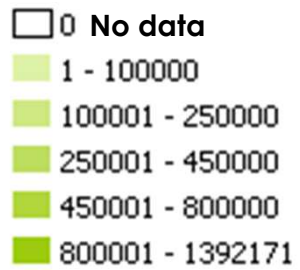
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Yet, only 35-40% of coffee is sold as FW. Why ?

SECTOR EXPANSION

< 2002

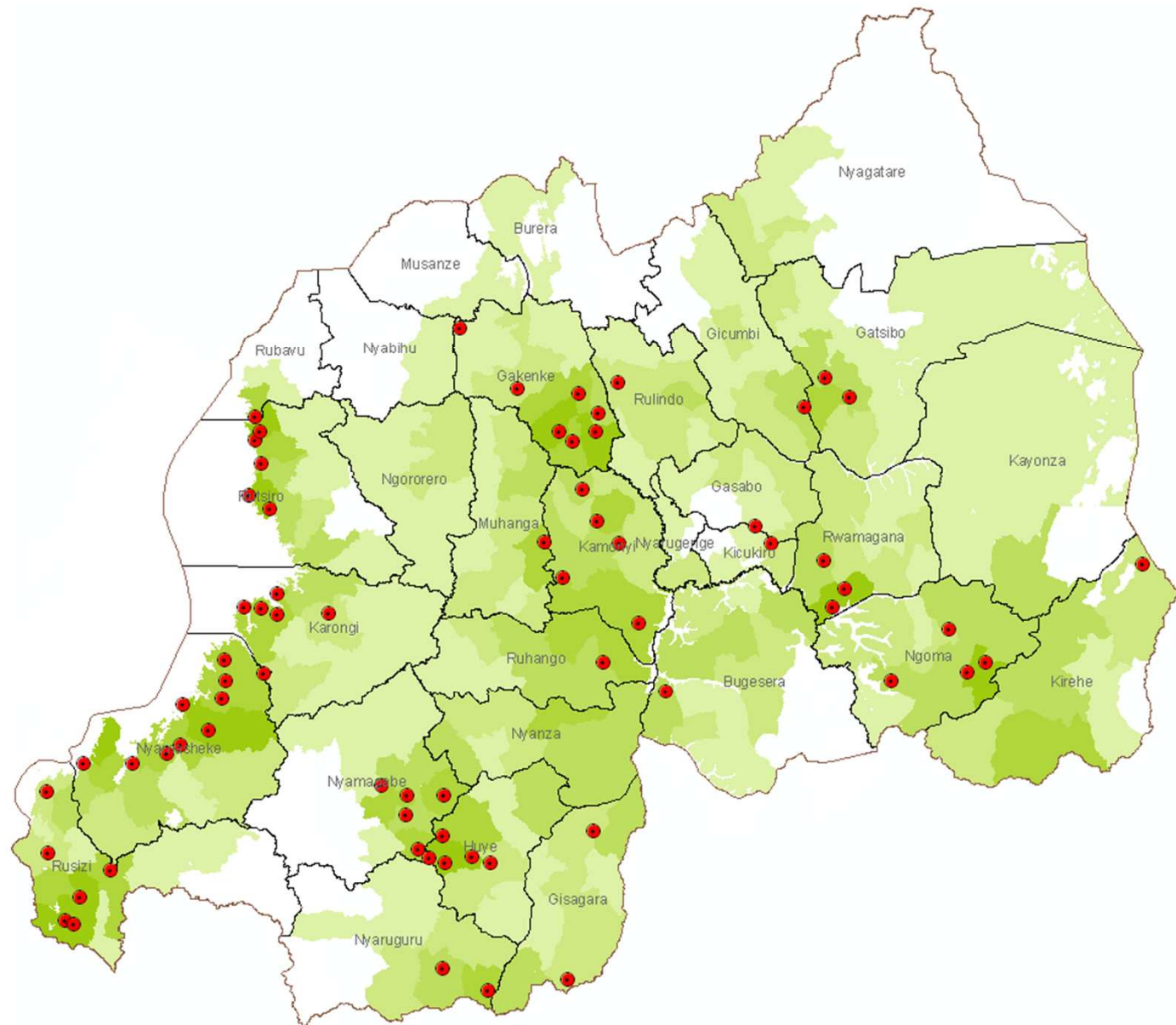
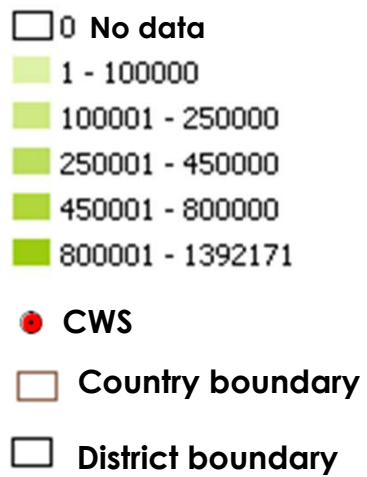
Coffee Producing Sector: No. of Trees



