



Re:Co Symposium, Seattle, April 19, 2017

Empowering Evidence: What Motivates Farmers to Invest in Coffee in Rwanda?

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UGANDA

TANZANIA

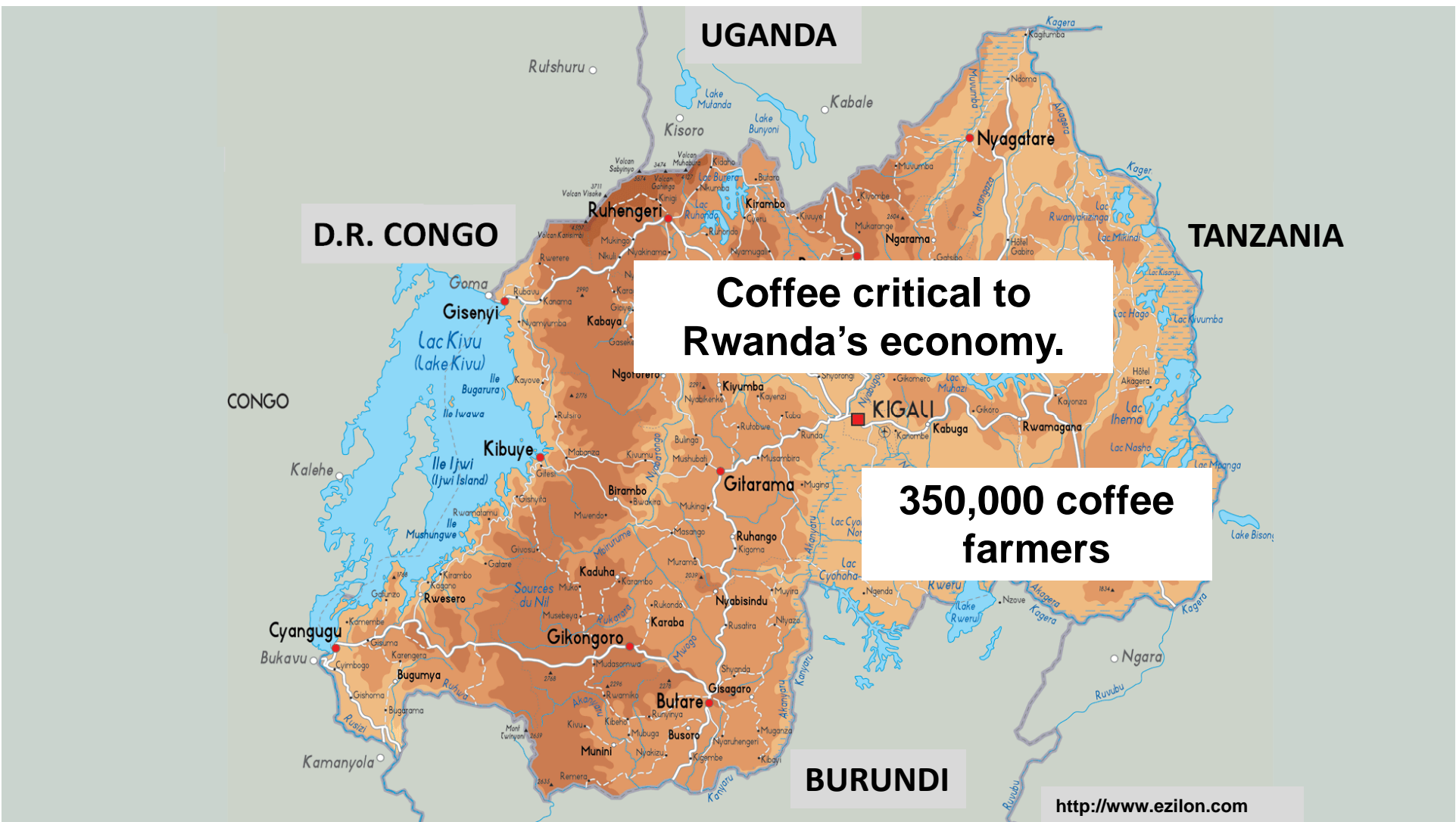
D.R. CONGO

**Coffee critical to
Rwanda's economy.**

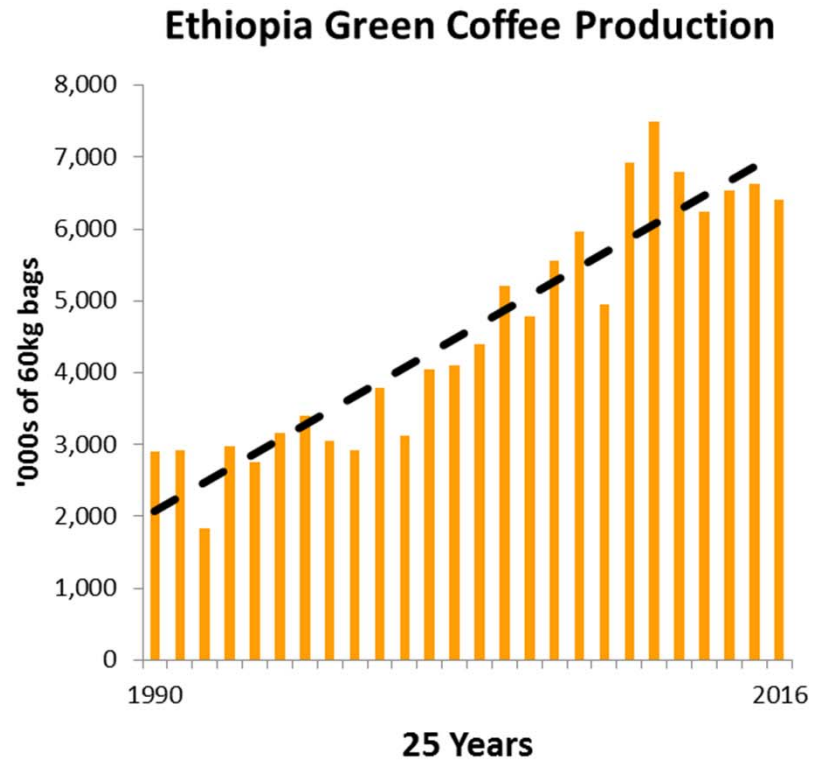
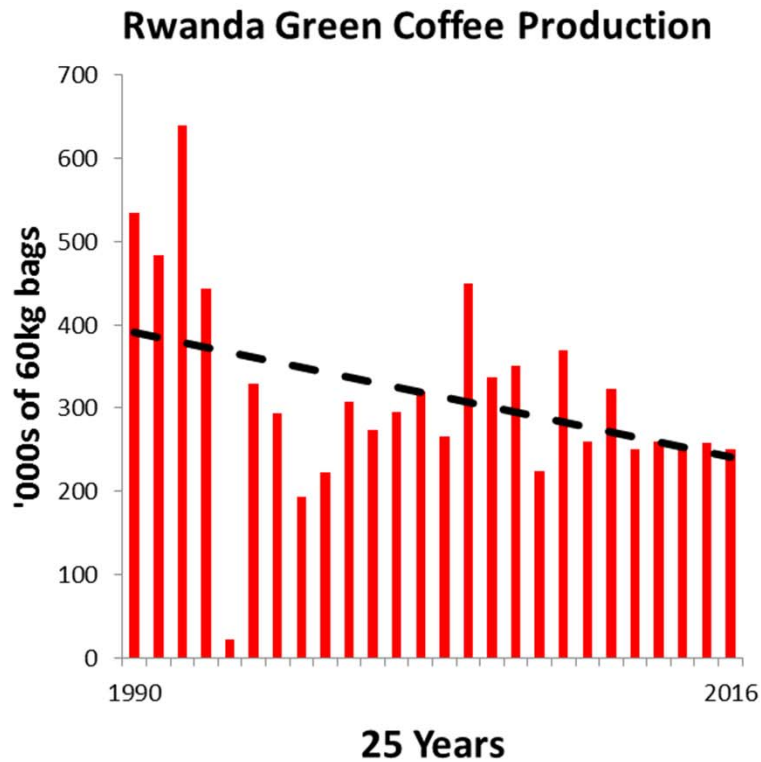
**350,000 coffee
farmers**

