#### MINEACOM Workshop on Trade & Export Development

Kigali, Rwanda 14<sup>th</sup> December 2016

#### **Session II**

Understanding Constraints to Value Addition in Rwanda's Coffee Sector

#### Ameet Morjaria

Assistant Professor of Managerial Economics & Decision Sciences Kellogg School of Management Northwestern University





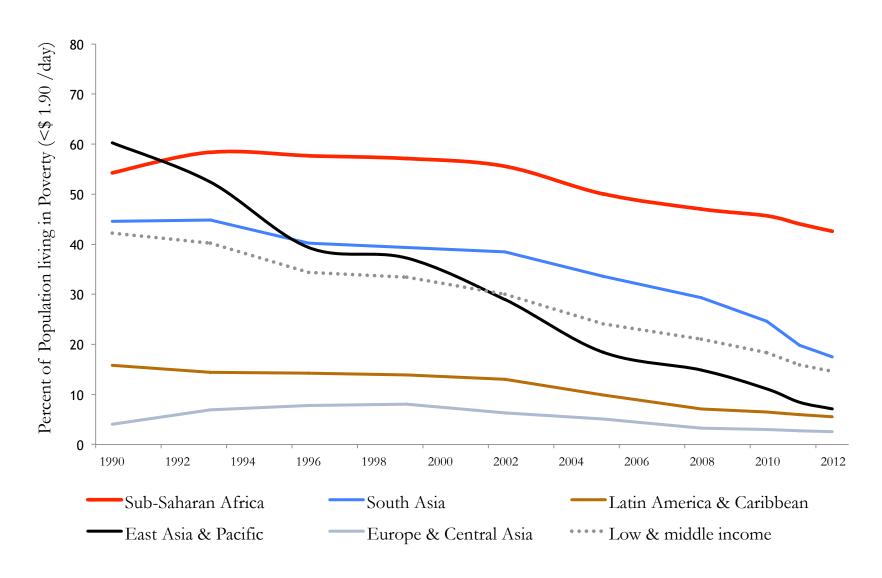
#### Outline

1. **Big picture:** why should we care?

#### 2. Rwanda's Coffee Sector:

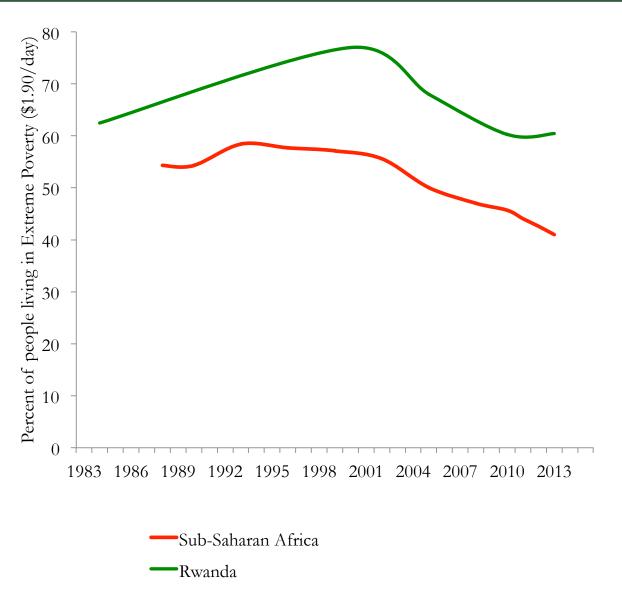
- quick re-cap on transformation of the sector
- break down of the value chain
- diagnosis of critical challenges and possible opportunities