SECTOR EXPANSION

2006

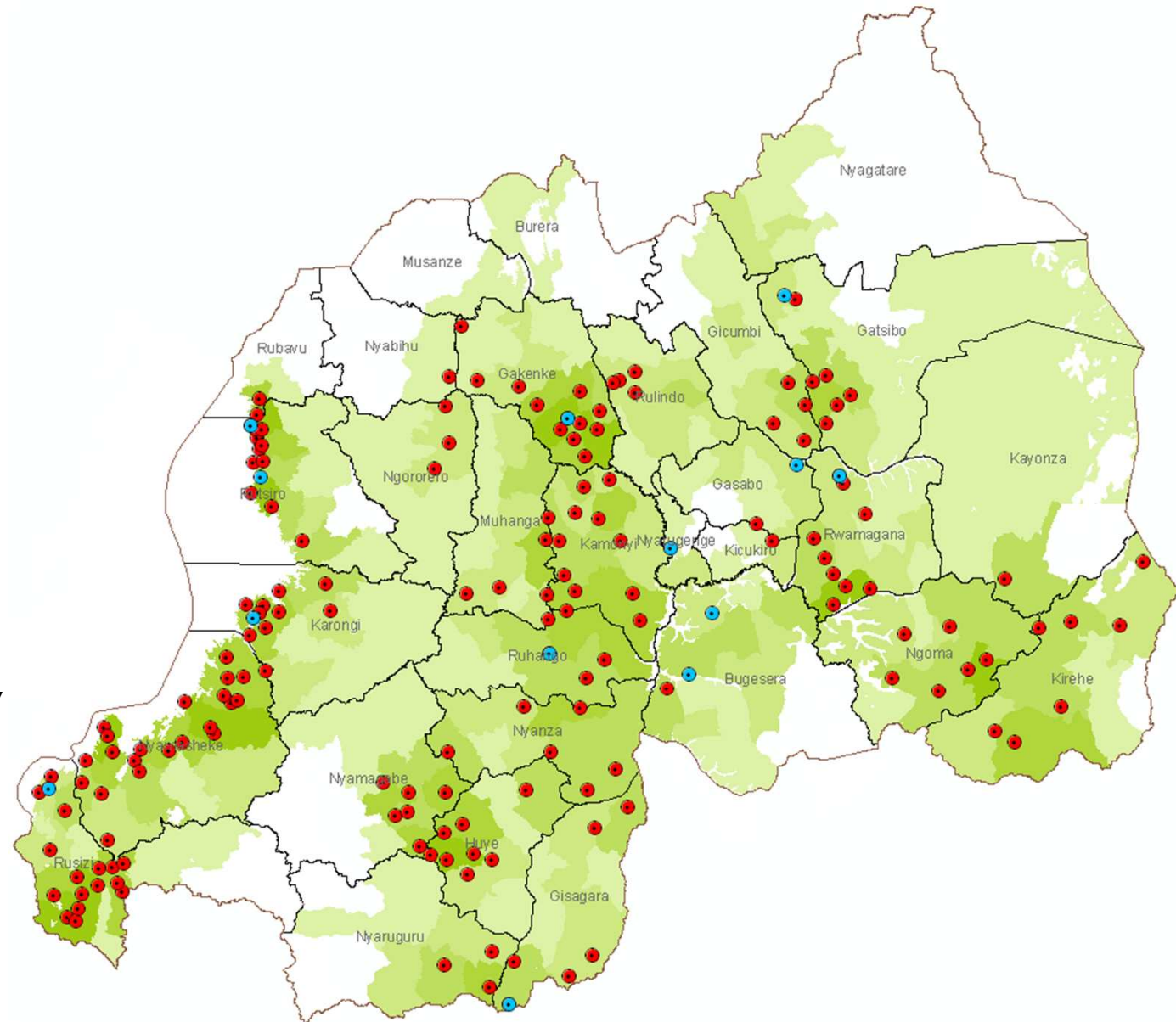
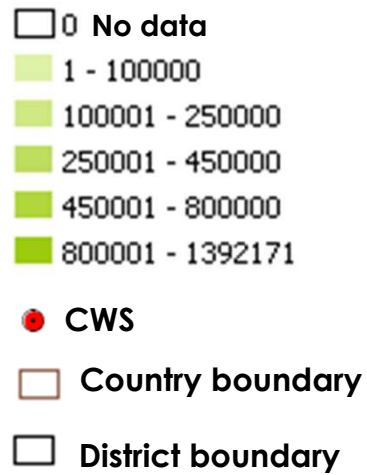
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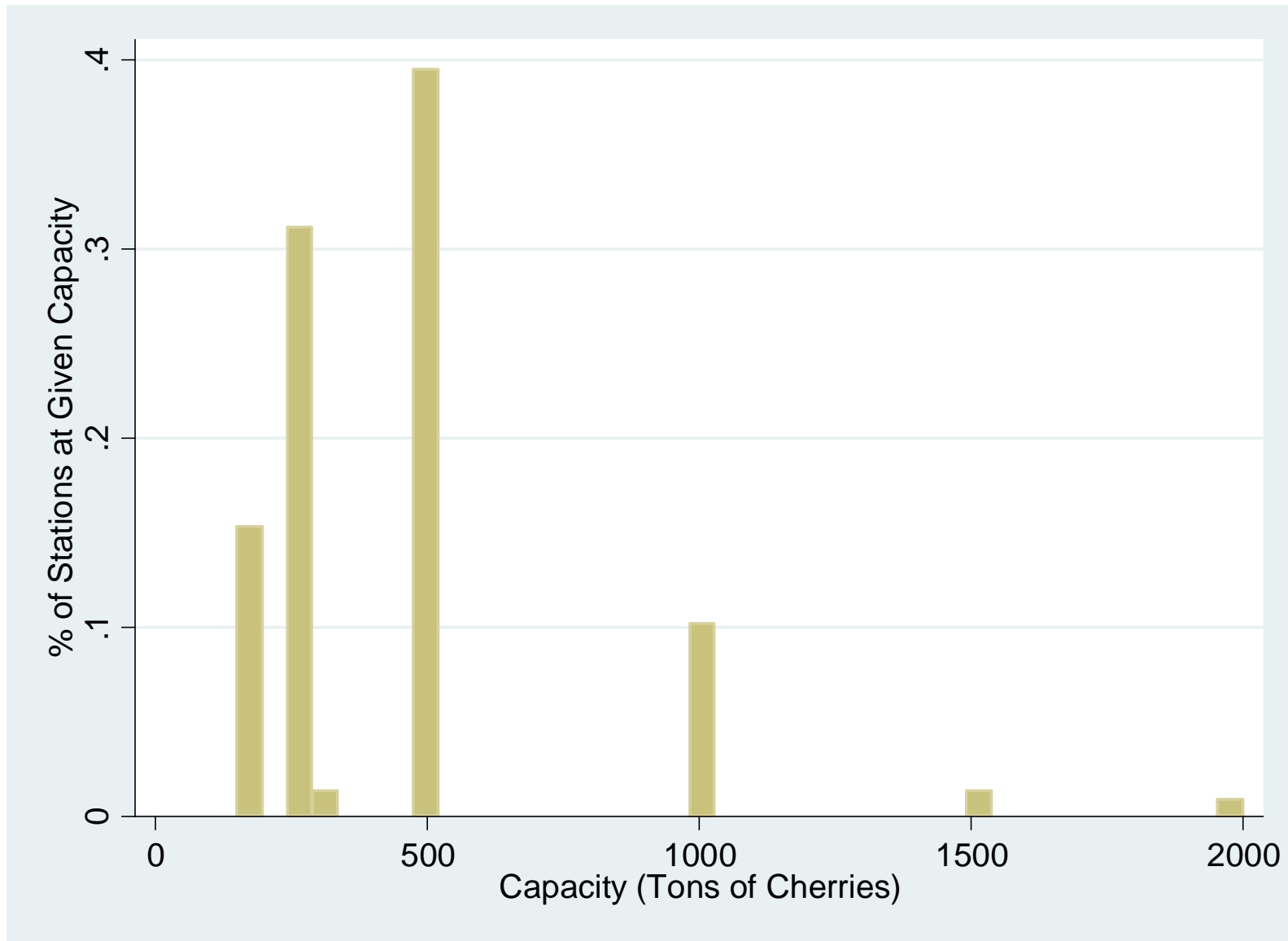
SECTOR EXPANSION