BURUNDI

<http://www.ezilon.com>



25 Year Decline



Source: International Coffee Organization (ICO)

Potato Taste Defect (PTD)

MI 711
M!1

Potato Taste Defect (PTD)

ANTESTIA BUG

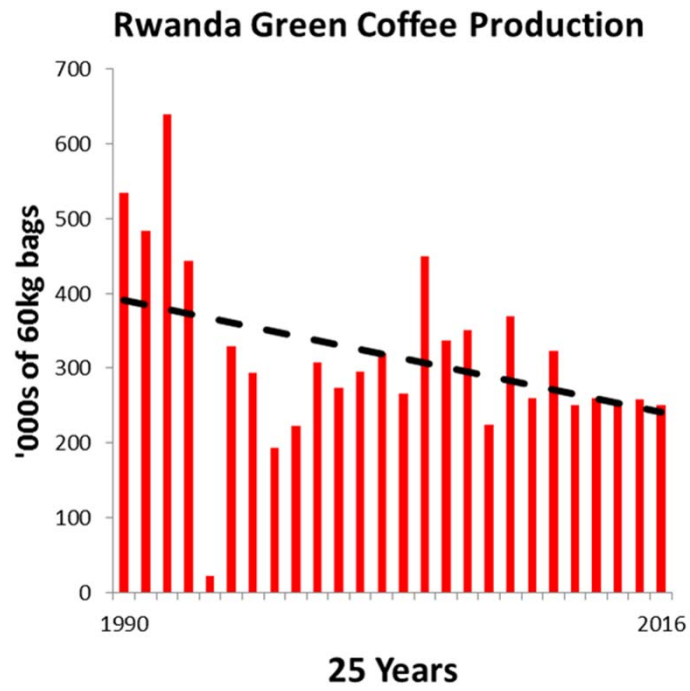
Source - <http://www.coffeeforums.com>



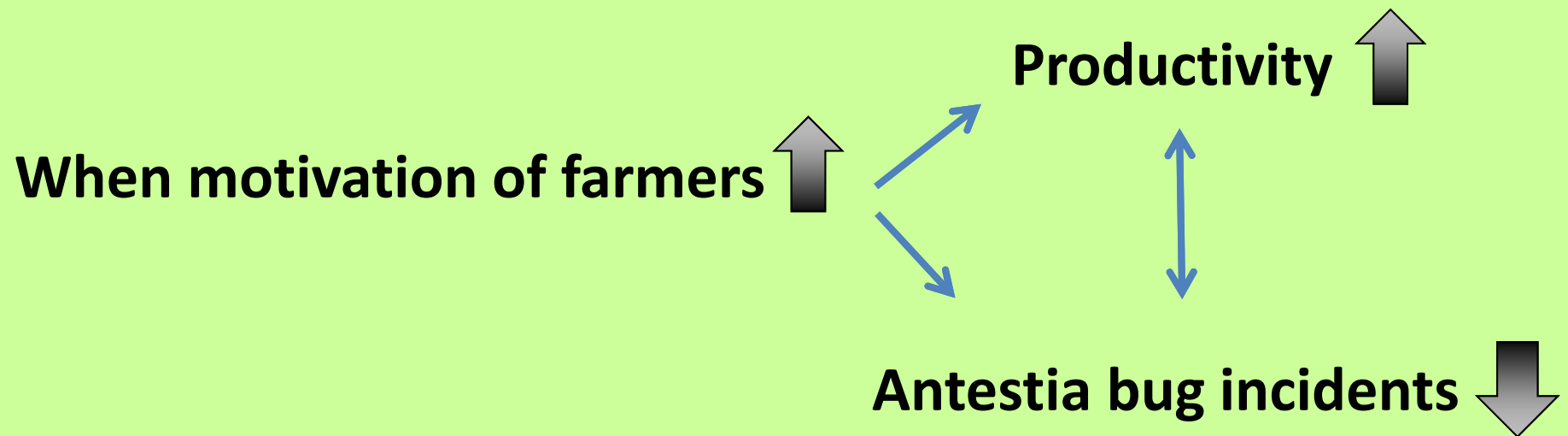
Slide 6

- M! [7]1** Sample Slide - of full image covering entire slide, change in font and colour - provides great visual impact (please do not use this as unsure of license - example of aesthetic only)
Matt I, 4/14/2017
- M!1** This image I pulled from Google appears to be the SAME image you originally used, just better quality - where did you get that image from? If you have the permissions to use then go great!
Matt I, 4/15/2017