### Poverty reduction in Africa lags other regions



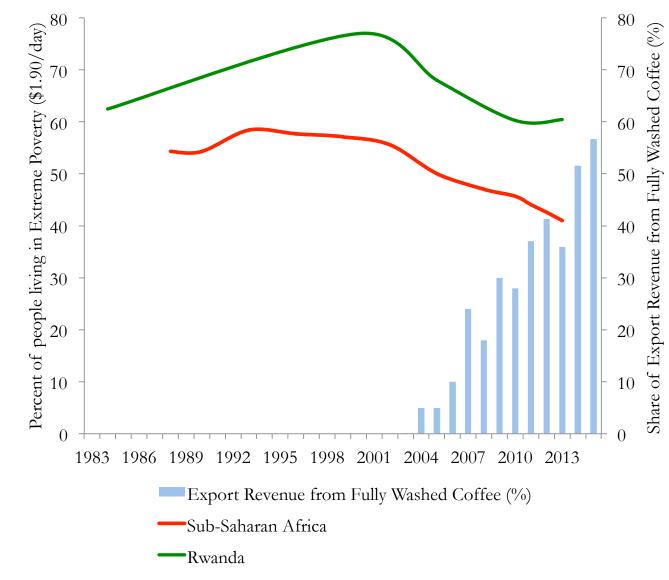
Source: WDI 2016

### Rwanda: rapid progress



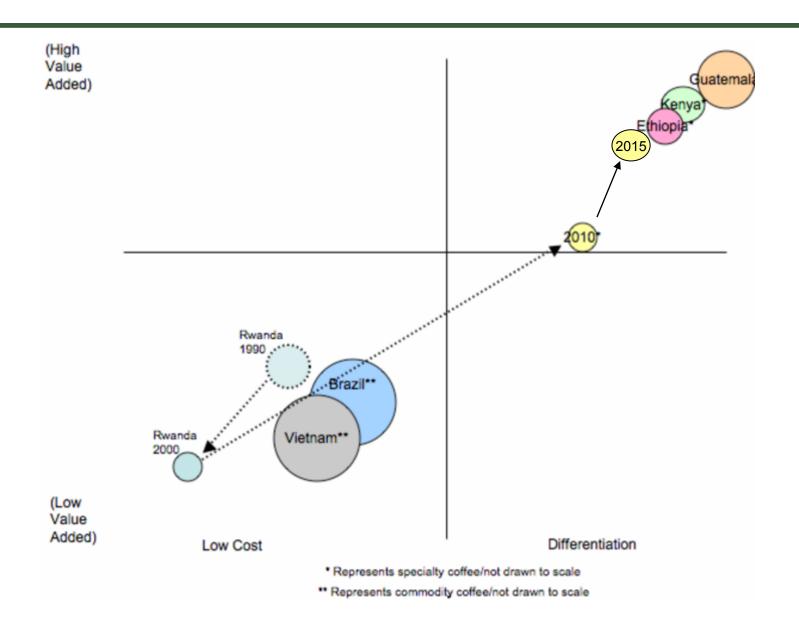
Source: WDI 2016

### Rwanda: important transformation



Source: WDI 2016; National Bank of Rwanda Annual Reports (various)

