International Growth Centre

Northwestern Kellogg School of Management

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Western Uganda's Arabica Opportunity

Kampala
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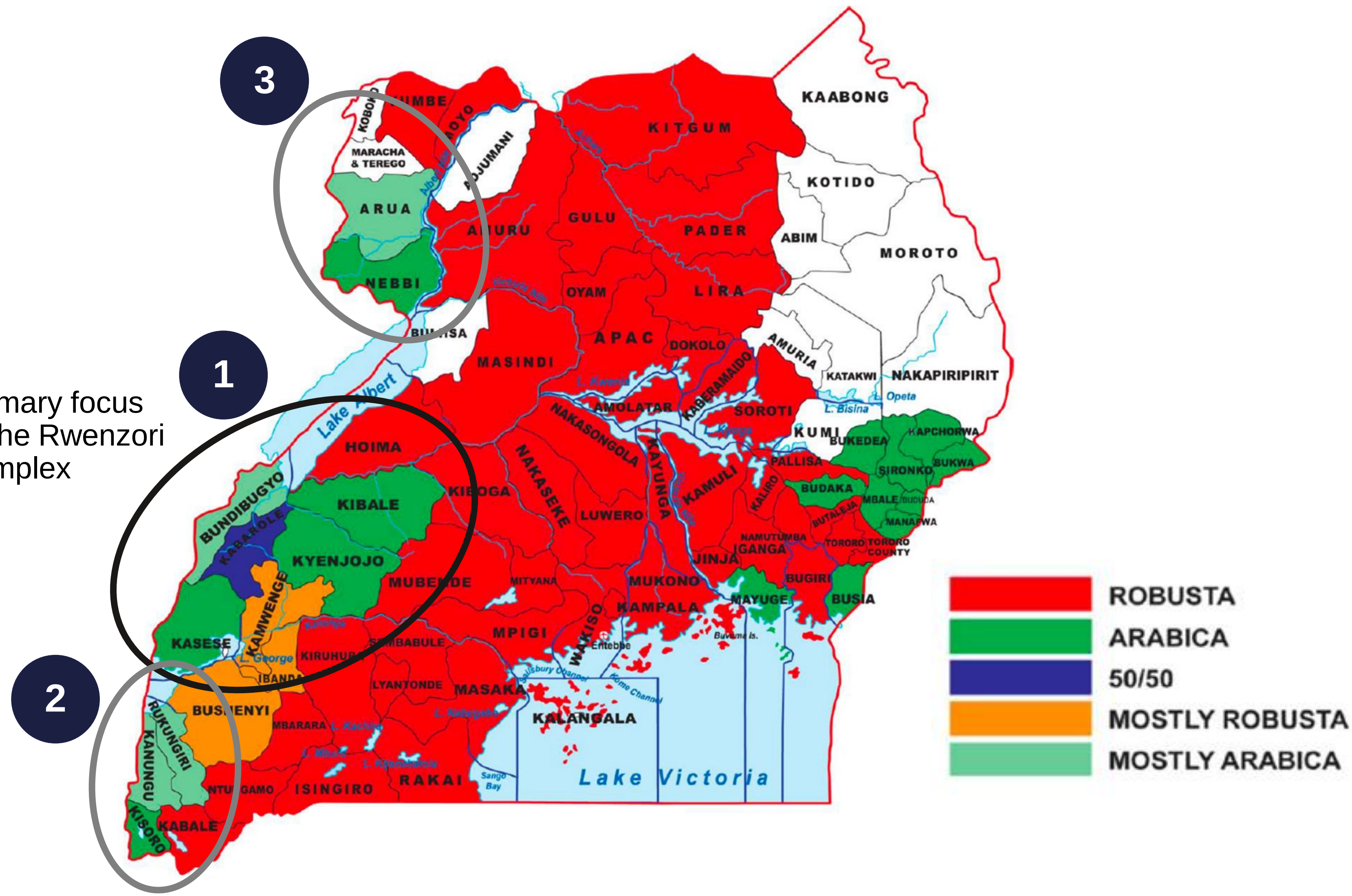
The western region has three main islands of Arabica production – we focus on the Rwenzori region served by Kasese