Challenges



First Hypothesis



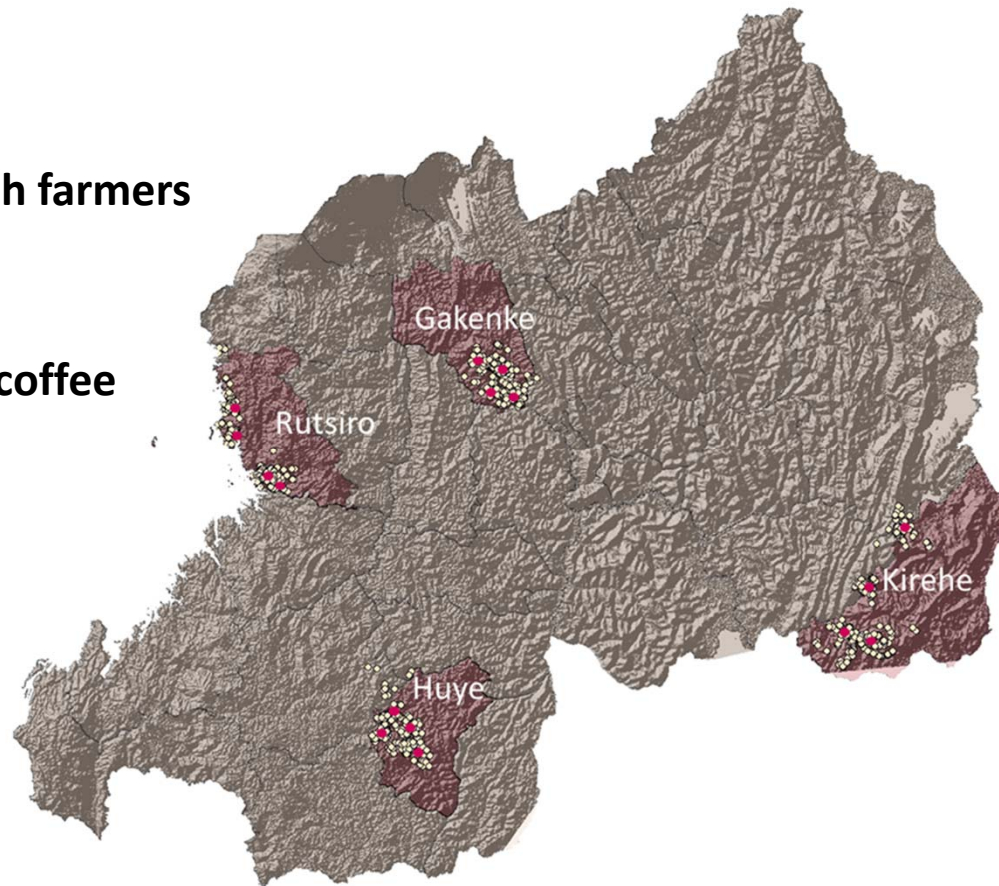
Second Hypothesis

+ Policy = Farmer Investment ↑ = Productivity ↑

Finding Root Causes: Fieldwork

10 focus groups with farmers

4 of Rwanda's key coffee districts



