



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative



Designing mechanisms that connect coffee price to quality

Feed the Future Africa Great Lakes Region Coffee Support Program (AGLC) Policy Roundtable

June 2017 • Kigali, Rwanda



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Roundtable Introduction



AGLC Background

- **AGLC is a 3-year USAID-funded initiative that addresses 2 major challenges in the coffee sector in Rwanda (and the Africa Great Lakes region)**
 - Reduce antestia bug/potato taste defect (PTD)
 - Raise coffee productivity
- **Partners**
 - Rwanda: Inst. of Policy Analysis and Research (IPAR) and Univ. of Rwanda (UR)
 - USA: Michigan State University (MSU) and Global Knowledge Initiative (GKI)
 - Numerous public and private sector partners
- **Components:**
 - applied research
 - policy engagement
 - capacity building

Guiding questions of this Round Table:

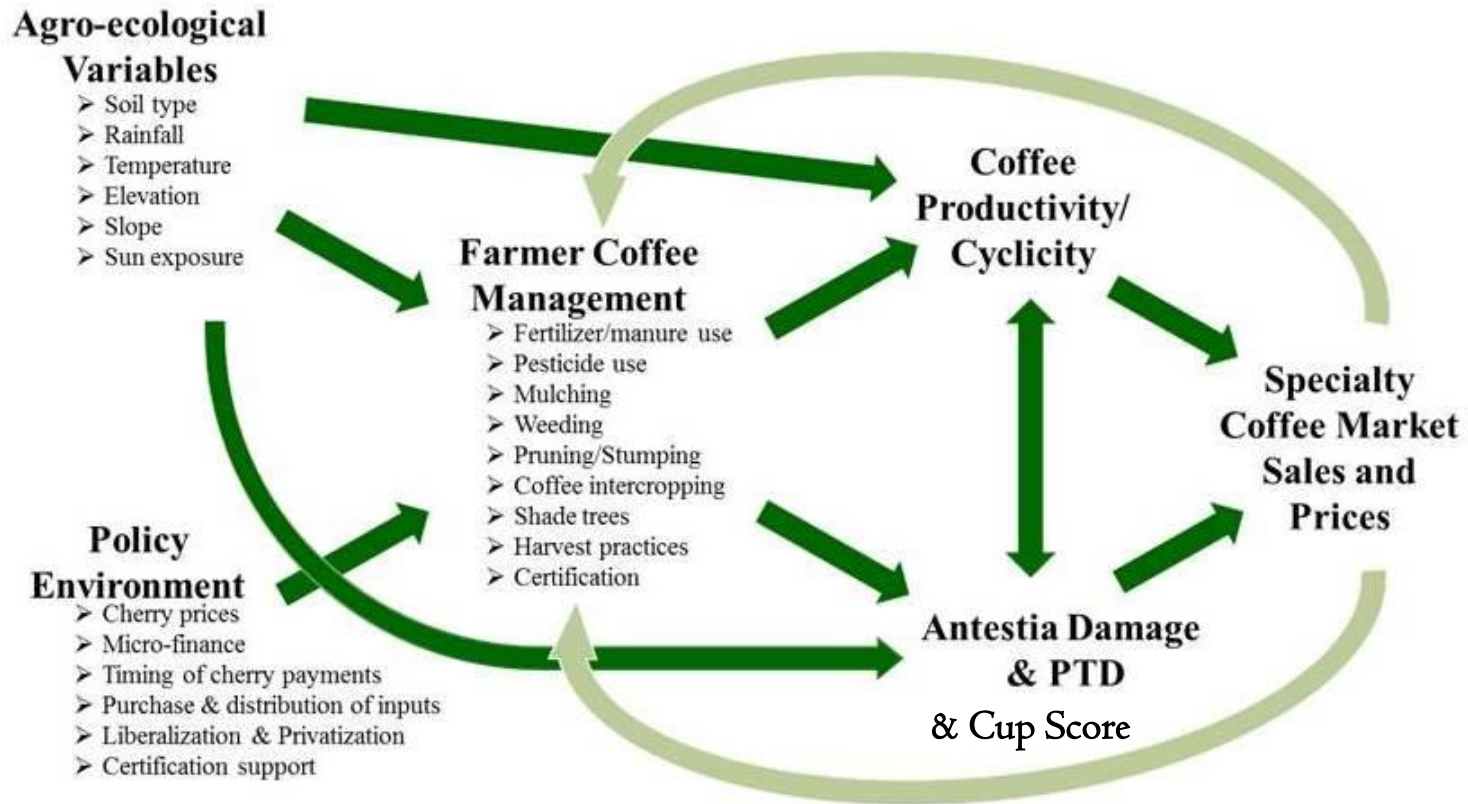
- What are the common definitions of “quality coffee” for Rwanda?
- How might we create systems that reward producers for producing high quality coffee – if and when high quality coffee is demanded?
- How might we support the growth of specialty coffee as a share of Rwanda’s total coffee exports?

Why it's Important

- Rwanda has a national target to reach 70% fully washed coffee.
- Rwanda has a competitive advantage globally in specialty coffee – not in commodity coffee.
- Once buyers are found who pay prices that keep farmers profitable, must “deliver,” must be no PTD.