2011

Coffee Producing Sector: No. of Trees



CAPACITY INSTALLED



15% < 150 Tons.; 15% => 150 Tons. ; 30% => 250 Tons. ;

30% => 500 Tons; 10% => 1000 Tons

Note: estimates from NAEB data.

Entry vs. Capacity Utilization

	Built Stations	Active Stations	Capacity Utilization
2012	214	197	60%
2013	222	202	55%
2014	229	199	50%

Dispersion in Efficiency (1 / Unit costs)

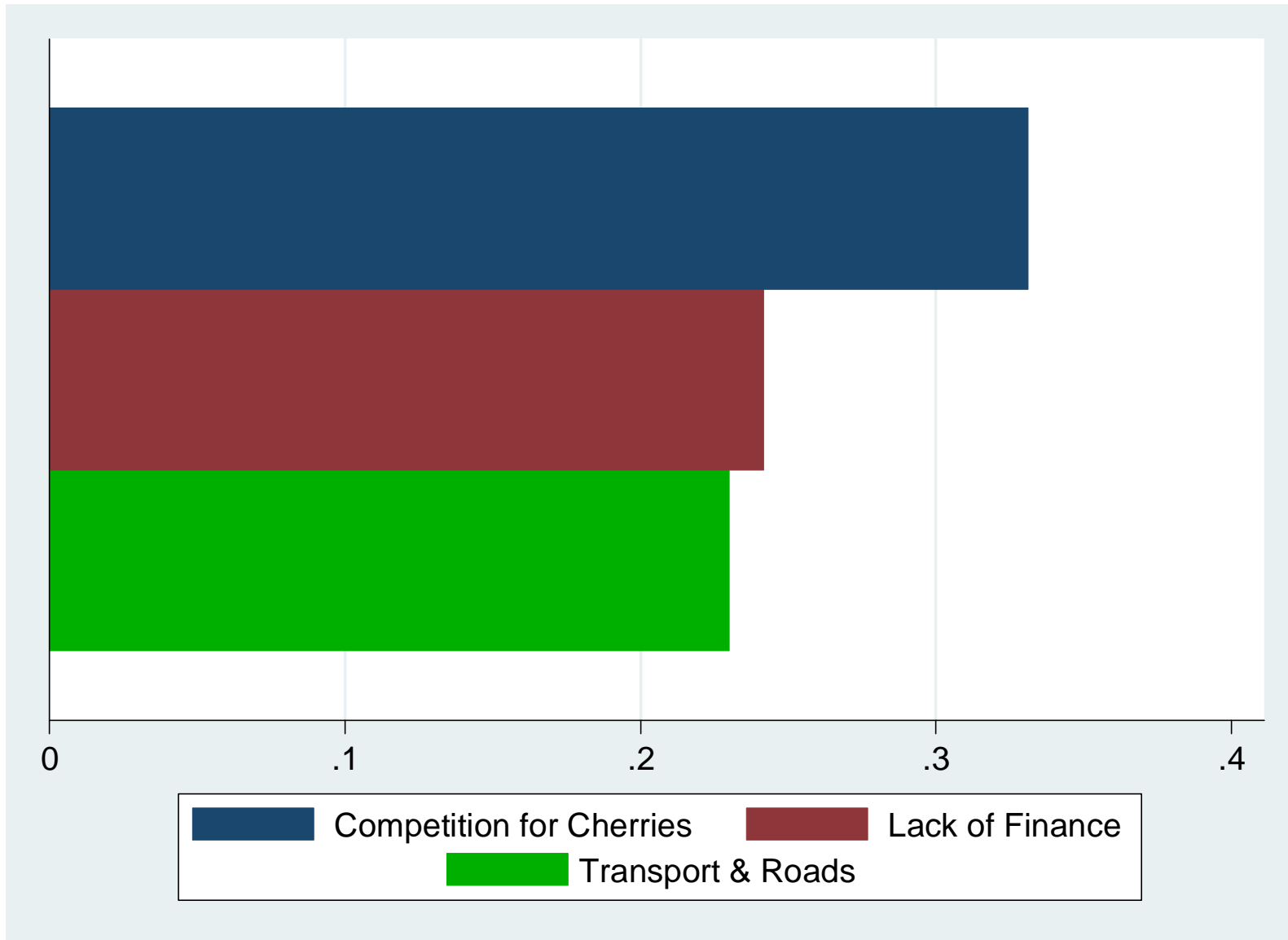
Variable:	<i>Unit Costs</i>	<i>Physical Efficiency</i>	<i>Cherry Prices</i>	<i>Other Unit Costs</i>
p75 - p25 Ratio	1.22	1.04	1.11	1.66
p90 - p10 Ratio	1.51	1.1	1.32	2.34
% Variation Explained by:				
<i>Geography</i>	27	34	41	30
<i>Technology</i>	8	6	7	4
<i>Physical Efficiency</i>	10	--	[4]	[3]
<i>Cherry Prices</i>	5	[4]	--	[7]
% Variation Unexplained:	50	60	52	57