Field Work → Dialogue With Stakeholders



Empirical Evidence

177 RWF/Kg cherry

~ \$.10/lb cherry



1. Household
Labor



2. Wage
Labor



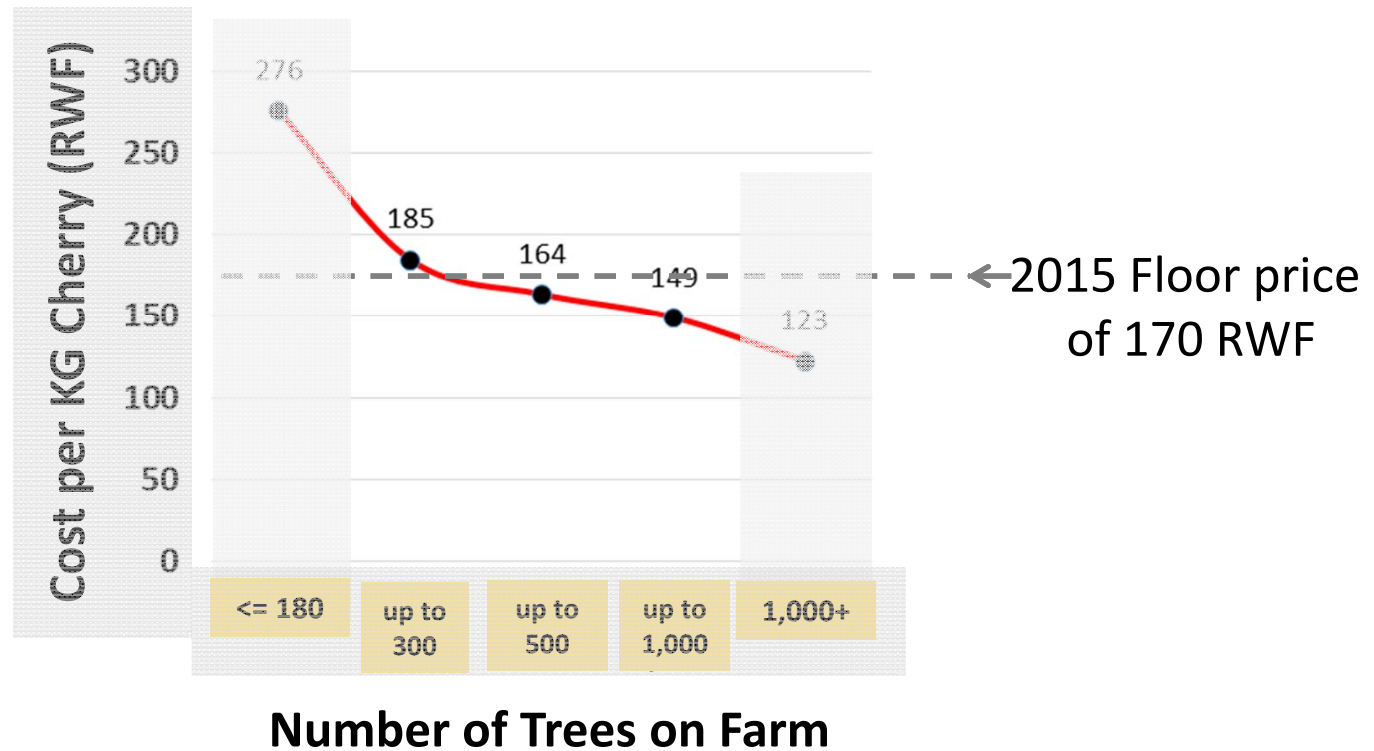
3. Purchased
Inputs
(e.g. fertilizer)