Research Framework



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Intro and Background



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Institute of Policy Analysis
and Research - Rwanda

Issues raised in 2016 policy roundtables

Second-Payments:

- Provision of second-payments may increase quality coffee production and productivity per coffee tree
- Being in a cooperative makes a coffee farmer more likely to receive second-payments, all else equal
- All else equal, farmers at 1651-1850m have greater likelihood of receive second-payments
- Second-payments are an incentive to supply coffee to CWS

Issues raised in 2016 policy roundtables cont.

Proportion of Coffee in Fully-Washed Channel:

- Focus should be on fully-washed SPECIALTY coffee
- Not all coffee that goes through CWS becomes fully-washed and graded as specialty coffee
- Low quality drives low prices, which lowers incentives for farmers to invest in fully-washed coffee
- Lack of second-payments for high quality
- Lack of adequate infrastructure at CWS
- Lack of adequate management at CWS



Market Insights



Customer Voices from the U.S. (2015-2017)

“What do you think about the price of Rwandan and Burundian coffee?”

Laura Perry,
49th Parallel
Vancouver, BC

PTD

Jenn Aodaca,
Blue Bottle
San Francisco, CA

PTD

We stopped buying Rw and Bu about 2 years ago. The PTD risk is just too expensive.

Theresa Pilarz,
Espresso Elevado
Plymouth, MI

PTD

Until there is a real solution for PTD, there is a significant market cap on price potential of Rwandan coffee.

Brent Patton,
Camino Real Coffee
Nacogdoches, TX

Tim Hill,
Counter Culture,
Durham, NC

PTD



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Global trends

- Global coffee consumption is outpacing production – past 3 years.
- The world supply of washed Arabicas is predicted to decline
- Rwandan producer concern:
“Will there be a market (buyers) for lots of expensive coffees?”
- Demand is growing fast in India, China, South Korea, and Japan

Roasters in the Room

What does your buying forecast look like?

- Washed vs. Robusta vs. Naturals?
- Growing markets geographically?
- Importance of quality?



Case Studies



Why Case Studies of CWSs?

Washing stations play two critical roles:

- Primary node offering training to farmers
- First “check-point” on quality

Case studies looking at quality incentives

1. “Traditional model” – Pay lowest price possible per KG cherry.
 2. Exporter with Contracted WSs
- ****Alternatives****
3. Long Miles Coffee Project (LMCP) - BURUNDI
 4. Kopakama - RUTSIRO
 5. Sustainable Harvest – KIREHE and NYARUGURU

1. Traditional Model

- Don't know the customer until later in season
- Pay lowest price possible per KG cherry.
- Theory: “you do not know what you will earn on the coffee, so buy low and prepare to sell at a low price.”
- Price to farmer at collection sites is 10 – 20 RWF lower than the price paid for cherry brought to CWS.
- Farmers pay collectors for the transport ‘service.’
 - Does the fee the farmer pays actually correspond to the cost of transportation?

2. Exporter with Contracted CWS

- Exporter contracts rural management team to manage and run CWS.
- WS knows all volume is sold at beginning of season
- Contract includes fixed up-front payment to the team (thousands of dollars) to deliver a certain production volume by the end of the season.
- Few if any quality criteria.
- CWS manager has incentives to adjust cherry price downward making the fixed dollars “stretch” to meet the required volume of parchment.

Alternatives:

3. Long Miles Coffee Project- Burundi

- Pays 50 RWF above the floor price and second payment.
- Farmer receives same price at collection site as they do at CWS.
- Cup of Excellence premiums will be combined into 'fund' used for second payment.
- High prices attract farmers more than rejecting floaters repels them.
- “Floaters” are weighed and recorded.
- Farmer takes “floaters” home.
- Brix meter to help farmers see the difference in sugar content.
- “Taste test” used during deliveries to teach quality.
- Strict floating and sorting requirements.



3. Long Miles Continued

May 8, 2017 Bukeye Daily Report
Shared via Whatsapp group

Cherry volume: 7,969.5 KG
Cumulative: 29,368.5 KG
Cherry rejected: 126.5 KG
Quality retention: 98.5%
Number of farmers: 174
First farmer arrival: 9:50
Table full: 28
Table empty: 118
Number of lot: 10
Munyinya Mu 10
Gaharo Ga 10
Observation: - FW
Brix meter: 17

Quality metrics



4. Kopakama Coop- Rutsiro

- Equity and fairness to members is of great concern.
- In January, when total sales are known, the cooperative board decides the second payment.
- Experimenting with cherry quality metric using 300g samples – one for each collection site.



How to Understand “Fairness” When...



If the goal is 80% A1 parchment, 70% ripe red won't get you there.

Both of these farmers receive the same amount of cash.



5. Sustainable Harvest Cooperatives



- At the end of the season, farmers receive a score for their actual best practices.
- Higher scores mean “better” rewards.
- Farmers get to choose from several options.
- [Sustainable Harvest Premium Sharing Rewards™](#)

Summary of Case Studies

- High cherry price combined with strict quality control
- High prices attract farmers more than rejecting floaters repels them.
- Rewards tied directly to behaviors the farmer can control.
- Poor cherry, “floaters”, measured, recorded, sent home.
- Reception area considered integral part of farmer loyalty and education system. Agronomist coaching at reception.
- Advanced systems and quality metrics at reception.
- Quality metrics that farmers can see and understand at the time of delivery.