Primary focus is the Rwenzori complex



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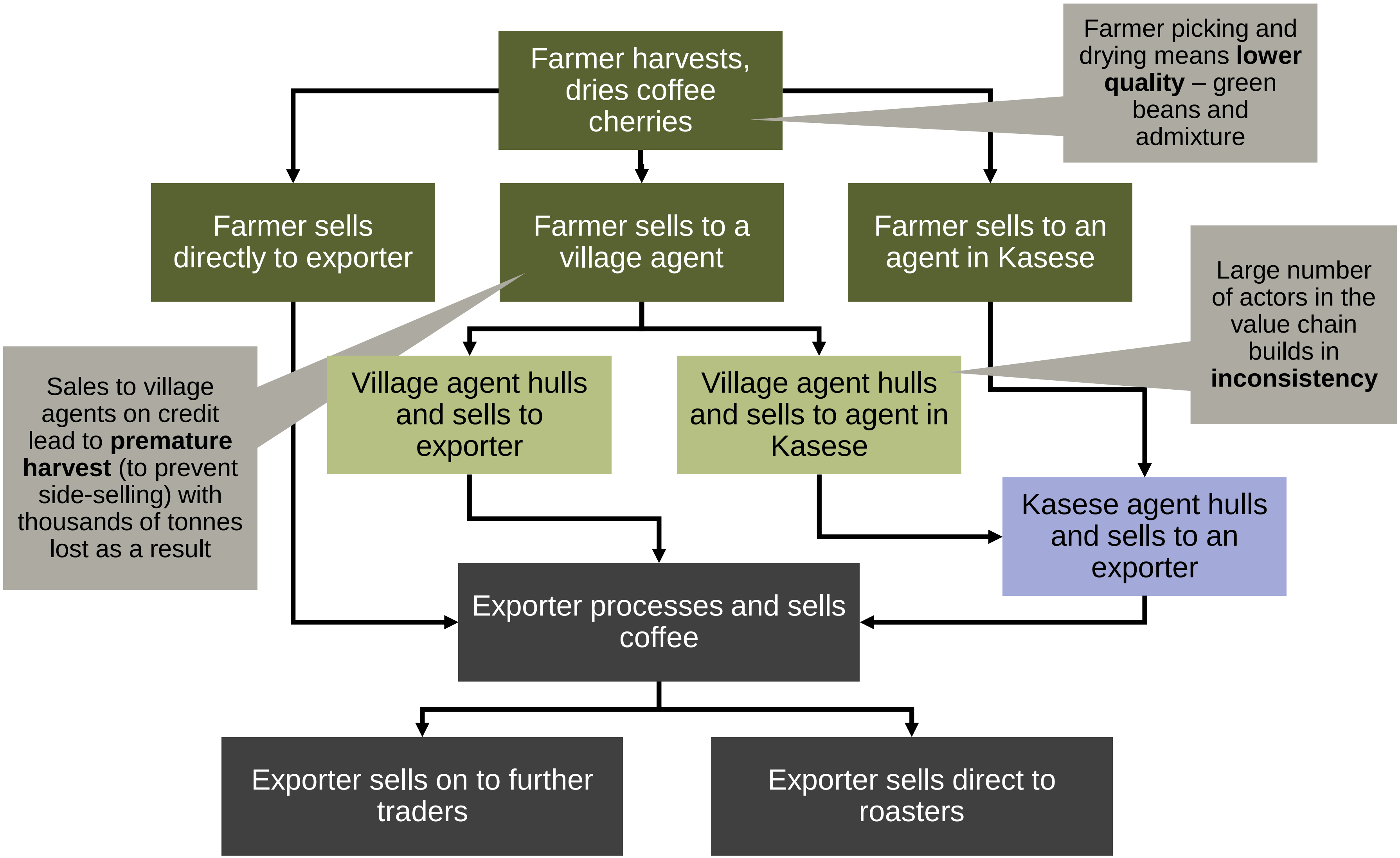
The western value chain has many actors with inefficiency and losses built into the system



Source: Field trip analysis

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What would washing coffee in the west mean?

