

The Financing of Coffee: Evidence from Rwanda (and around the World)

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Warwick

IGC Growth Week

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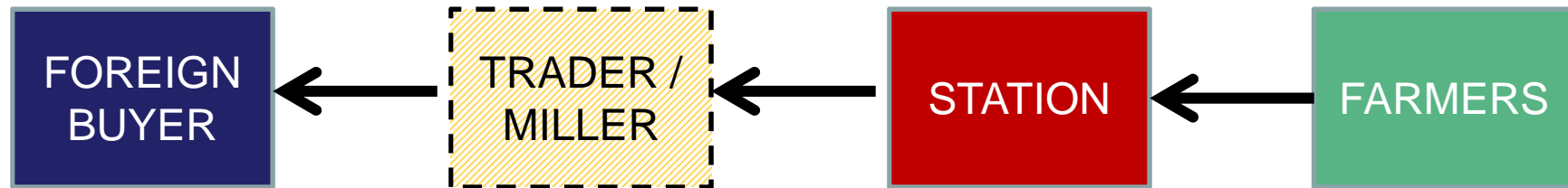
Overview of Agenda

1. Census + Survey + Admin Records of all Rwanda Stations –
 - *Competition and Efficiency* (with A. Morjaria)
 - *Trust, Organization and Efficiency* (with A. Blouin and A. Morjaria)

 2. Detailed Loan/Contract Data from a Financial Institution:
 - *Tropical Lending* (with A. Blouin)
 - *International Prices, Contracts and Matching* (with A. Blouin and N. Moneke)