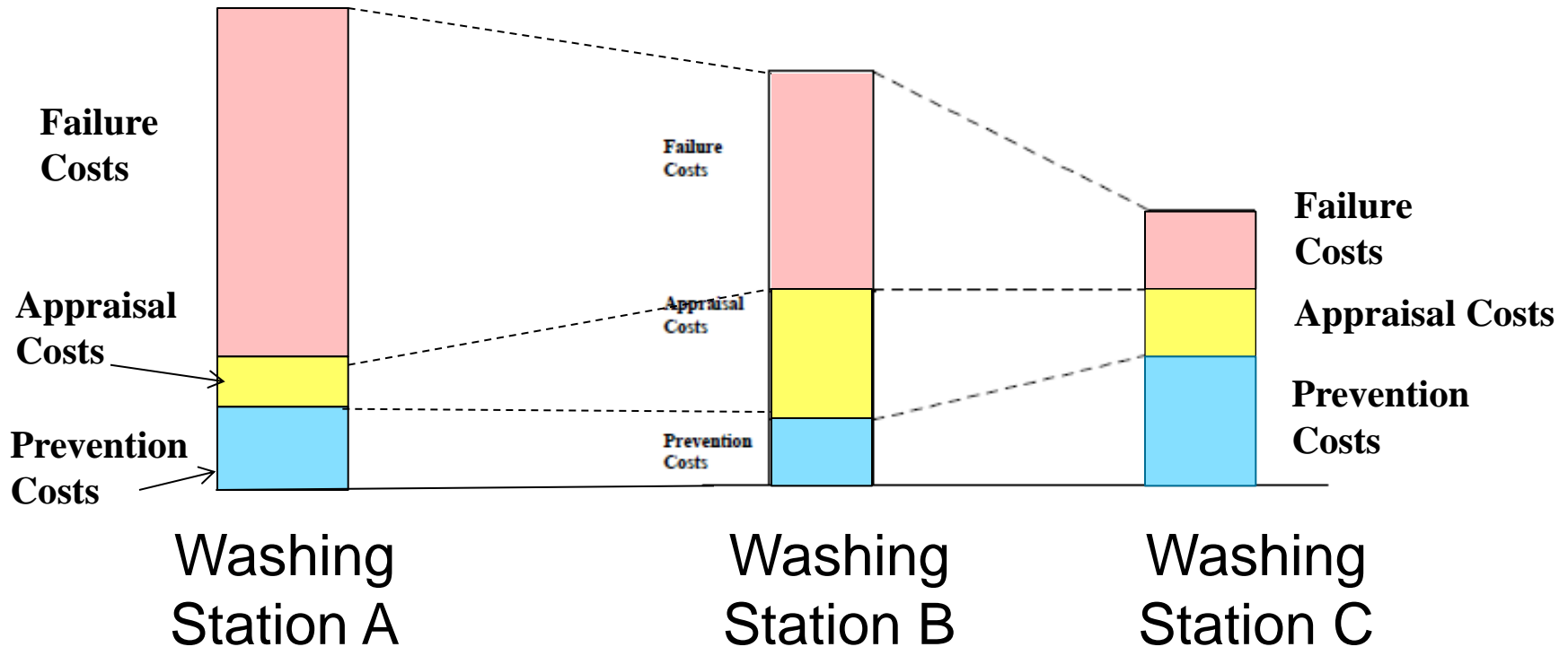


Proposed Mechanisms



“Economics of Quality” To Keep In Mind

Failure Costs, Appraisal Costs and Prevention Costs



Possible Mechanisms To Link Quality & Price

1. Measurements of quality at cherry reception
 - Send farmers home with poor quality cherry
2. Minimize ordinary coffee produced by CWSs
3. Ensure farmers have fair share of export price
4. Publicly promote quality metrics at washing stations

Issue 1: How do we measure quality at the CWS?

Finding a clear way to measure and communicate quality to farmers delivering to a washing station is critical. It is only a measurement if you can show progress. E.g. “deliver red cherry” is not a metric.



...	%	
3. Izarengaje gusha (g)	27	
...	%	
4. izitaribwashe neza (g)	25	
...	%	
5. Izononekaye (g)	23	
...	%	
vyose hamwe(Total) (g)	294	
Nziza zose hamwe (Izitukura+Izumuhondo=A1) (g)	219	
Izononekaye zose hamwe (g)	75	

Ways to measure and determine quality

- Floatation before weighing (farmer can see, it can be recorded and reviewed)
- Cherry quality metric using small scale
- Cherry taste test: green = sour; red = sweet
- Brix meter (too abstract for some)
- Cupping (distant from farmer)
- Grind and smell test for PTD (distant from farmer)



Policy Implications: Farmers take home the floaters. A form of price differentiation.

Issue 2: Ordinary Coffee From WSs

“Not all coffee that goes through CWS becomes fully-washed and graded as specialty coffee.”