Farmers	Agents	Businesses / exporters
• Switch from selecting and drying on farm to delivering cherries to a station • Focussing on producing for quality • Working with extension workers to steadily improve farm practices • Leading to: **Raised quality, yields and margins**	• Lost customers as hulling and resale activities fall away • Stop providing credit to farmers • Competition for cherries between agents falls away • Role as intermediaries for parchment trading	• Significant investment in washing station assets • Setting up farmer access teams and extension staff • Investment in inputs to promote changes in farm practices • 3 to 5 years of ramp up and stabilization • Leading to: **Raised quality, yields and margins**

Source: Authors' analysis

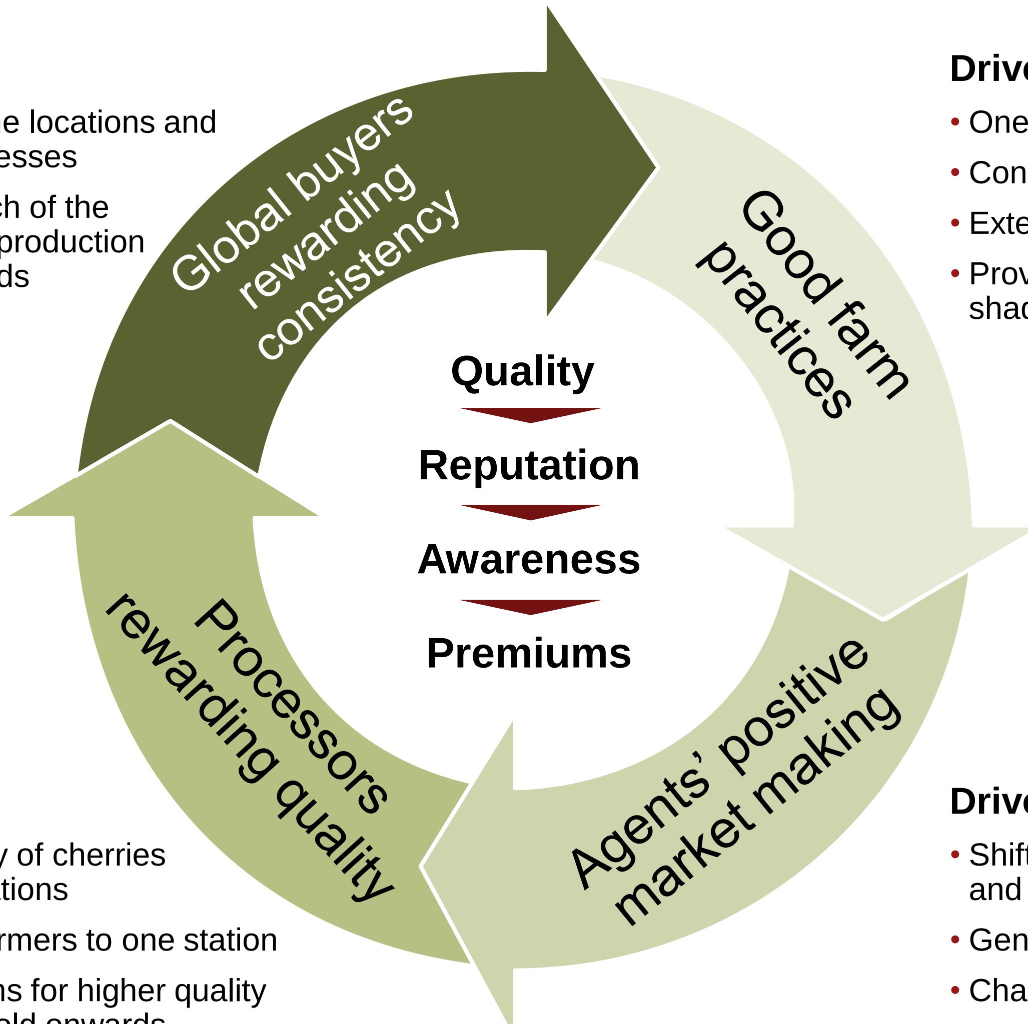
Creating washing stations will create a virtuous circle of value chain interactions

Driven by:

- Knowledge of the locations and production processes
- Consistent match of the product to their production and market needs
- End consumer recognition and demand

Driven by:

- One point of contact to processors
- Continuous feedback on practices
- Extension worker support
- Provision of inputs – seedlings, shade trees etc.



Driven by:

- Improved quality of cherries reaching the stations
- Dedication of farmers to one station
- Raised premiums for higher quality of the product sold onwards

Driven by:

- Shift from hulling to hand pulping and parchment trading
- General shift to focus on quality
- Change in market participants

There is a case for DRUGAR, but volumes are low and the process does not promote quality control

The case for DRUGAR

Some actors preferred the idea of developing DRUGAR to washing stations because:

- There are forms of DRUGAR that sell at very high prices – into Japan and Korea at up to USD 60 over board
- There are fewer environmental issues – especially relating to waste water
- There would be less disruption to the existing trade pattern and to farmers