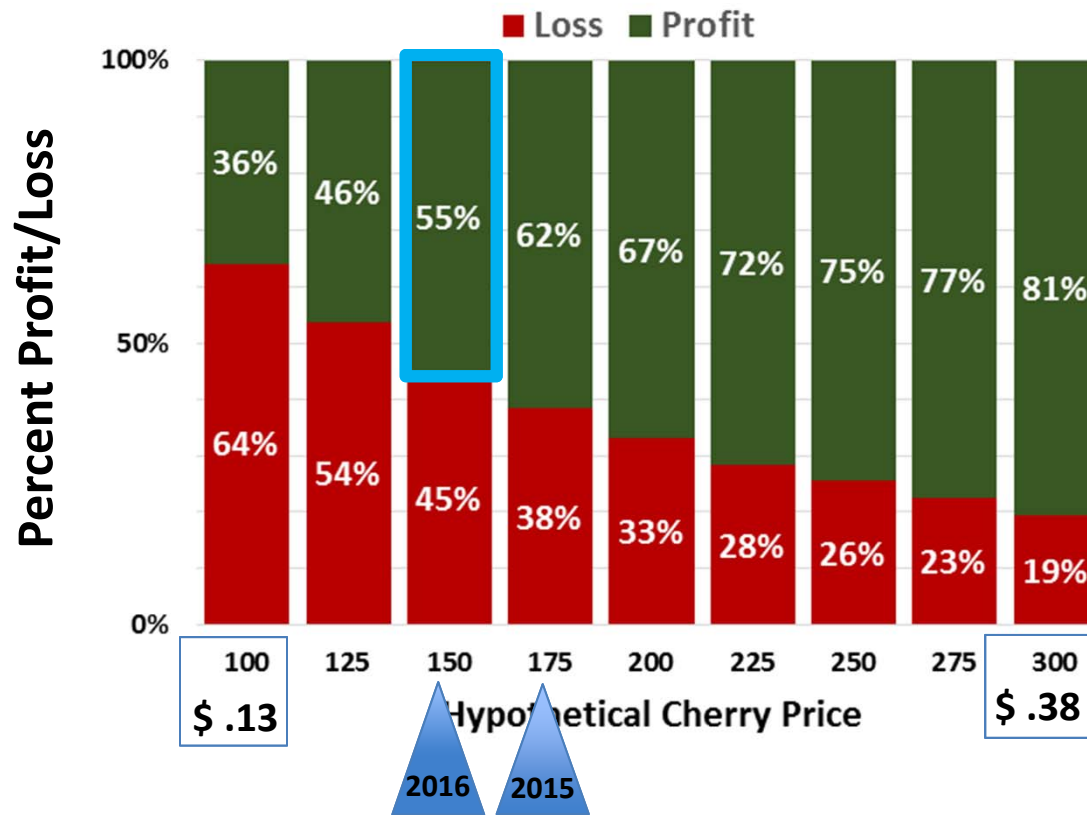
4. Purchased
Equip.