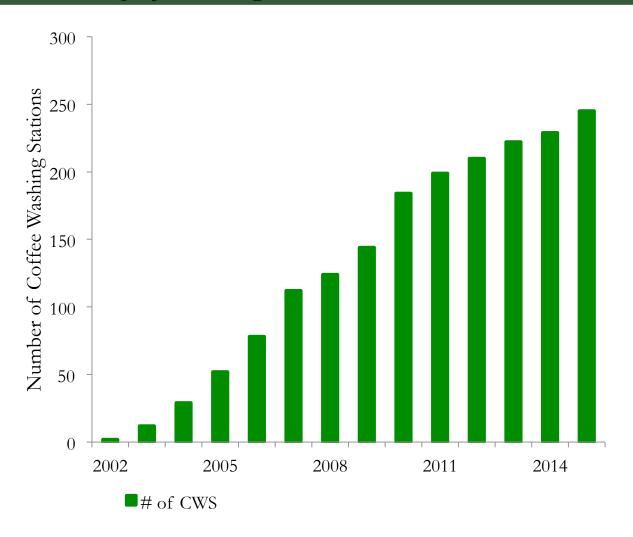
# Rwanda: important transformation



#### Context

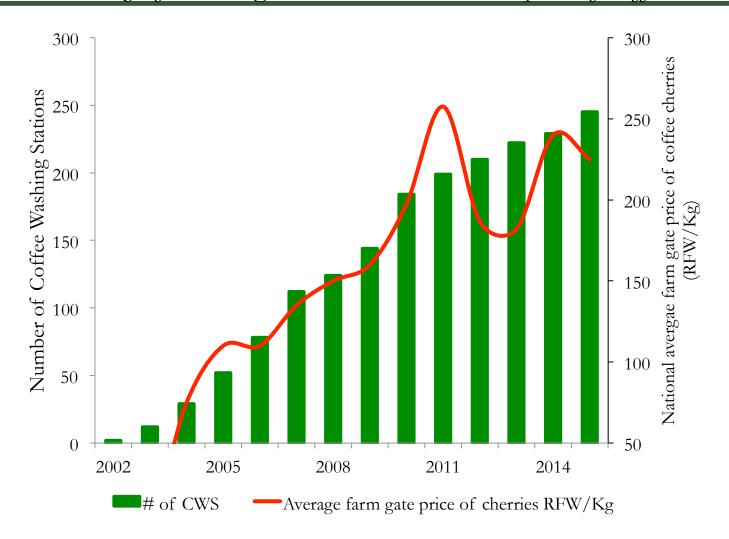
- o In 2000s low-quality, low-volume cycle: commodity-grade coffee producer
- o New GoR targeted coffee as a priority sector (after several strategy sessions), adopted 1999-2003 Coffee Strategy & Action Plan (increase production, improve quality, promote greater equity in value distribution) and kept elaborating the plan Horizon 2010 Coffee Action Plan. Liberalization. Strategic realignment.
- o Embraced assistance in cooperative formation and private sector advisory e.g. USAID (e.g. ADAR, PEARL, SPREAD...)
- o Focus on quality e.g. Cup of Excellence competitions since 2008
- Pre-2002: quantity as only measure of performance, GoR controlled,
  vulnerable to price movement
- O Post-2002: quality as only criterion for remuneration, role of private sector, potential for Rwandan coffee to become single-origin
- o Fully washed (Arabica) exports: 1% in 2002; 21% in 2010 and 50% in 2015

# Explosion in entry of washing stations



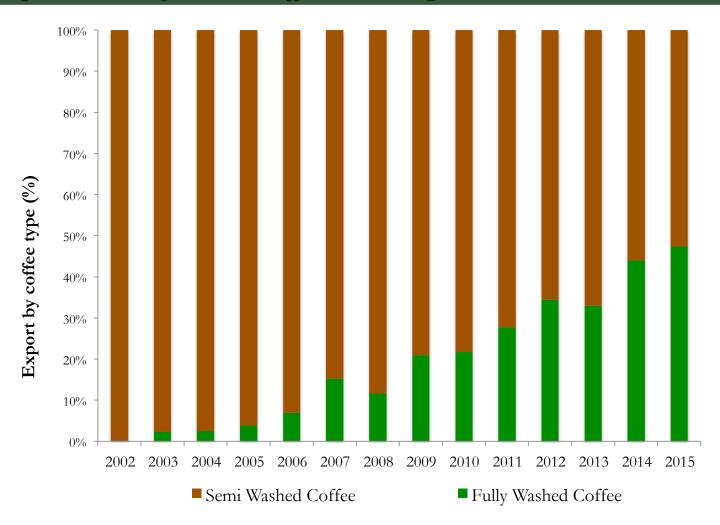
Source: Authors calculation on NAEB annual report, OCIR-Café reports (various)

Explosion in entry of washing stations and increase in price of coffee cherries



Source: Authors calculation on NAEB annual report, OCIR-Café reports (various)