 3. Industrial Structure in Comparative Perspective
 - Costa Rica (with P. Miquel-Florensa)
 - Peru (with J. Chavez)
 - Interested in Ethiopia, Kenya and **any** IGC country (Uganda, India, Bangladesh, Tanzania, Ghana, ...) as well as Colombia, Mexico...
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Sector



Station:











- Large business for LDCs standards (this is important!)
 - Seasonal business
 - Very High Financial Requirements
 - Vertical Integration: many are coops, few have estates

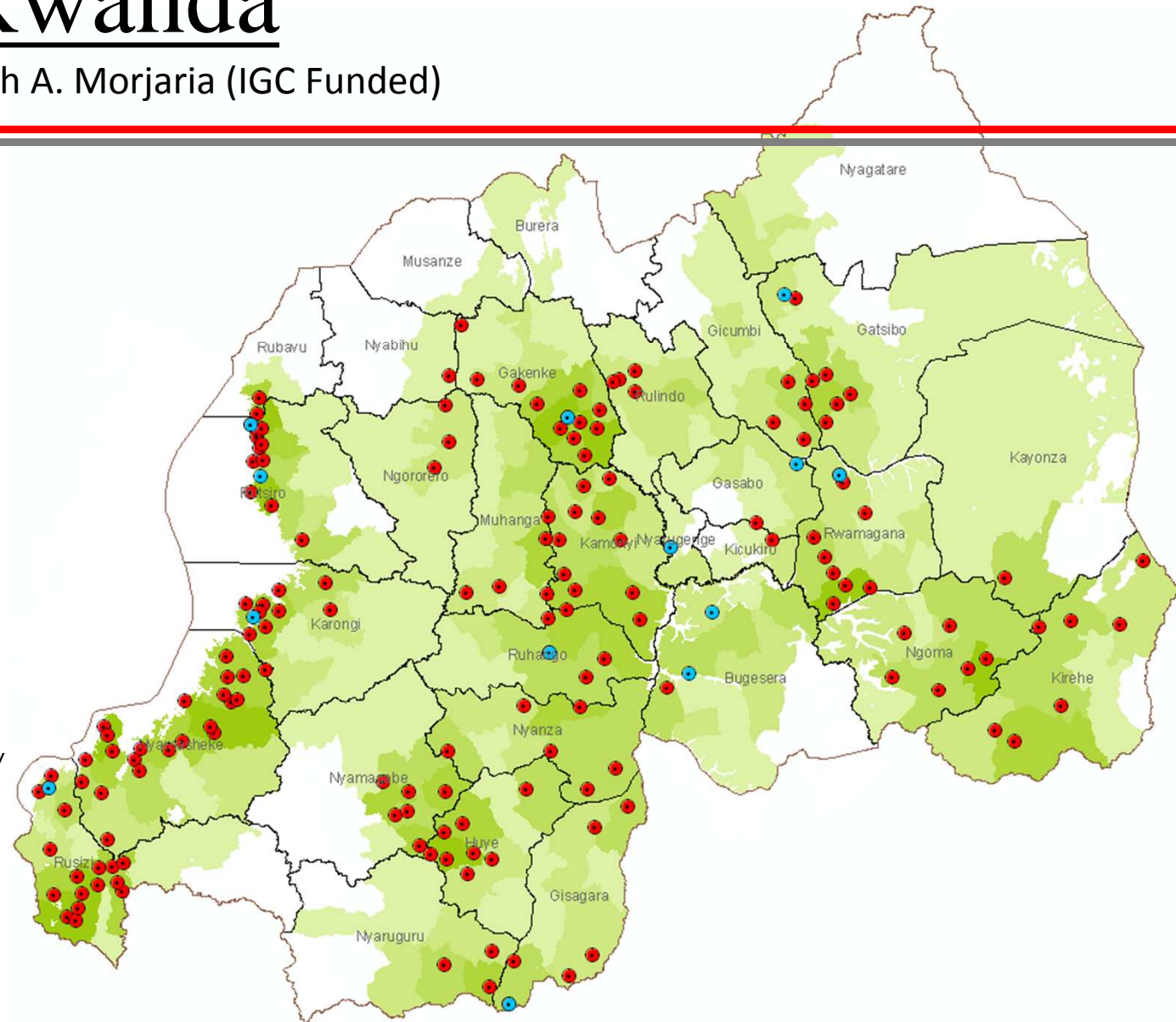
 - 7-10% of Rwanda GDP
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CWS in Rwanda