For Cherry costs: $R_{75/25}=1.15$; $R_{90/10}=1.28$. $\rho(\text{Physical Efficiency, Cherry Prices})=0.33^*$

- **Significant dispersion in efficiency**
- **Management is key driver**

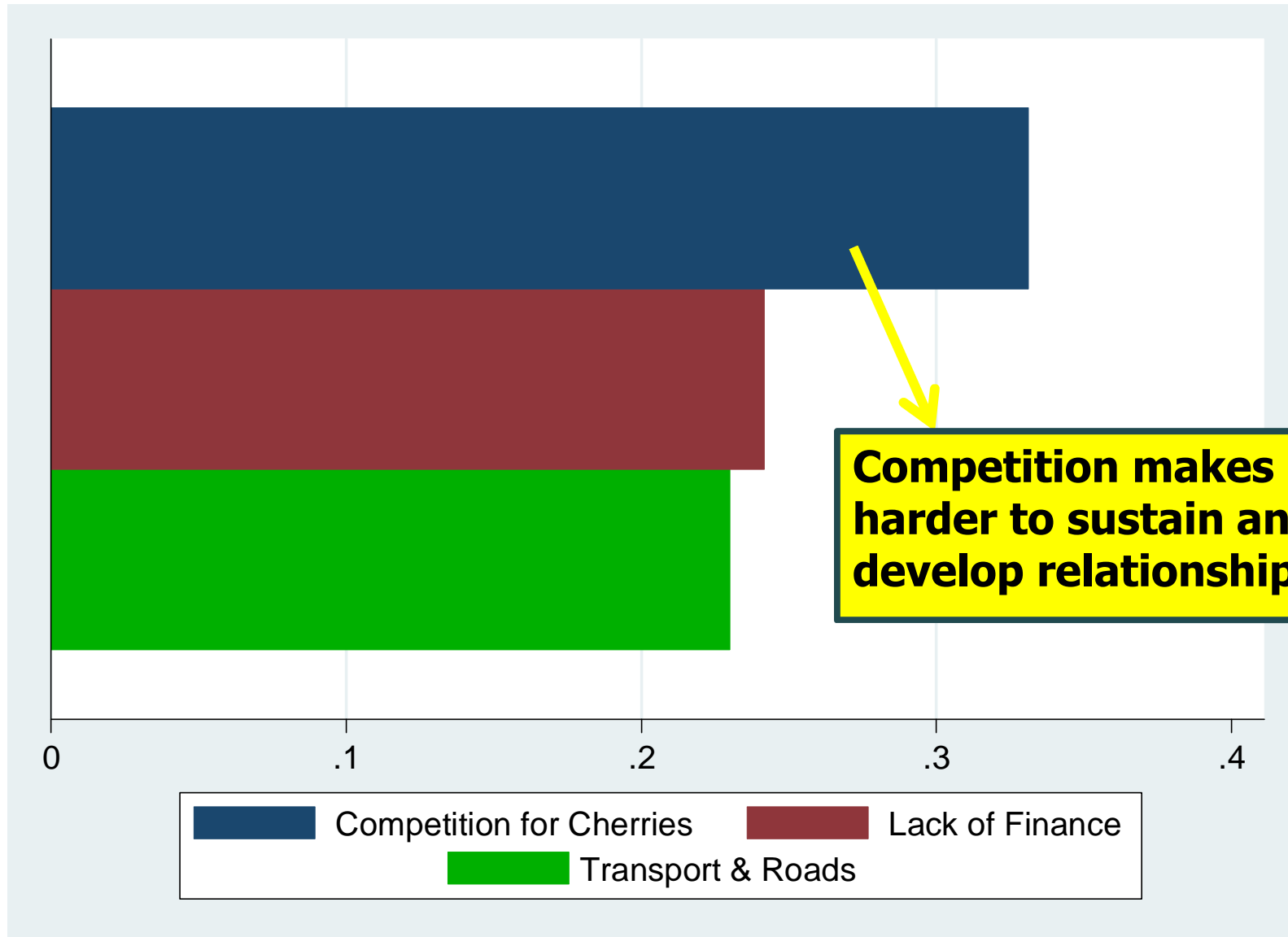
Why ?

SELF-REPORTED CONSTRAINTS TO OPERATION



Why ?