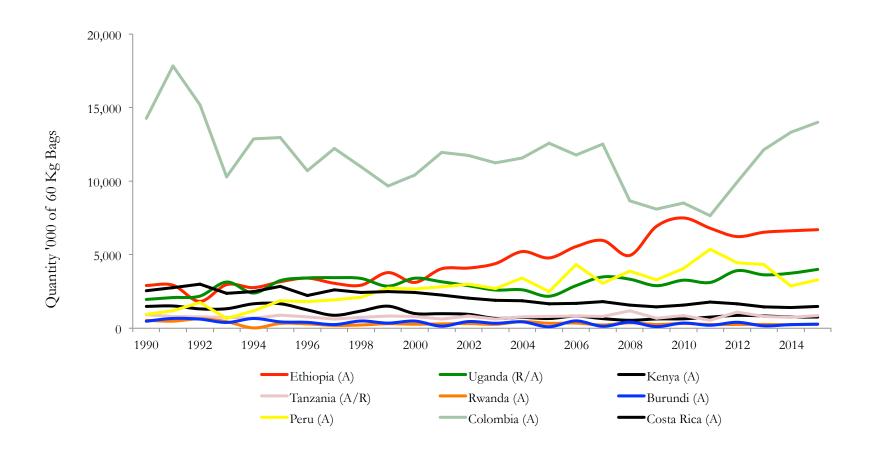
### Export volume of washed coffee increasing



Source: Authors calculation on NAEB Annual Statistics, National Bank of Rwanda Annual Reports (various)