Based on joint work with A. Morjaria (IGC Funded)

Coffee Producing Sector: No. of Trees

-  0 No data
-  1 - 100000
-  100001 - 250000
-  250001 - 450000
-  450001 - 800000
-  800001 - 1392171
-  CWS
-  Country boundary
-  District boundary
-  CWS (construction)



The Problem

Relationship with farmers is a key determinant of CWS efficiency:

1. Reliability of supply lowers costs
2. Inter-temporal agreements can reduce working capital requirements
3. CWS at advantage in providing extension services, technical assistance, inputs, and loans.

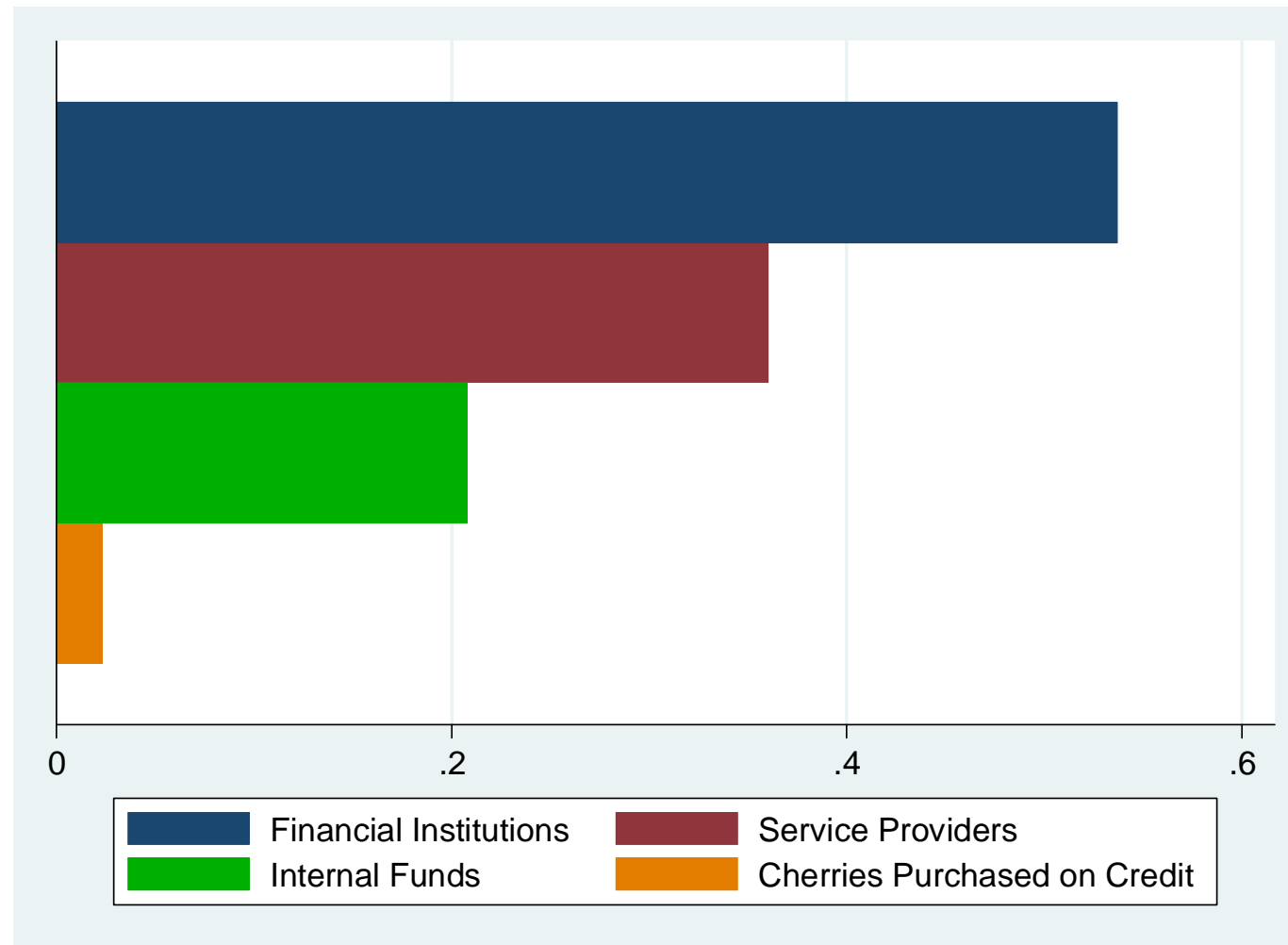
No formal contracting is available in rural markets. For example:

1. Poorly managed stations/coops might default on 2nd payments,
2. farmers might default on loans / side-sell

Project:

1. Understand trust
 2. Understand role of competition and excessive entry
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Sources of WK Finance



Credit Constraints

1. **Direct** questions suggests lack of finance one of top 2 constraints.

 2. **Indirect:** at least 60% of firms are constrained
 - a. Asked hypothetical questions on i) returns to capital at various capital level, ii) willingness to borrow at given interest rate. Obtained remarkably consistent answers with the two methods => ***MPK***
 - b. Most say would use additional money to purchase more cherries
 - c. Obtained information on all outstanding loans (for working capital and not) and interest rates => **$1 + r$**
 - d. In at least 60% of cases **$1 + r < MPK$**
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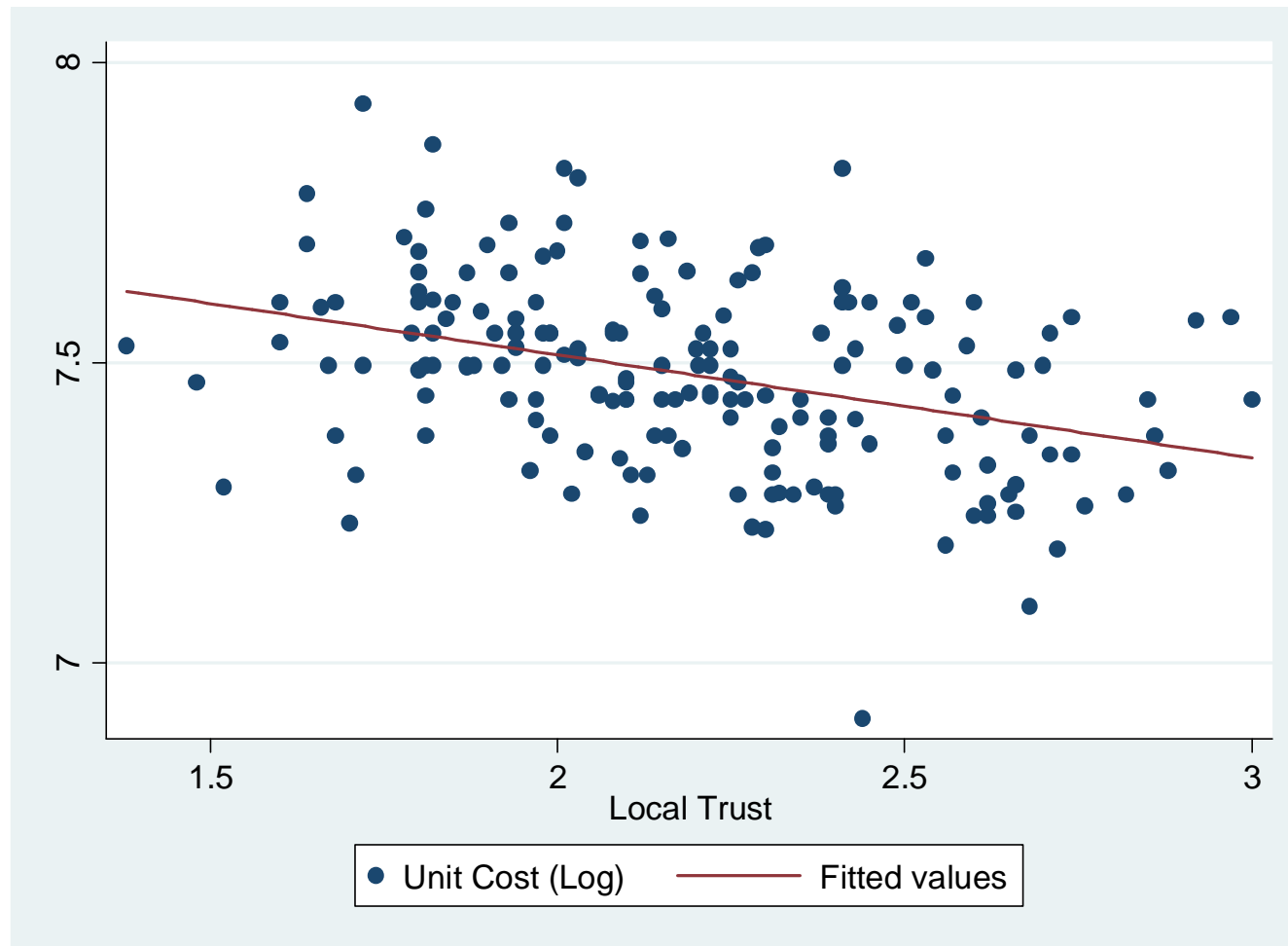
Trust

- **Trust** helpful to:
 - Increase reliability of supply of cherries → higher utilization and lower search costs,
 - Lower working capital needs
 - Extend credit and other inputs to farmers → higher quality