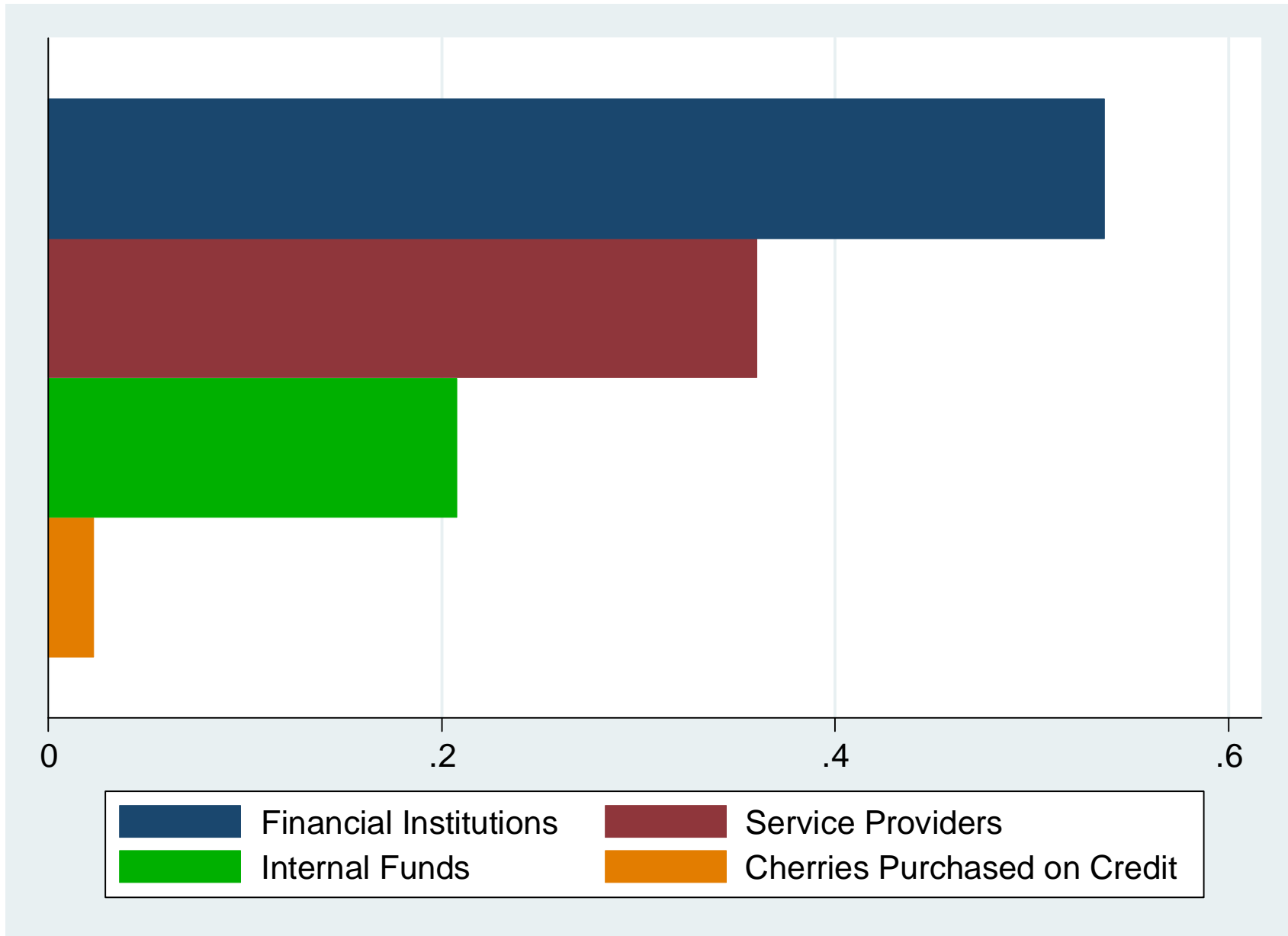
SELF-REPORTED CONSTRAINTS TO OPERATION



Financing Working Capital

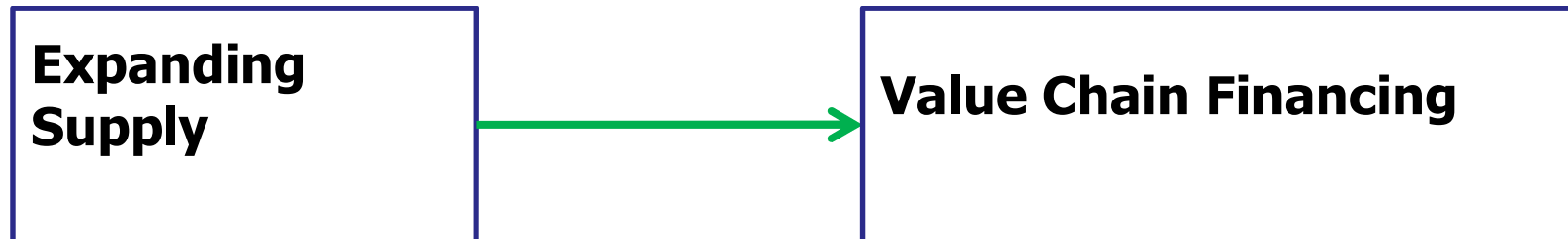
- Working capital requirements = 70-80% of cash flows (against typical 20-40% for SMEs in manufacturing)
- Providing loans to CWS is also *difficult, costly and risky*
- **WHERE DO CWS IN RWANDA GET FINANCE FROM ?**