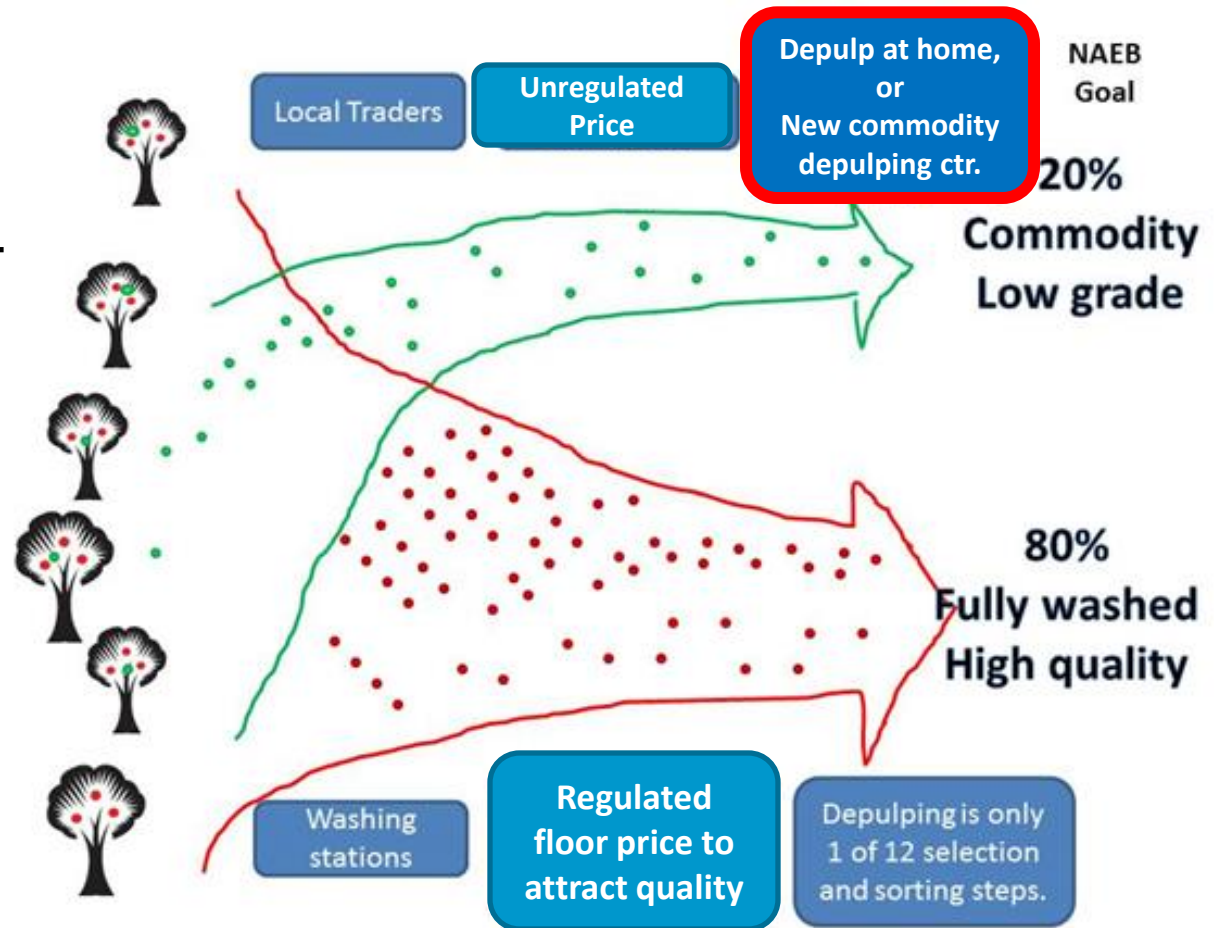
- Seems the portion of coffee purchased by washing-stations that becomes “ordinary” is not measured.
- AGLC CWS Survey: 30% is 'low grades'. 68% (2015) and 71% (2016) = average percent of total which is A1.

Two proposals:

- Implement a regular survey to monitor (reduce) ordinary from WSs
- Create "two-tier" washing station system – either build separate CWSs or designate current CWSs for ordinary only/specialty only.