And the case against

DRUGAR will not have the same sector and development impact as washing stations because:

- The current demand for “magical DRUGAR” is highly specific and limited to a few containers
- Consistency is THE driver of quality and value in Arabica
- Quality, yields and margins are raised by slow, steady engagement with farmers and in turn roasters
- DRUGAR reliance on farmers to select cherries and maintain consistency cannot match the inbound quality control of washing stations

Source: Field trips, industry interviews, comparison to other countries’ production

We estimate additional value to the Ugandan coffee sector of between USD 15 and USD 30 million

Farmer population-driven value calculation

Farmers	100,000	Based on estimates of up to 200,000 farmers
Hectares per farmer	0.5	Based on field reports and the pattern seen in the east
Trees per farmer	300	Based on 600 per hectare
Kgs per tree	2	A very conservative assumption - averages are closer to 3
USD improvement	1	Combined price and value chain effect
Total value uplift	**30,000,000**	

Production-driven value calculation

60 kg bags of DRUGAR	490,000	2017 production
Kilogrammes	29,400,000	
Addressable portion of crop	50%	Assumes some areas will be unreachable
Addressable production	14,700,000	
USD improvement	1	Combined price and value chain effect
Total value uplift	**14,700,000**	

1 USD improvement =
0.7 c direct price effect
plus
0.3 c value chain effect

Based on the mid-point we estimate a target of USD 20 million uplift from washing station investments

Source: Authors' analysis, industry interviews, market analysis

Who needs to do what to get this done?

Government

- Focus on quality in Arabica
- Enforce quality standards in production, trading and export in the west (and the east)
- Identify the right mix of actors and balance of competition in the west

Processors / exporters

- Invest in washing stations
- Involve farmers – explore options for co-ownership
- Promote good farm practices – accelerate the transition where needed

Development agencies

- Focus on quality in Arabica
- Support changes in farm practices including education and early input provision
- Help understand the optimal shape of competition

Development Finance Institutions

- Provide finance to accelerate investments across the value chain from farm to ship
- Support models of farmer co-ownership
- Support related infrastructure e.g. roads

Summing up

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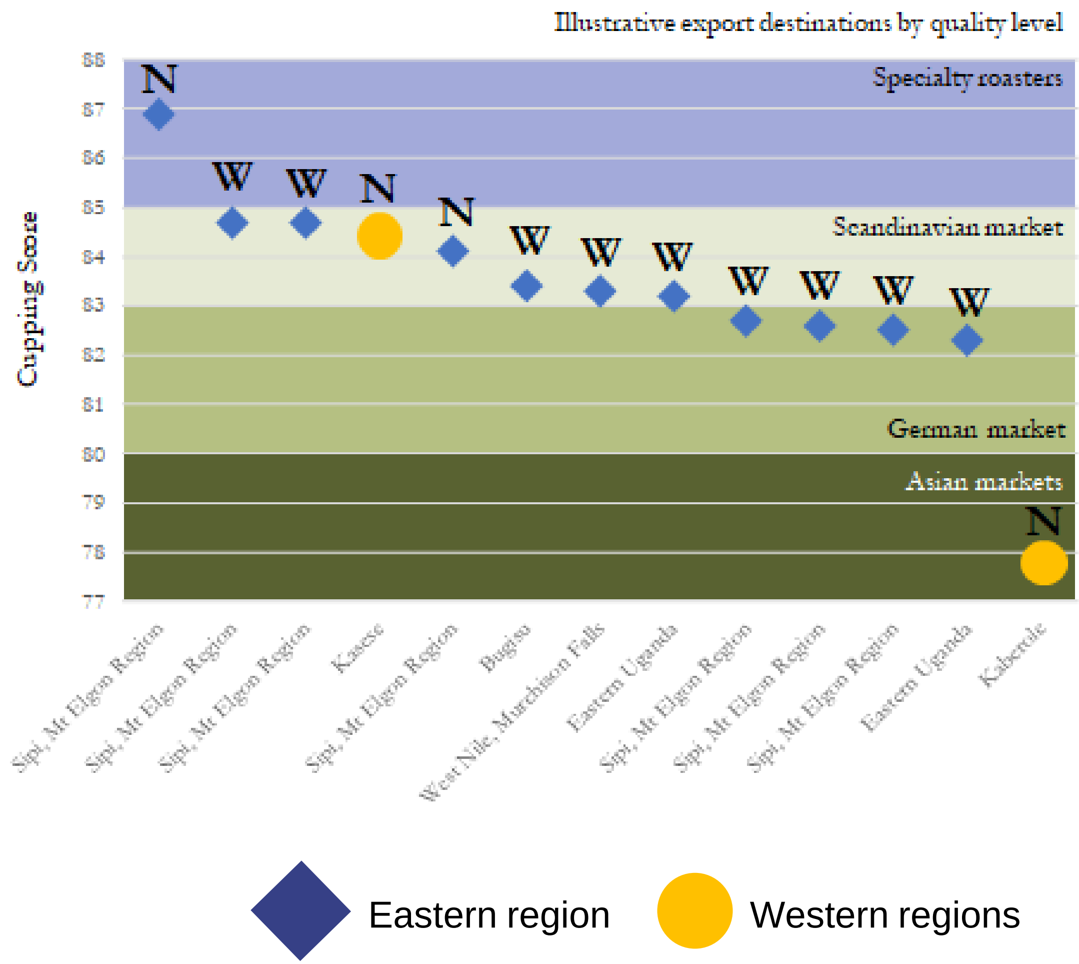
raising rural incomes making markets