ACCESS TO FINANCE



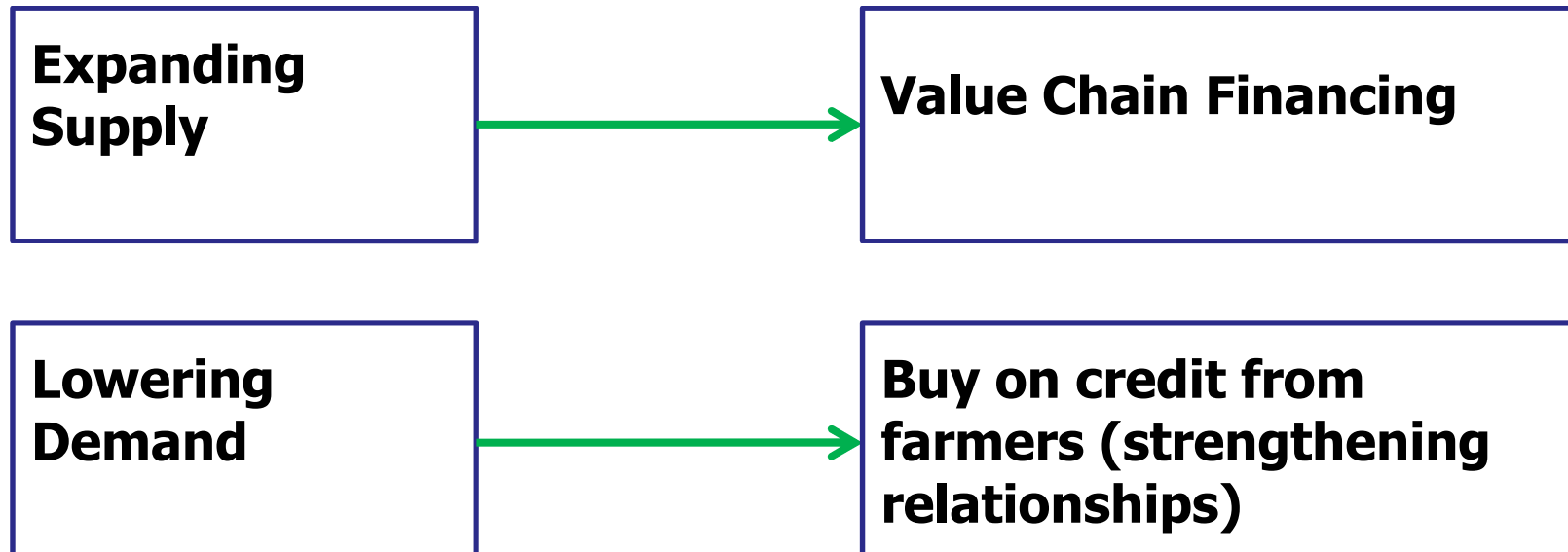
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- As a result, we estimate approx. 60% of CWS to be *credit constrained*
- **WHAT TO DO ?**