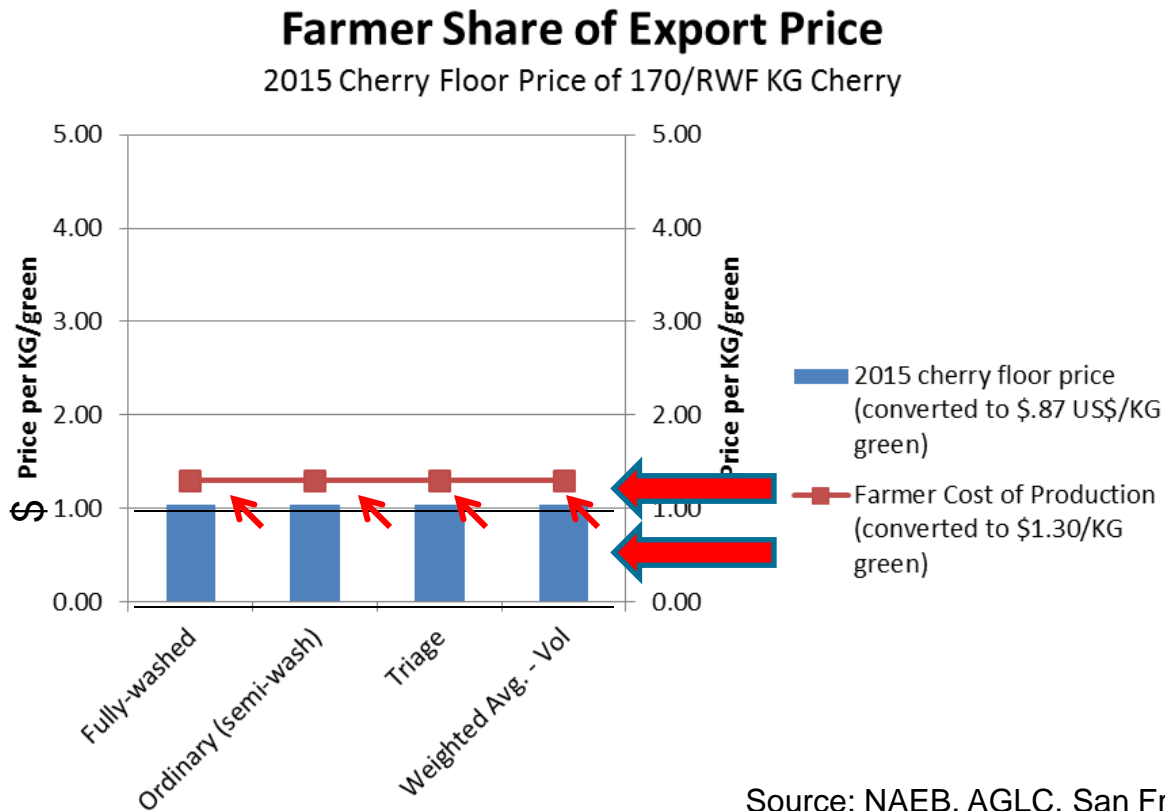
New high-volume, low-grade cherry depulping centers.

Remove defective cherry from the quality cherry value stream.



Issue 3: Farmer share of export price

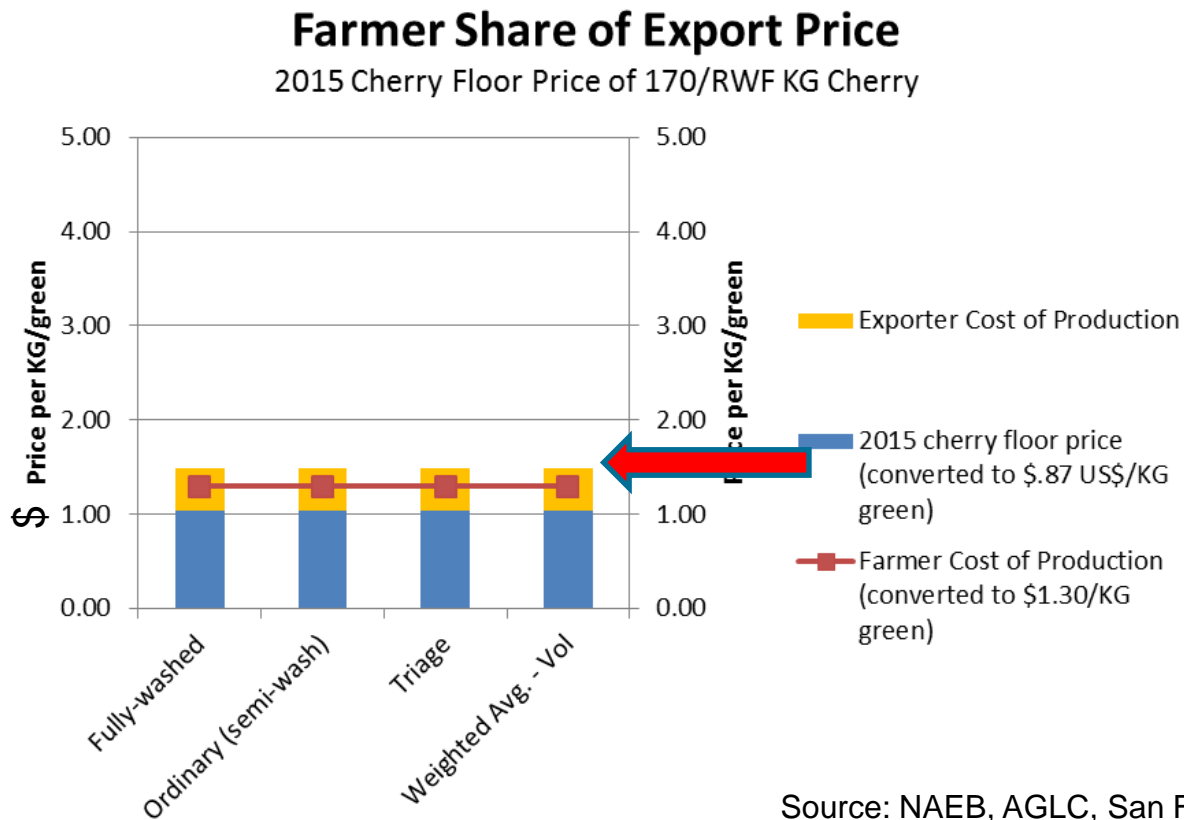
Chart 1: 2015 Cherry Floor Price of 170 Rwf/KG cherry



Source: NAEB, AGLC, San Francisco Bay Coffee

Issue 3: Exporter share of export price cont.