# Rwanda Benchmarking

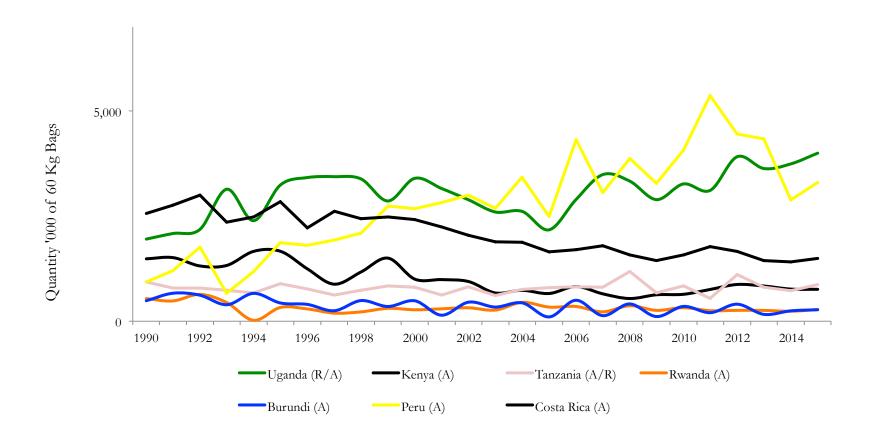
### Volume produced



Source: International Coffee Organization 2016

### Rwanda Benchmarking

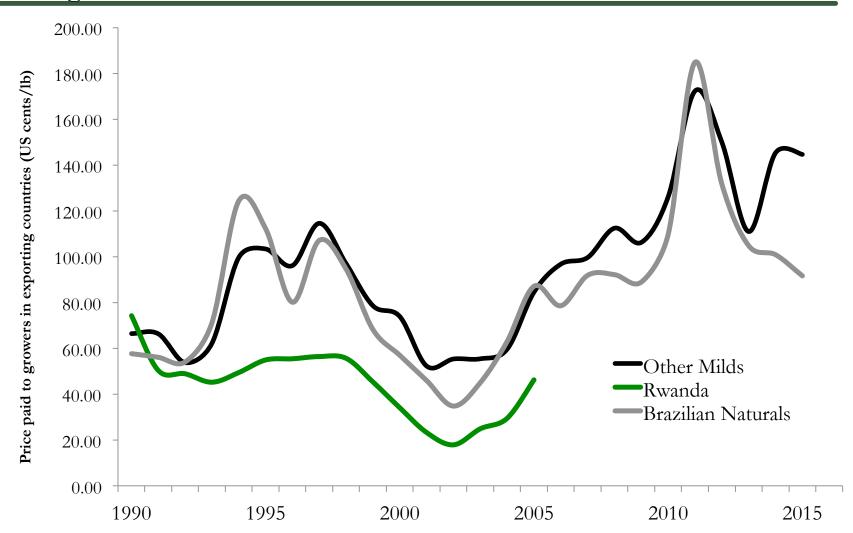
### Volume produced



Source: International Coffee Organization 2016

# Rwanda Benchmarking

### Pricing



Source: International Coffee Organization 2016

# Farmers



# Farmers, Washing Station





# Farmers, Washing Station, Exporters







# Farmers, Washing Station, Exporters, National issues



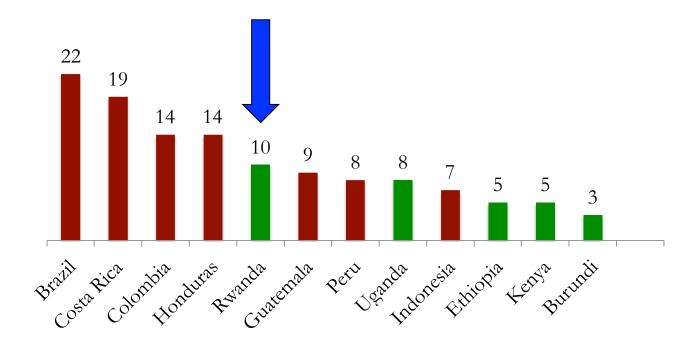




#### Constraints at Farm level

#### *Yield*

- Yield per tree is low: average 2.8 kg/tree potential 5-7 kg/tree
- Implications for export: how many 60 kg bags can be produced from 1 ha?



#### Constraints at Farm level

#### Investment and input usage

#### Investment limited between 2009-2015:

- Increase in new coffee trees 25%,
- Currently 26% of coffee tree stock beyond productivity age (> 30 years)

#### o Extremely low input usage:

- 40% of the coffee farmers use basic practices in their coffee husbandry
- BIG GAINS, no need of scientific breakthrough
- NAEB addressing this recent MOU with CEPFA fertilizer and pesticide fund moved to CEPFA (30% funded by GoR, and levy on exports)
- Under CEPFA they procure and distribute inputs
- Improvement in application prior to 2015: 35%, recent figures 59%
- Challenges remain: leakage, adequate warehouse facility, quantity of fertilizer, local level monitoring (1 district extension officer: 13,000 farmers, in UG 1:35,000 and Colombia 1:500)
- Recent appointment of new service provider should help
- This is crucial to get right. Multiplier effect

Source: discussion with NAEB technical staff

#### Constraints at Washing station

### Utilization and relationship management with farmers

- o Capacity utilization improving: 2011: 49%; 2015: 60%
- Ruthless competition: 2015: average CWS sourcing from 4 sectors nearby & facing 6 other CWS competing in its sector
- Hurts long term relationship with farmer, private CWS have 35% of procurement from repeated farmers whereas cooperatives have 45% from repeated farmers
- o **Financial implications:** when dealing with private CWS, 87% of the purchases from farmers are paid by cash at the time of delivery, whereas cooperatives 70%
- NAEB implementing zoning policy