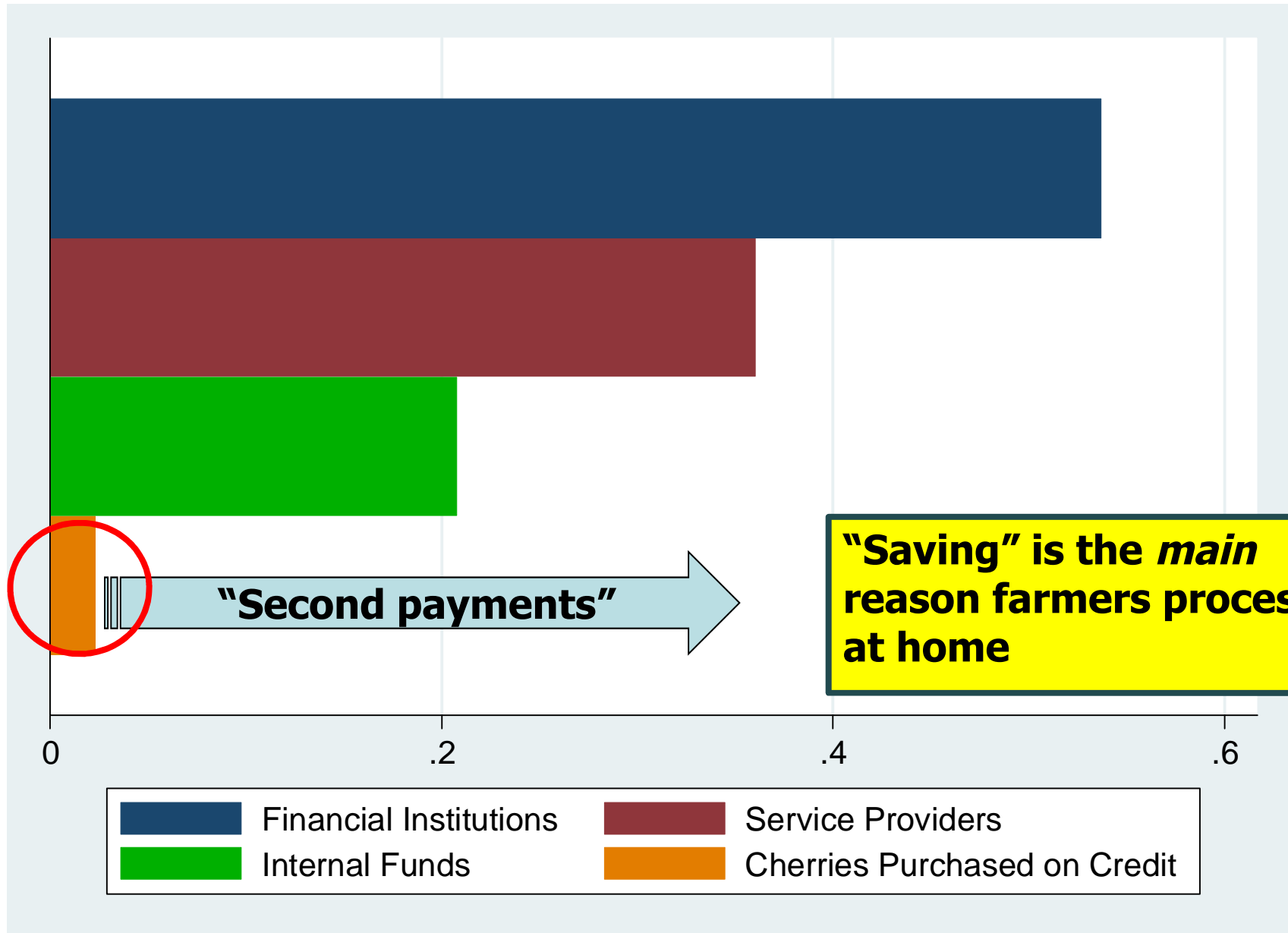


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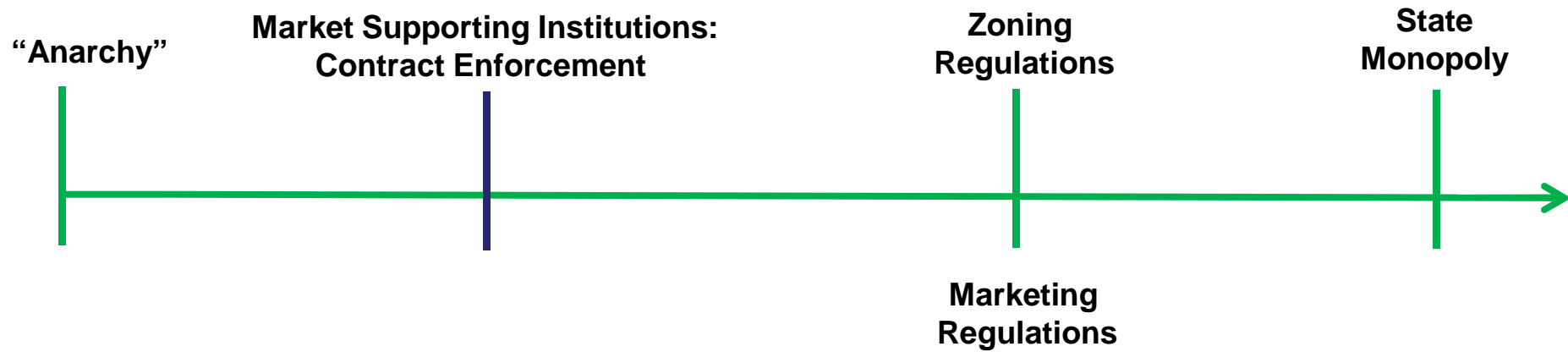
REGULATORY OPTIONS