Chart 1: 2015 Cherry Floor Price of 170 Rwf/KG cherry

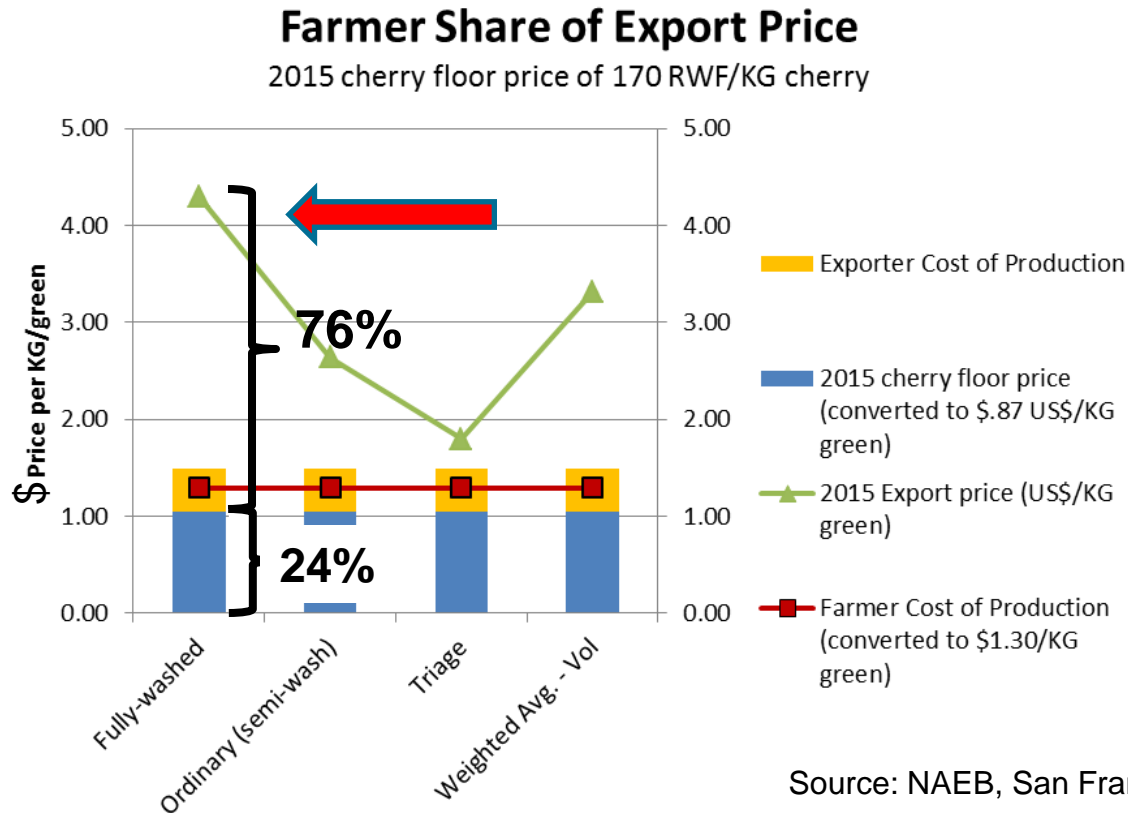


Source: NAEB, AGLC, San Francisco Bay Coffee

Issue 3: Comparison of shares of export price

Chart 1: 2015 Cherry Floor Price of 170 Rwf/KG cherry

Farm-gate price = 24% of FW price

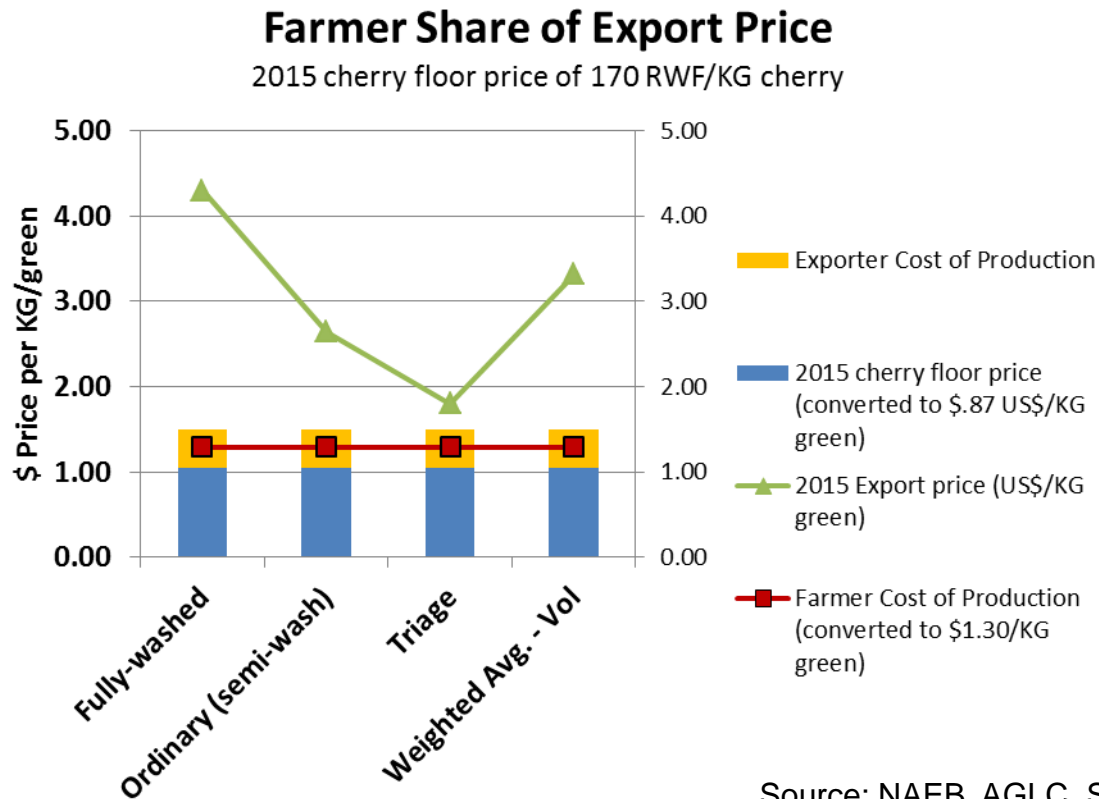