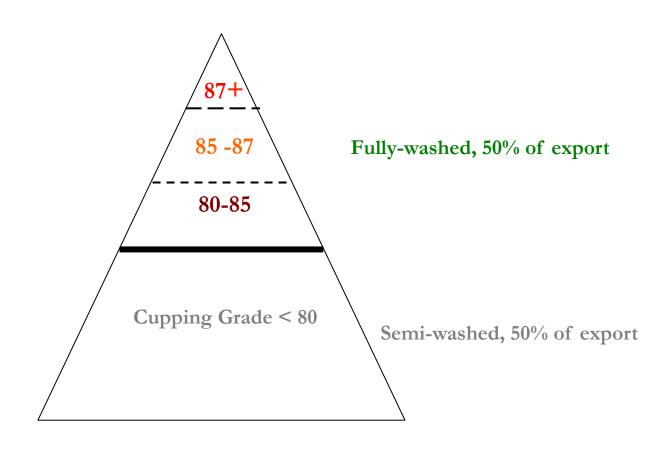
# Constraints at Washing station

# Operational challenges

PRIVATE		COOPERATIVES	
2012	2015	2012	2015
40%	27%	30%	16%
7%	3%	3%	4%
12%	7%	38%	49%
5%	3%	3%	2%
5%	7%	5%	2%
30%	54%	22%	25%
	2012 40% 7% 12% 5% 5%	2012  2015    40%  27%    7%  3%    12%  7%    5%  3%    5%  7%	2012    2015    2012      40%    27%    30%      7%    3%    3%      12%    7%    38%      5%    3%    3%      5%    7%    5%

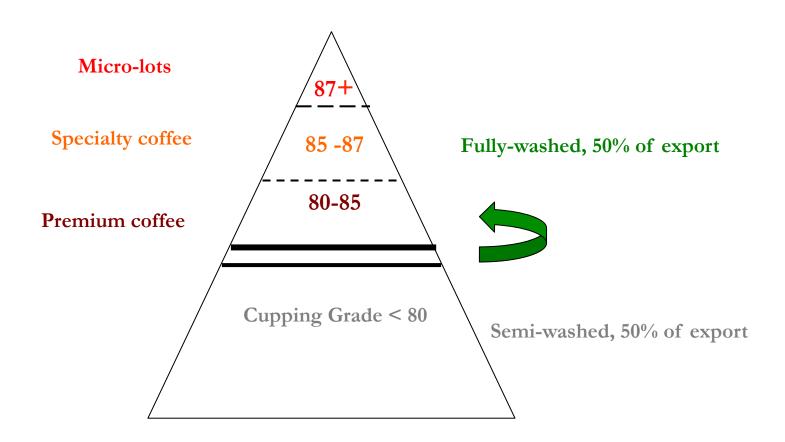
### Opportunity at Washing station

Large gains to small improvements in quality



### Opportunity at Washing station

Large gains to small improvements in quality



### Improving lending to washing stations

- O Different financial implications of fully washed versus unwashed coffee
- o FWC financial cycle very different from unwashed coffee
- Export contract execution and payments take place much much later in the season for washed compared to unwashed which can take a week
- o Important to get financial organizations to work together with GoR, and coffee sector
- (related need patient capital for certification not commercial lending)

#### Rwanda origin?

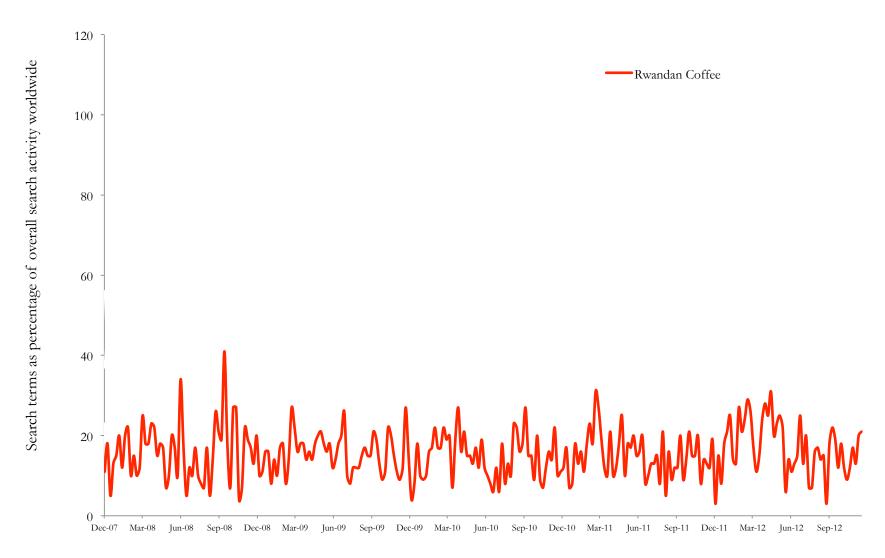
Leading off-taker's of Rwanda Coffee: Swiss 56%; EU 40%, ROW: 4%