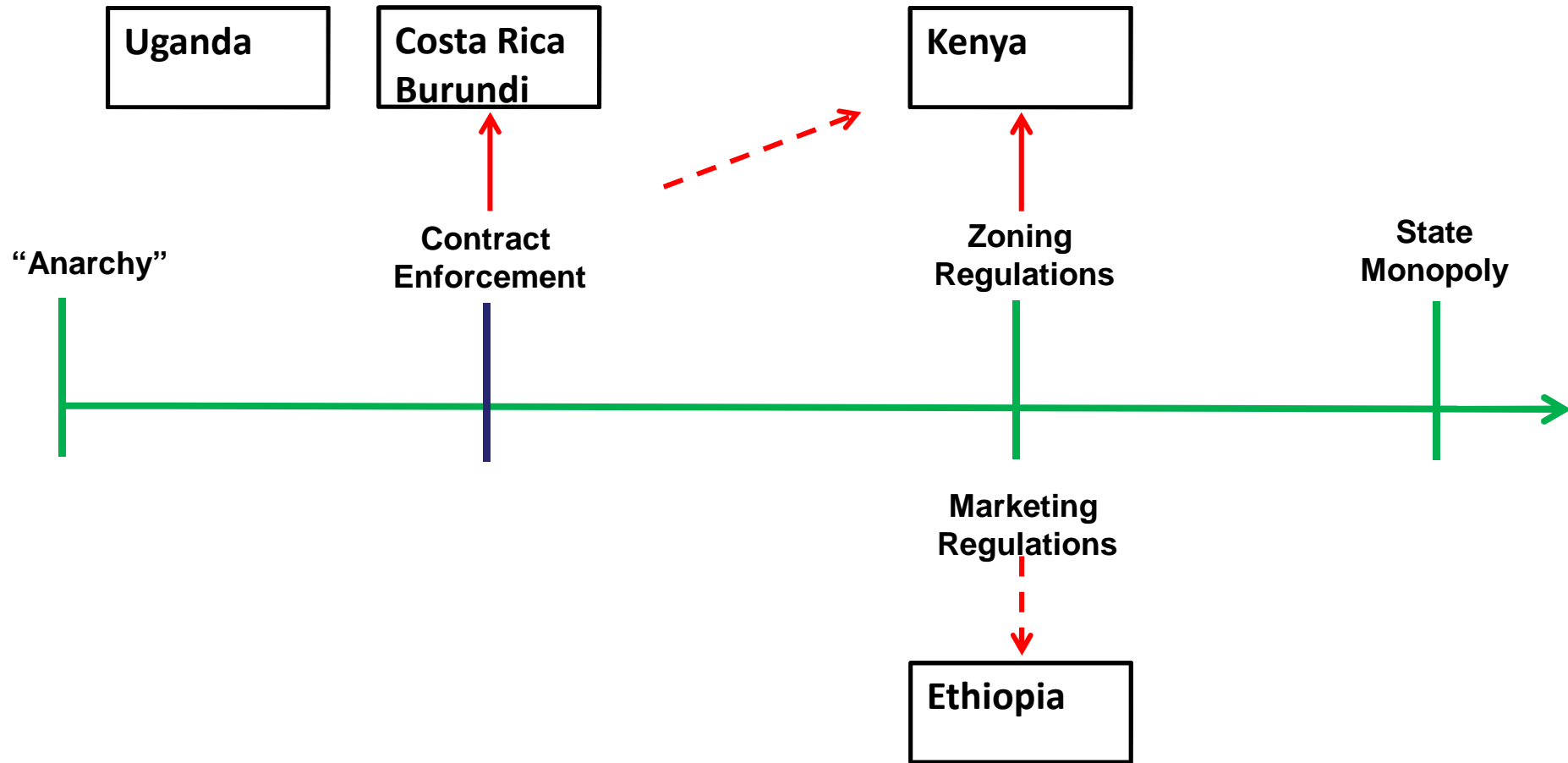
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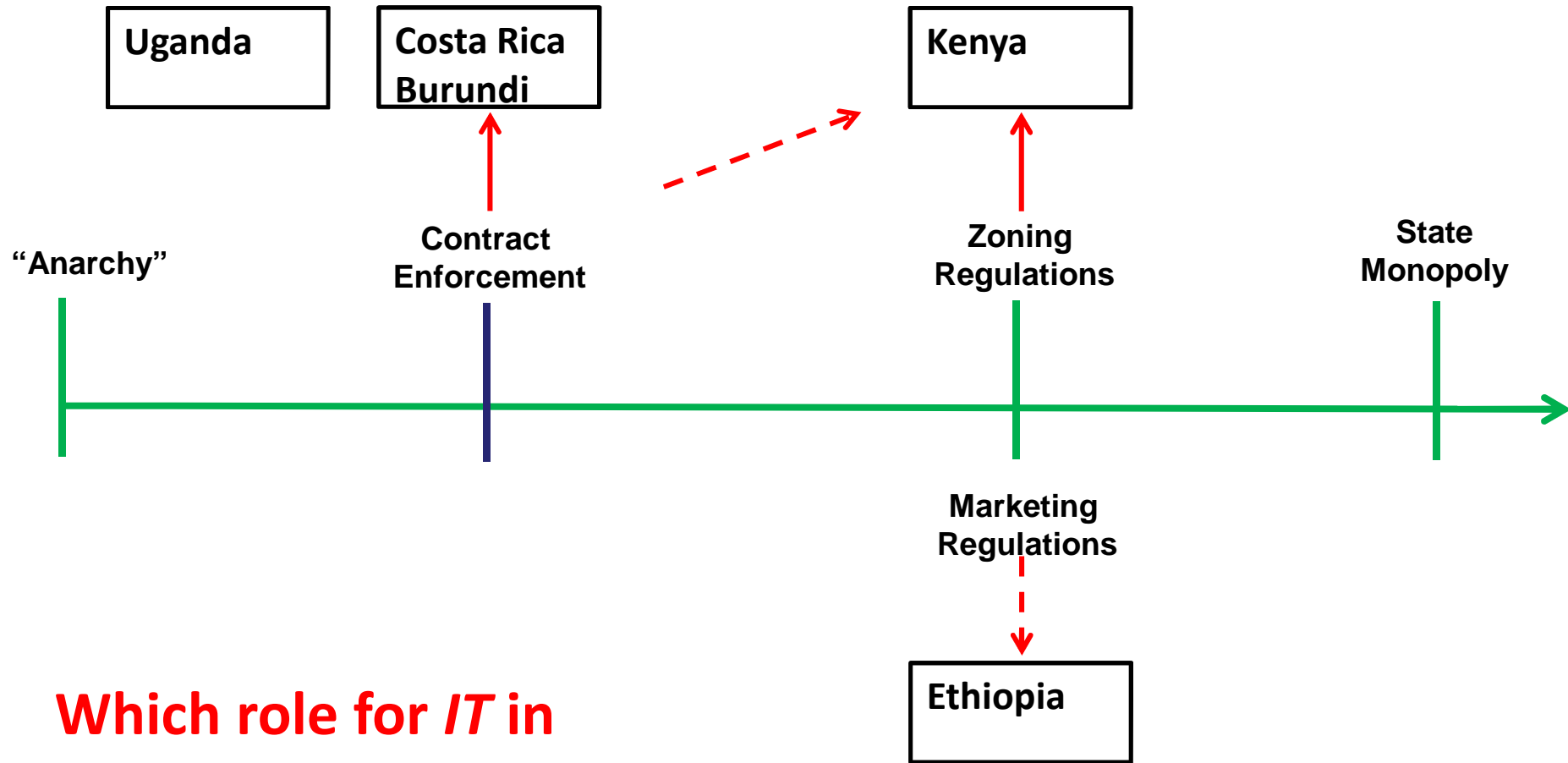
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REGULATORY OPTIONS



Which role for *IT* in helping regulation ?

WRAP - UP

Issues:

- Washed coffee *is* profitable for Rwanda
- Strengthening relationships btw. farmers and stations
 - Regulating competition and/or enforcing contracts
 - Access to finance

Session 2

WRAP - UP

Issues:

- Washed coffee *is* profitable for Rwanda
- Strengthening relationships btw. farmers and stations
 - Regulating competition and/or enforcing contracts
 - Access to finance
- Experience from other countries:
 - Costa Rica,
 - Burundi, Uganda, Ethiopia, Kenya, ...
- *Way forward*

Session 2

Session 3 &
wrap-up

Few Final Words

1. **NAEB**
2. **IGC**
3. **Numerous stakeholders (private sectors, NGOs, financial institutions, ...) and today's participants ...**

THANKS !