Source: NAEB, San Francisco Bay Coffee

Issue 3: Comparison of shares of export price

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Farm-gate price = 24% of FW price



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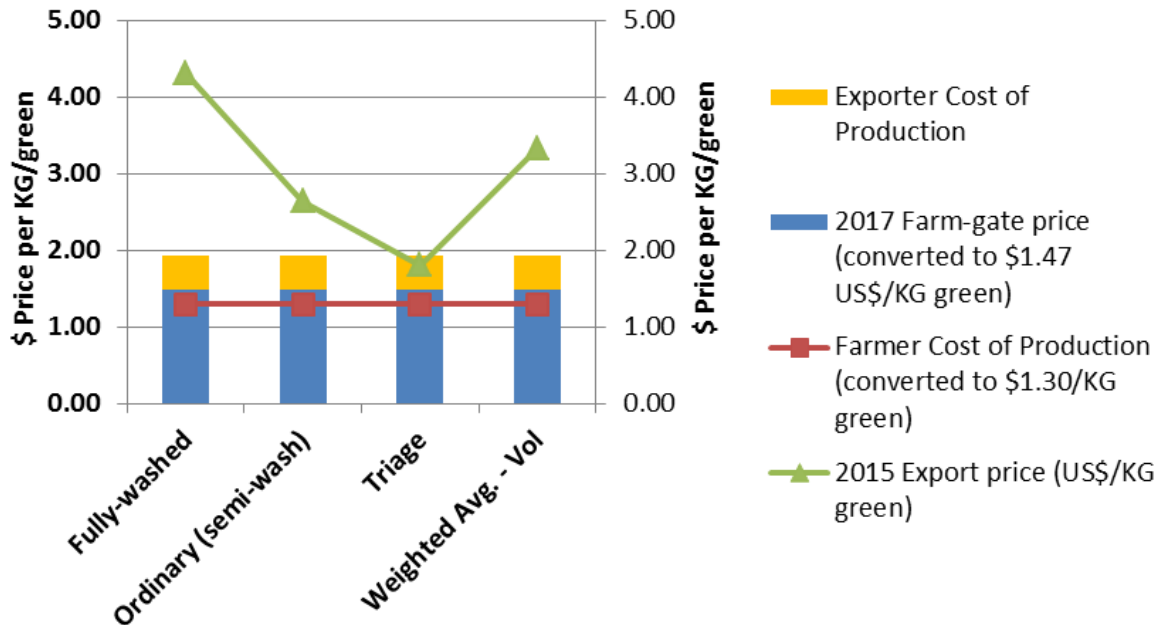
Issue 3: Comparison of shares of export price