The majority of high cupping coffees in Uganda are from the east and washed



Source: AFCA, "Taste of Harvest Cupping Results 2017"

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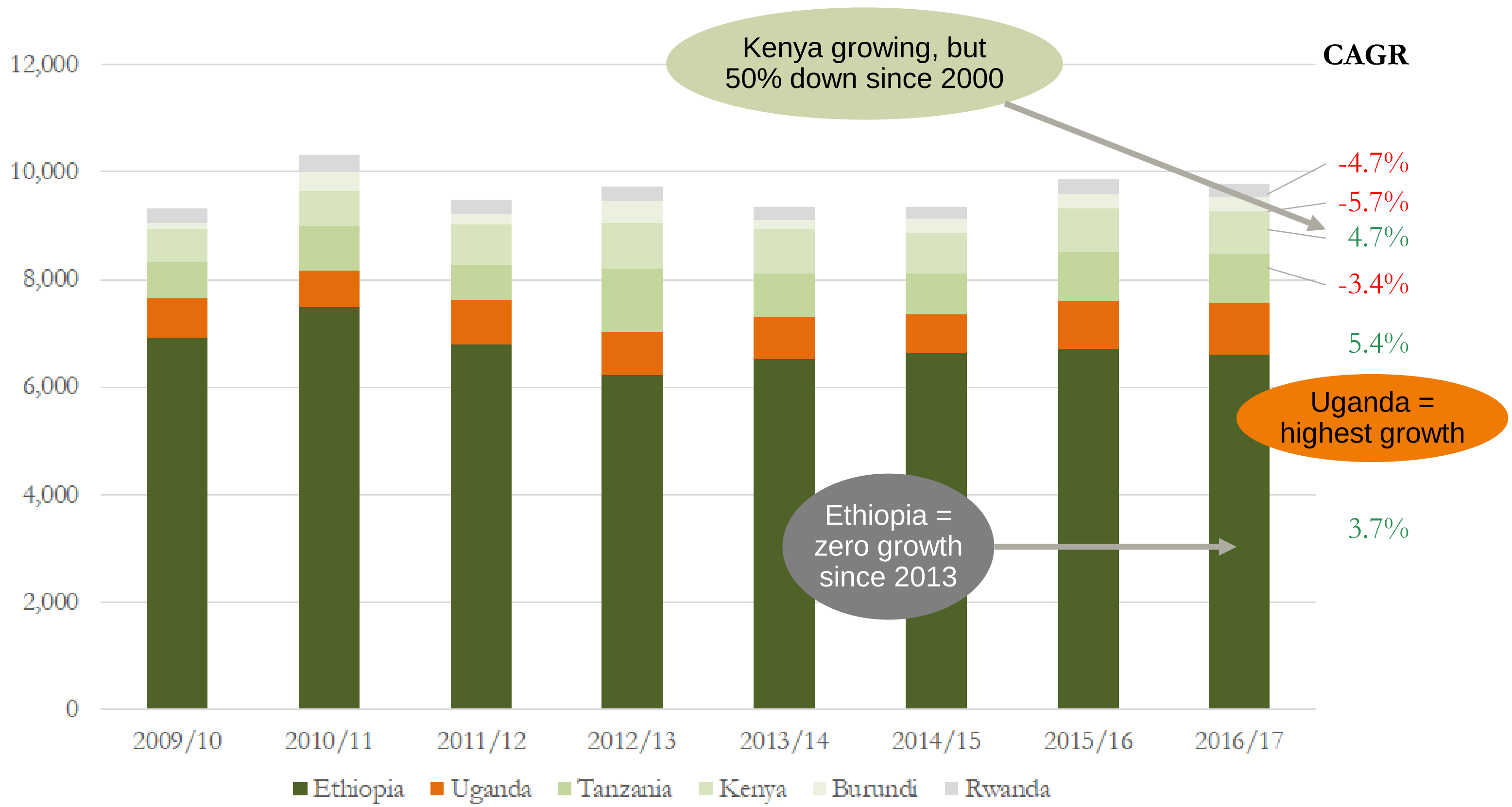
Uganda is the most dynamic Arabica market in east Africa with the highest growth rate and greatest potential