Cost of Production by Number of Trees



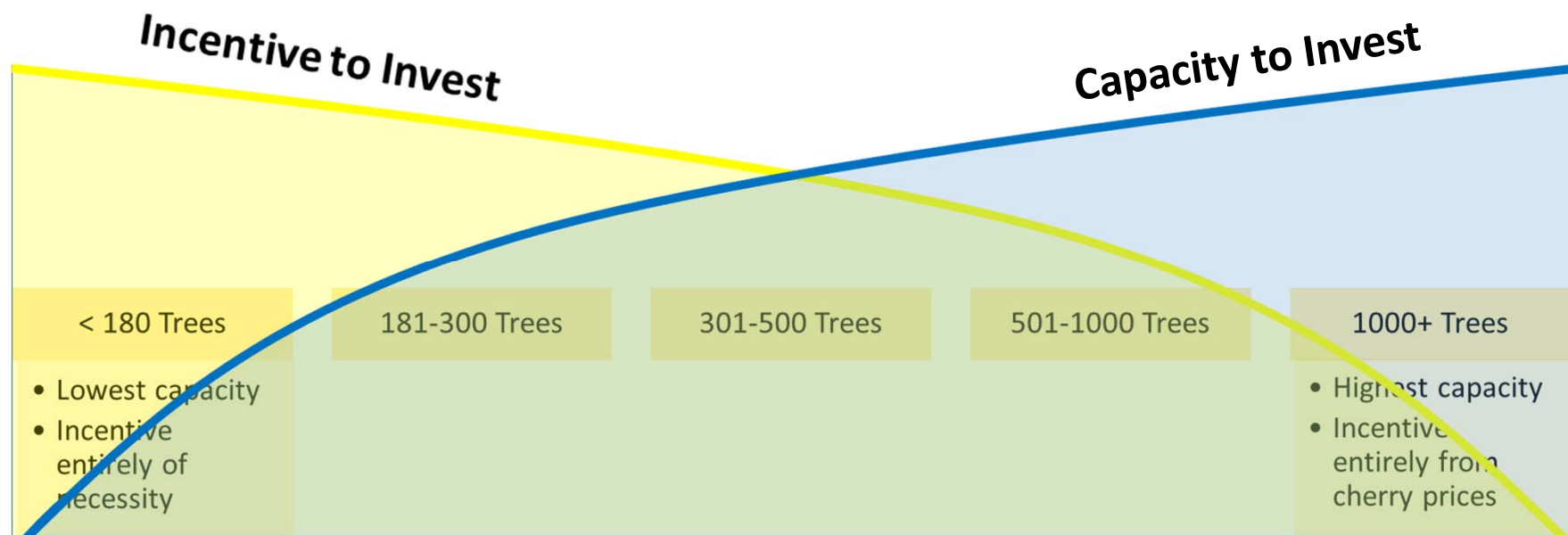
1st Model - Profit/Loss



Further Analysis

2nd Model – Capacity vs. Incentives

Low cherry price scenario



Yield = 2.17kg cherry/tree

Yield = 1.08kg cherry/tree

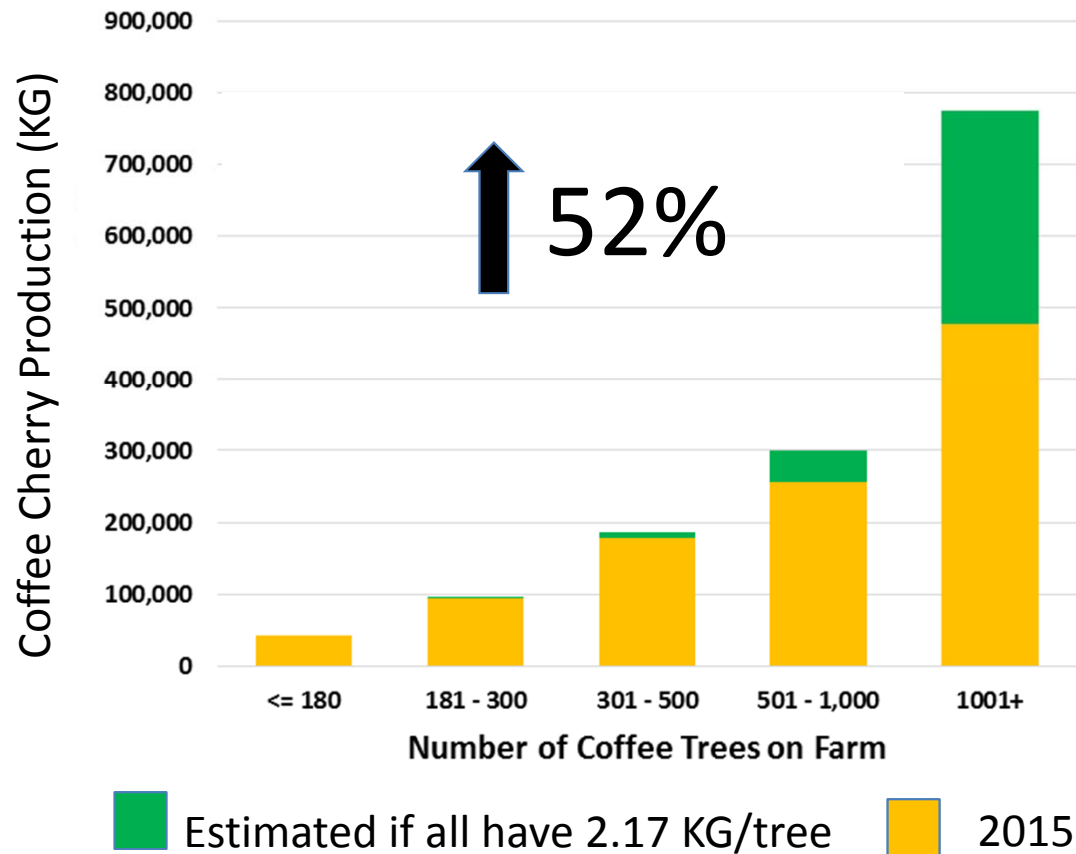
Evariste Habimana –

7,500 trees

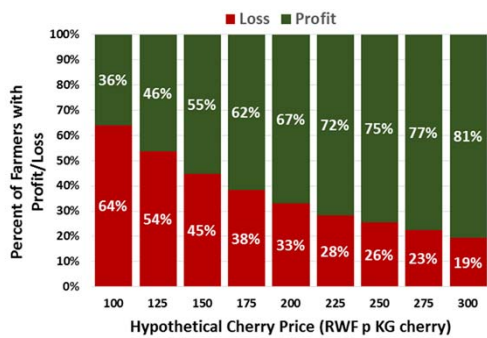


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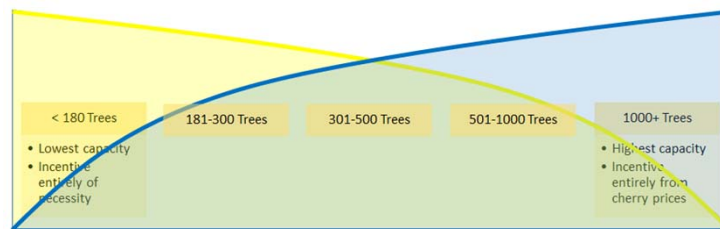
3rd Model –Productivity of Large Farms



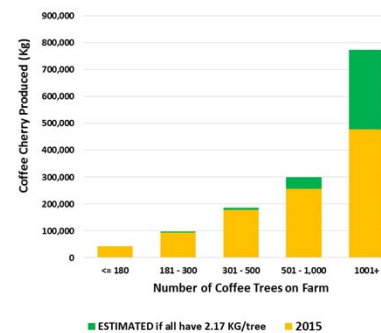
1. Losses at Hypothetical Prices



2. Farmer Typology – Incentives vs. Capacity



3. Importance of Large Farms





**Similar finding:
raise prices to
improve farmer
profitability**

**What about the
people who buy
cherry?**

Today, we're mostly only paying the floor price...

Farmer sales record – Mar. 3 - Apr. 20, 2016