Chart 2: Current cherry price of 240 Rwf/KG cherry

Farmer Share of Export Price

Current 2017 Cherry Floor price of 240/RWF/KG cherry

Farm-gate price = **34%** of FW price



Source: NAEB, San Francisco Bay Coffee

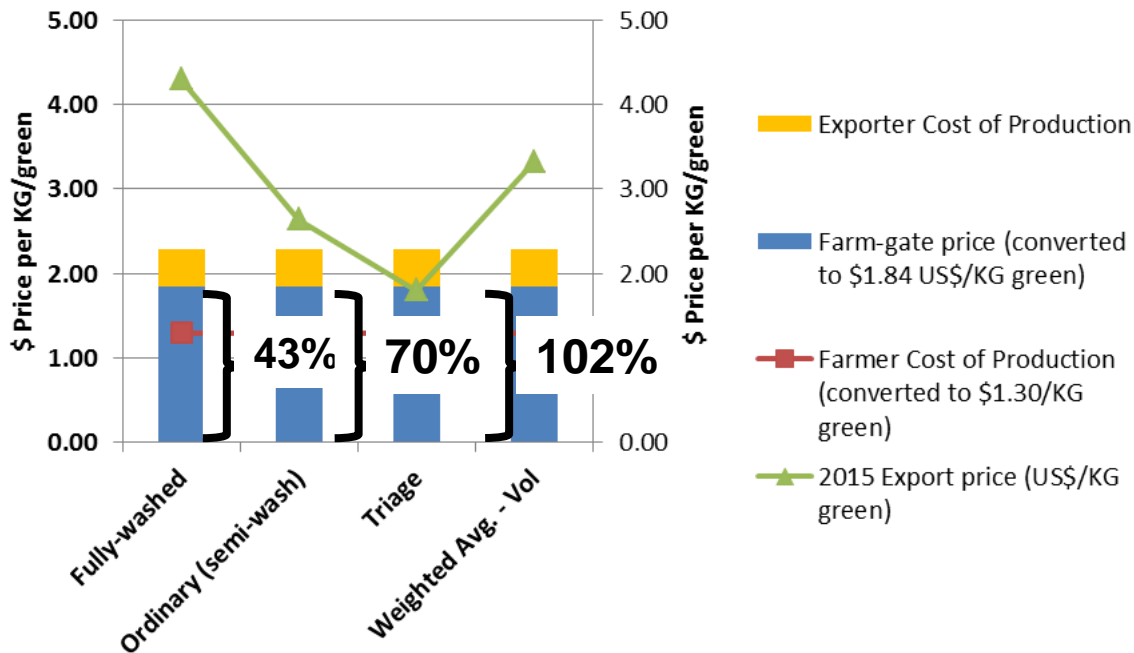
Issue 3: Comparison of different grades

Chart 3: Cherry Price of 300 Rwf/KG cherry

Farmer Share of Export Price

Cherry price 300 RWF/KG Cherry

Farm-gate price = **43%** of FW price



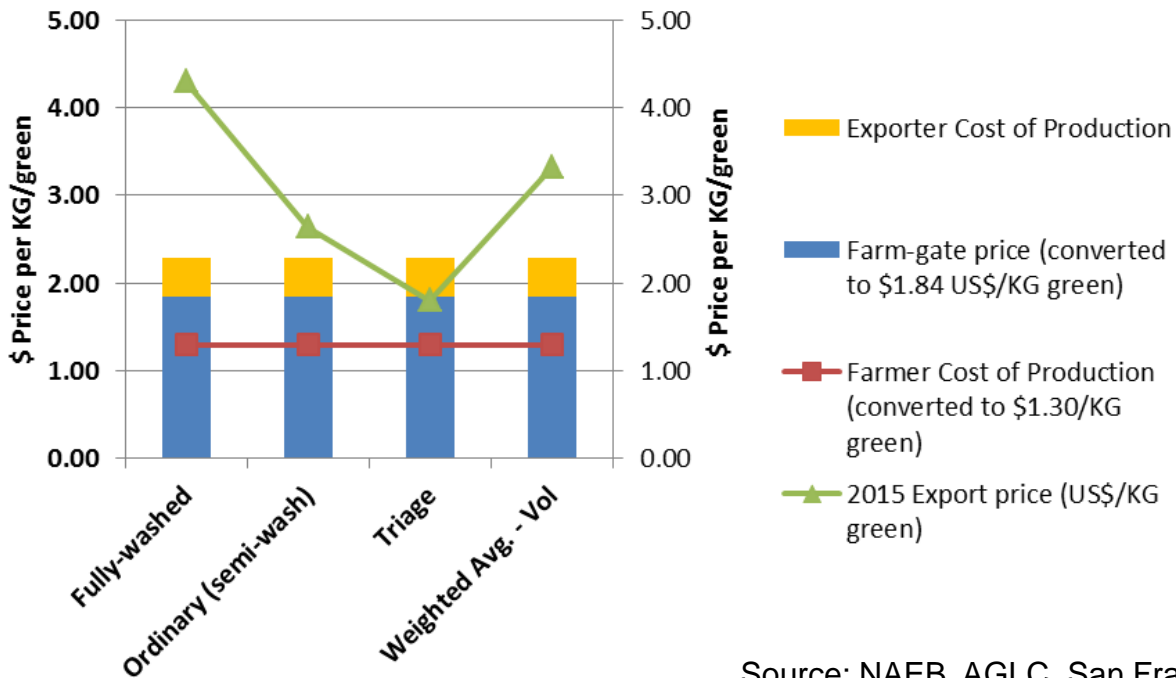
Source: NAEB, AGLC, San Francisco Bay Coffee

Issue 3: Improved farmer share of export price

Chart 3: Cherry Price of 300 Rwf/KG cherry

Farmer Share of Export Price

Cherry price 300 RWF/KG Cherry



Farm-gate price = **43%** of FW price

Source: NAEB, AGLC, San Francisco Bay Coffee

Issue 3: Lack of programs promoting quality metrics at washing stations

- Public recognition and rewards – e.g. “Baldrige Awards”
- Strengthen NAEB list of “best CWSs” and annual survey of CWSs.
- Public lists of washing station scores - percent specialty vs. percent ordinary produced
- Publish cherry price and second payment of each CWS. Over time, price-quality differentiation between CWSs will become apparent.
- Public support for WS management training

Summary: Designing Mechanisms To Link Quality & Price

1. Define measurements of quality to be taken at the time of cherry reception - send farmers home with poor quality cherry.
2. Program to minimize and separate ordinary coffee produced at WSs – keep floor price focused on fully-washed.
3. Ensure farmers have fair share of export price – via floor price.
4. Publicly promote "CWS lists" including percent ordinary and second payment as part of quality metric support program..

Recap of challenge – your input?

1. What are the common definitions of “quality coffee” for Rwanda?
2. How might we create systems that reward producers for producing high quality coffee – if and when high quality coffee is demanded?
 - How can we ensure a connection between farmer compensation and specialty grade production at washing stations?
3. How might we support the growth of specialty coffee as a share of Rwanda’s total coffee exports?



Thank You!



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