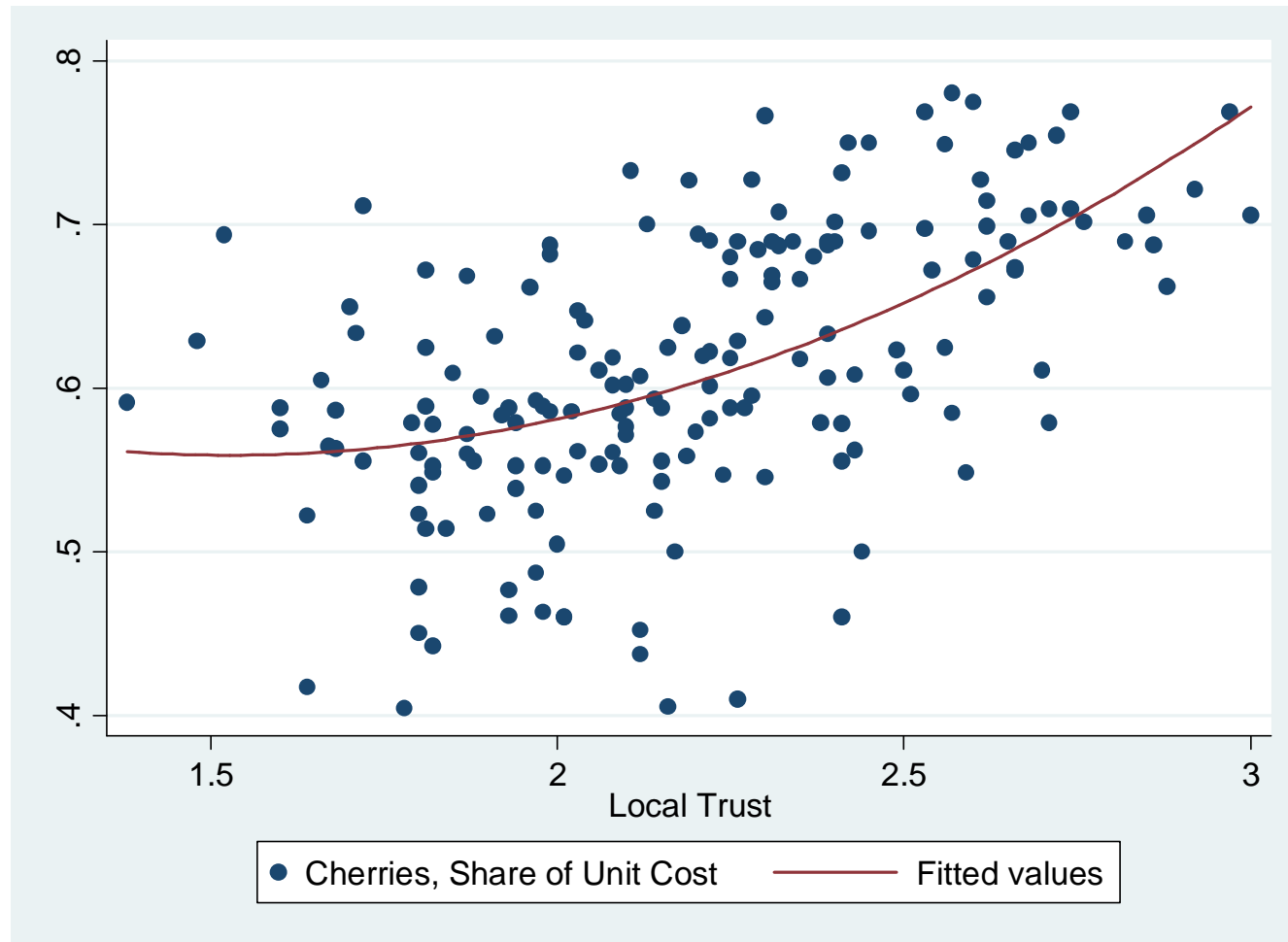
 - Trust Measures
 - General trust attitudes (from World Value Survey)
 - Games with farmers / collectors / workers / managers

 - Two measures well correlated
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Trust & Unit Costs



Trust & Cherries Share of Costs



Trust also Correlates With

1. Farmers' use of fertilizers given by station,
 2. Farmers' help received by station,
 3. Lower Pass-through of Prices to Farmers
 4. More second payments to farmers,
 5. Lower share of costs to capital and transport/procurement,
 6. Lower likelihood of being credit constrained*
 7. Better Main Buyer,
 8. Higher Likelihood of Fixed Price Contract,
 9. Lower likelihood of borrowing from main buyer
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Evidence from Around the World

Based on joint work with A. Blouin (Warwick)

Set Up:

Partnership with international lender specialized in WK loans to CWS (several clients in Rwanda and other IGC countries). Loan level analysis:

- 700+ loans,
- 197 CWS,
- 18 countries.

Main findings:

1. Credit constraints are pervasive
 2. Credit constraints spillover along the chain (externalities)
 3. Lack of enforcement of sales contracts an obstacle to lending
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A Policy Idea from Costa Rica

Based on joint (planned) work with P. Miquel-Florensa (TSE)