Source: ICO

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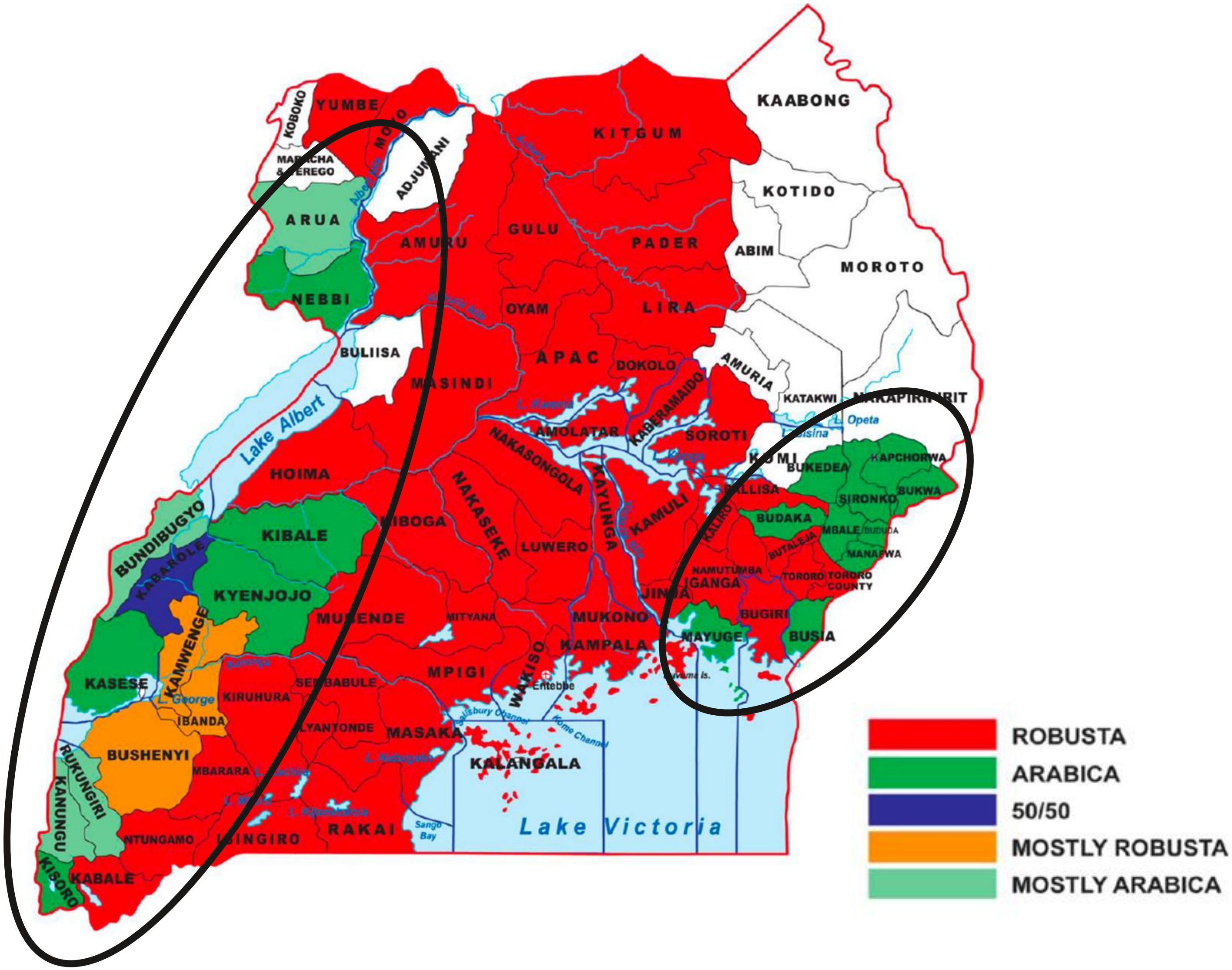
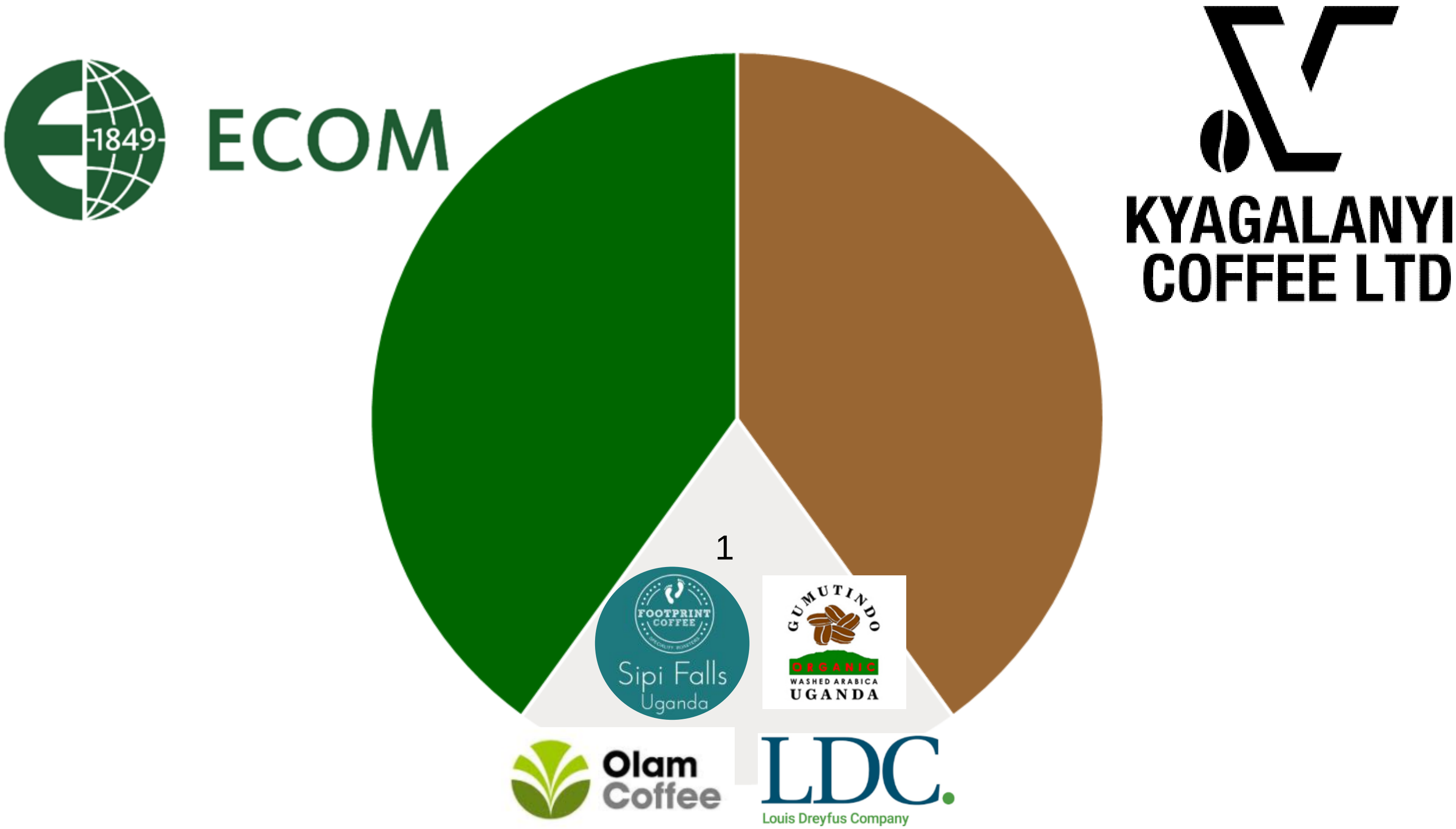
Uganda's Arabica coffee production is a tale of two regions



Direct buying from farmers at washing stations ensures quality control, continuous feedback and direct engagement

Source: Project field trip

A small number of players in the east has created stability in access to cherries enabling farmer investment