	Itariki Date	Fagitiro n° Invoice n°	P/C	IGICIRO Price KG	Ibiro Total KG	AYISHYUWE Total amount paid
1	3/4/2016	28018		150	49	7350
2	5/4/2016	28116		11	22	3300
3	5/4/2016	28421		11	82	12300
4	18/4/2016	281140		160	108	17280
5	19/4/2016	28143		11	52	8320
6	24/4/2016	28149		150	44	6600
7						
8						
9						
10						
11						
12						

Price
150 p KG
~\$.19 p KG

Weight
351 KG

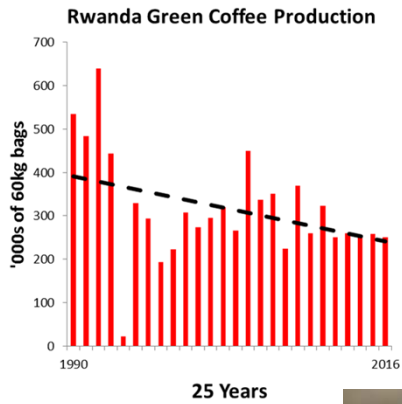
What happened?



264 RWF/KG cherry
\$.15/lb cherry

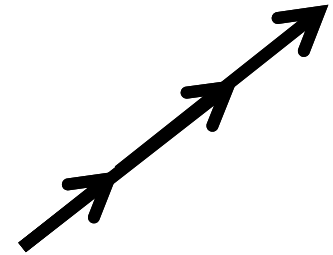
75%
Pay Increase!

Challenges



Solutions

\$\$\$ →



Take-Aways

Check the incentives.

Invest in an evidence-based dialogue with stakeholders.

Coffee – an attractive business for *everyone*.



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Collaboration



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