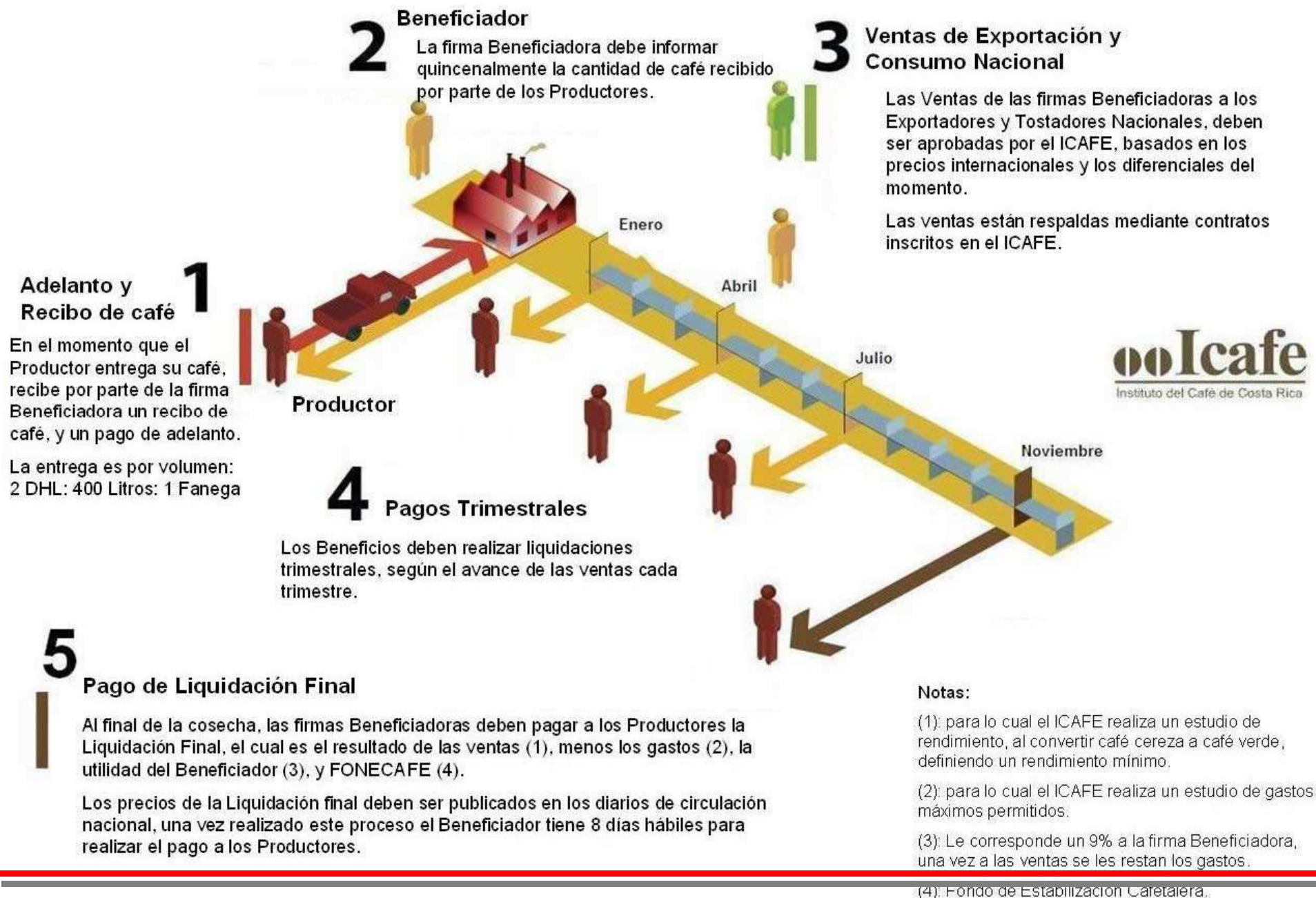
Costa Rica is regarded as a success story (and a leader) in the specialty coffee segment. In comparison to Rwanda:

- a small producer with extraordinary conditions for high-quality,
- no longer dependent (coffee account for 3% of exports),
- very different “history” and market-state relations

A well-functioning (?) system that seems to address at its core the enforcement of “contracts” between farmers and stations.

Very Preliminary !! We are (still) gathering data to study the system

Proceso General de Liquidación Final



An aside on Fair Trade Coffee

- The characteristic of FT contract that has received most attention is pricing:
 - There is a **minimum floor price** fixed by FLO
 - Buyer must pay a **FT premium**
 - However the FT contract is a “bundle” of different contractual provisions, many concerning other aspect of the sale contract (e.g., contract should be PTBF at seller’s call).
 - W.r.t. financing FLO states:
 - On request from the producer, the Fairtrade payer must make up to **60% of the value of the contract available as pre-finance** to the producer at any time after signing the contract. The prefinance must be made available at least eight weeks prior to shipment. (...) Pre-finance must be adapted to the real needs of the producer.
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Areas of Consideration for Policy

Integrated Approach to WK Finance:

1. Role of downstream buyers (foreigners) as collateral
2. Schemes to reduce WK requirements
3. Risk-management

State Role in Supporting Rural Markets

1. Competition
 2. Role of vertical integration / coops
 3. Roads
 4. Supporting Trust
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