Under Sustainable Coffee Program – major coffee roasters have set a goal of procuring sustainable coffee sales from 8% to 25%

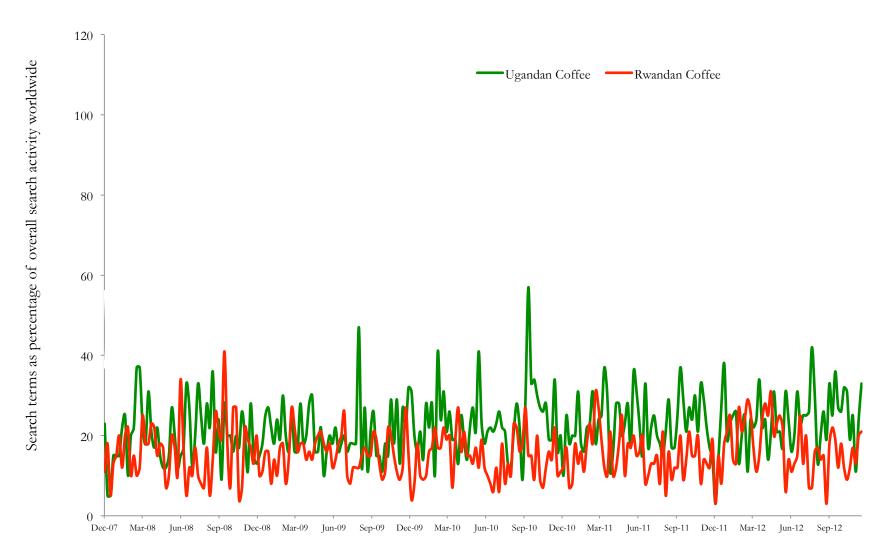
 Close to 50% exports to large traders hence limited impact of origin/ certification

O However for the other 50% of sales it would pay huge dividends if *Rwanda* origin is marketed

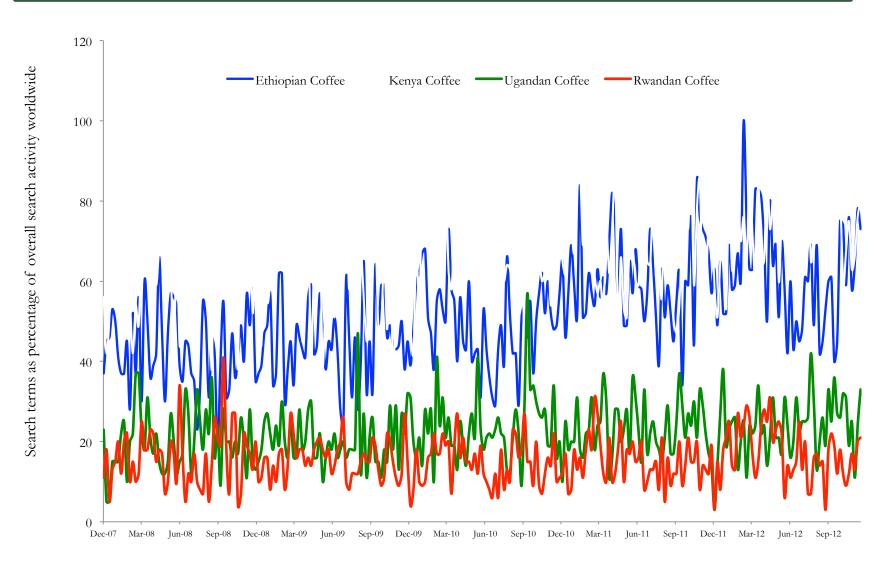
Rwanda origin?



