THE SUSTAINABILITY OF HARVESTING STRATEGIES

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OBJECTIVES OF HARVESTING

- Collect all ripe cherries (maximize quality)
- With as few unripe and over-ripe cherries as possible
- At a competitive cost
- Without damage to coffee trees (ensure future production)
SITUATION TODAY

- Percentage of unripe cherries growing markedly
- Labor factors
  - availability falling
  - costs growing faster than inflation and coffee prices
- Need to sort out cherries after harvesting
  - manually
  - mechanically
- Cherries with different degrees of ripeness
  - mostly processed together
  - quality losses

POOR SELECTIVE HARVESTING BECOMING STANDARD (5 TO 15% UNRIPE CHERRIES)

HARVESTING SYSTEMS I

- Selective
- Stripping
- Mechanical
HARVESTING SYSTEMS II

- Selective (ripe only)
  - washed Arabica
  - some Robusta

- Stripping (some or all coffee in branch)
  - natural Arabicas
  - most Robustas

- Mechanical
  - some Arabicas in Brazil
  - other countries experimenting

HARVESTING SYSTEMS III

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SELECTIVE</th>
<th>STRIPPING</th>
<th>MECHANICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELECTIVITY</td>
<td>High</td>
<td>Low to high (1, 2 or 3 picking rounds)</td>
<td>Low to intermediate (1, 2 or 3 picking rounds)</td>
</tr>
<tr>
<td>LABOR REQUIREMENTS</td>
<td>High</td>
<td>Intermediate</td>
<td>Low</td>
</tr>
<tr>
<td>COST</td>
<td>Highest</td>
<td>Intermediate to low</td>
<td>Lowest</td>
</tr>
</tbody>
</table>
HOW TO HARVEST MORE VOLUME (V) WITH LOWER COSTS: FEASIBLE OPTIONS

1. Selective harvesting
2. Manual stripping
3. Stripping with hand held harvester
4. Stripping with self propelled harvester

PICKERS’ PERSPECTIVE UNDER SELECTIVE HARVESTING

- Limited to picking a given weight of coffee per day
- Prices of all commodities falling in long run
- Real salary tends to grow little if any
- Growing cost of living
- Increasing aspirations
- Poverty will inevitably grow

IS THIS SUSTAINABLE?
SOLUTION

- Shift to more efficient harvesting systems
- Pick cherries with different degrees of ripeness
- New generation of wet mills
  - sort mechanically
  - process separately
- Different qualities
- Different uses
- There are markets for cherries that are not fully ripe

ENABLE SUSTAINABILITY OF PICKERS
(WHO STAY)

BREAKING PARADIGMS:
MYTHS AND TRUTHS

**Myth 1.** Production of high quality coffee requires selective picking (of ripe cherries only)

**Truth:** High quality coffee comes from 100% ripe cherries (picked by any system, manual or mechanical)

**Myth 2.** Labor intensive coffee growing (picking) grants social and economic sustainability

**Truth:** Romantic approach: selective hand picking may condemn labor to poverty

**Myth 3.** There are no markets for coffees coming from semi-ripe and unripe cherries

**Truth:** There are already markets and others can be developed
SIDE EFFECTS AND EXPECTED NEEDS

- Need to grow more coffee to satisfy quality market
- Need to create markets for lower quality coffees
- Need to create jobs for displaced pickers
- Avoid migration to capital cities and regional centers

NEED TO GROW MORE COFFEE TO SATISFY QUALITY MARKET

- Less high quality coffee available
- New markets developed
- More coffee to be planted
- Stronger coffee business
NEED TO CREATE MARKETS FOR LOWER QUALITY COFFEES

- Soluble
- Consumption in producing countries
- New products
  - RTD
  - others

NEED TO CREATE JOBS FOR DISPLACED PICKERS

- Jobs in rural communities and towns
- Develop skills to increase income
AVOID MIGRATION TO CAPITAL CITIES AND REGIONAL CENTERS
- Poor in coffee fields — risk of social unrest and manipulation
- Poor in periphery of cities — risk of drugs and violence
- Pickers and ex-pickers as citizens in rural communities — develop countryside

TENDENCY OR PROPHECY
CHANGE MUST BE MANAGED
OR
MARKET FORCES MAY CAUSE SOCIAL DAMAGE
COFFEE WORLD MUST UNDERSTAND PROCESS TO MANAGE IT

- Who?
  • workers
  • growers
  • traders
  • industry
  • institutions
  • government

- How?
  • know technologies available
  • face and destroy paradigms
  • pave way for change
  • create jobs and develop markets

- When?
  • as need develops
  • different in each country
  • but... it will come... and earlier than expected

COUNTER CHALLENGES BEING FACED BY MOST COFFEE PRODUCING COUNTRIES

- Youth unemployment
- Lack of “sense of” service towards the community
- No “culture of work”
- Younger generations fleeing countryside to work in cities
- Growth of poverty in urban areas
  • underemployment
  • slums
  • social unrest
  • violence
REENGINEERING COFFEE COMMUNITIES

- Labor empowering initiatives
- Employment outside farms
- Youth entrepreneurship
- Community service
- The power of local systems — “what works” for each place

“Half-educated, unemployed youth, with no prospect of being integrated into a better future is a prescription for disaster.”
Ismail Serageldin, World Bank

SUMMARY AND RECOMMENDATIONS

- Manual selective harvesting may condemn labor to poverty
- Alternatives exist and must be used
  - efficient harvesting
  - modern processing
- Need to destroy paradigms
  - quality
  - social
  - markets
- More coffee to be produced
- New markets to be developed
- Labor that remains to be empowered
- Jobs / businesses to be created for labor that leaves
  - retain people in countryside
- Manage change because process is unavoidable
THANK YOU!