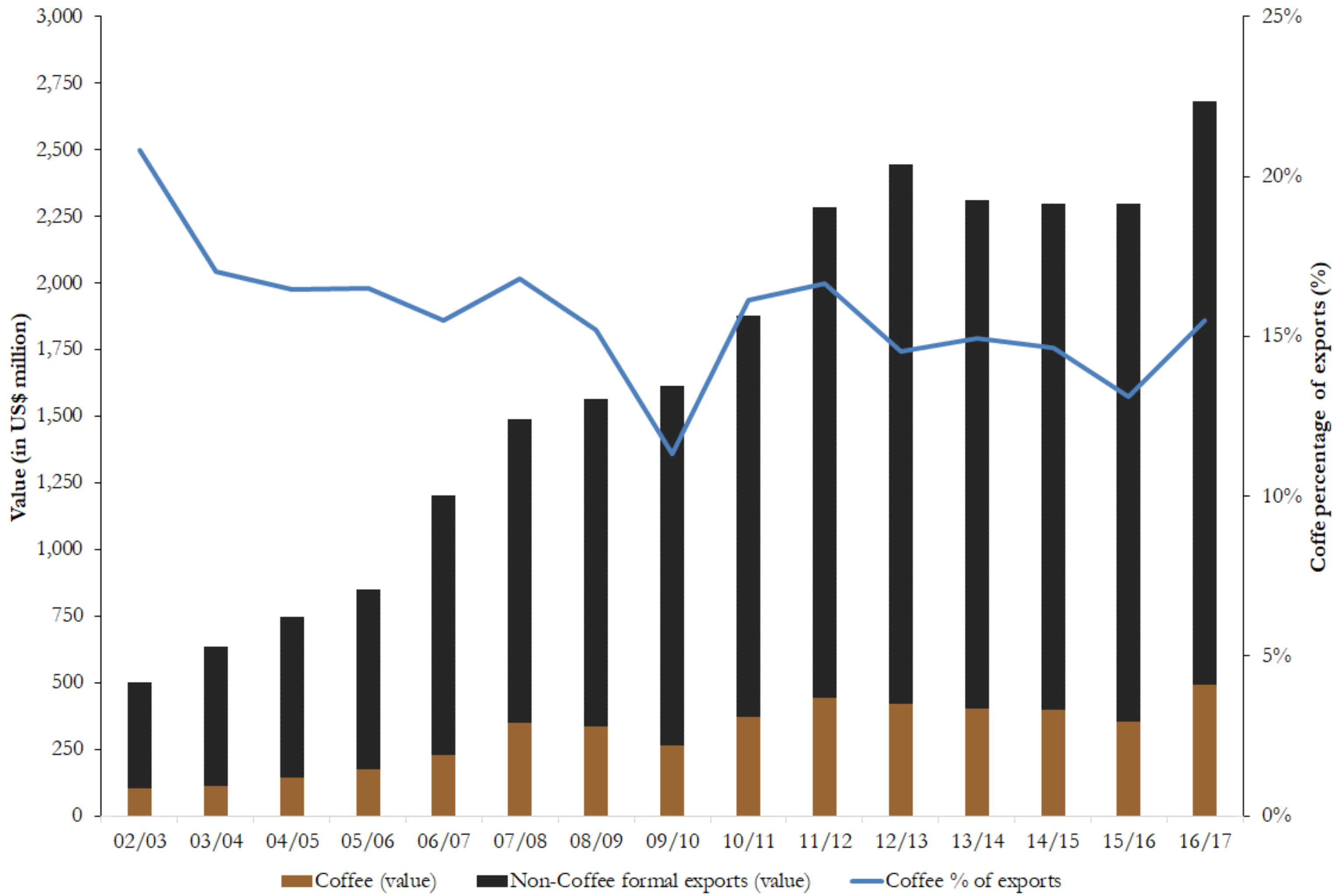
1. Examples, not exhaustive
Source: Project analysis

There are four major drivers of value in Arabica

A base of quality production creates opportunities for steady, long-term market making

1. Raise awareness and pull from end consumers
2. Educate traders and roasters about sources, types and quality of Ugandan coffee
3. Learn from trade and roasters about their needs in processing
4. Consolidate brand views of Ugandan coffee. Use the name!
5. Continually drive quality to meet demand
6. Raise margins over board

Coffee has been a stable driver of export earnings at around 16% of total export earnings since 2005



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