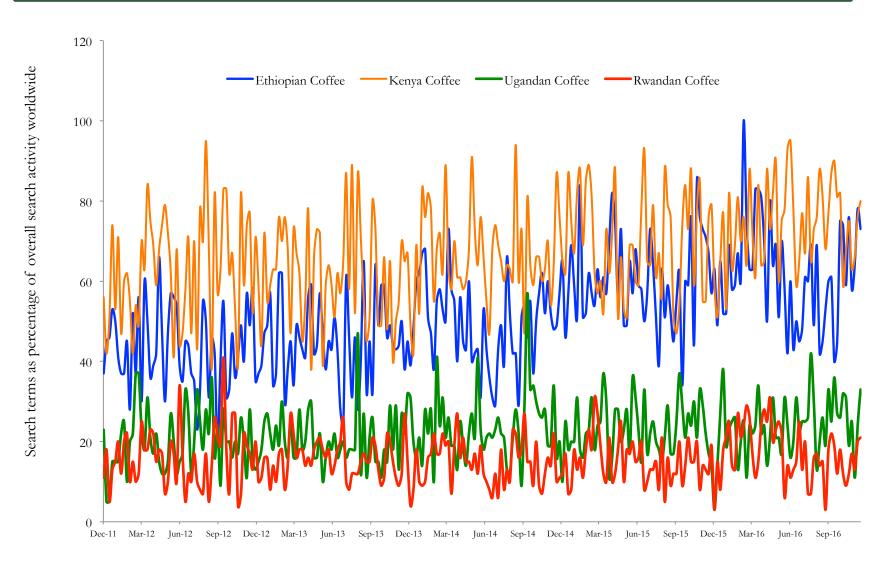
### Rwanda origin?



### Rwanda origin?



### Rwanda origin?



### Rwanda origin?

o Kenya's "AA" washed coffee branding





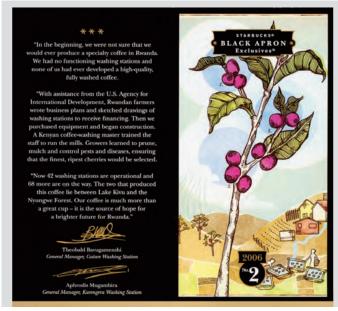




#### Rwanda origin?

- Idea not completely new for Rwanda
- Rwanda's early success in 1999 was NGO (USAID-PEARL) support of *Abahuzamugambi Cooperative*
- Recall: in 2006 Starbucks selected CWS coffee for their ultra-premium "Black Apron". The coffee was sold for \$13 per half-pound at 5,000 retail outlets in North America and sold out faster than any previous "Black Apron" coffee





### Appellation?

o geographical indication, whereby a product's given quality or reputation is linked to a geographical origin e.g. appellation in wine and cheese

Ethiopia's experience (Sidamo, Harrar, Yiragacheffe), long road, recall the UN arbitration (GoE vs. Starbucks). Appropriate infrastructure and capacity is needed: GIS data, office of intellectual property, policy & enforcement, awareness at all levels of chain, monitoring and follow-up mechanism

o I understand this is back on the agenda at NAEB

### Recap: several opportunities



Yield improvement

- Input usage
- Input access



**CWS** 

■ Small improvements in quality



**Zoning policy** 

- monitoring
- **■** enforcement

#### National level

- Financial implications of FWC
- Rwanda Origin

# Thank You Murakoze

Ameet Morjaria

+1 857 991 7895 a.morjaria@kellogg.northwestern.edu