Competition and Coordination in the Zimbabwe Cotton Sector 2001 – 2004

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Critical Issues

- Impact of economic crisis on the cotton sector
  ⇒ Response of existing players to new conditions
- Impact of new players on sector performance
  ⇒ Credit provision
  ⇒ Quality control
  ⇒ Pricing
- Need for a new regulatory framework
- Future prospects
Impacts of Economic Crisis on Company Operations

- Foreign exchange shortages
  - Shortages of inputs
- Fuel shortages
  - Companies – transport provision + reimbursement
- Cash shortages in 2003
  - Bearer cheques (Cargill) + b. material & equip (FSI)
- Legal grey areas around foreign exchange retention
- Pricing uncertainty under hyper-inflation
  - Interest rates
  - Seed cotton pricing

Challenges for Agro-Chemical Companies

- Borrow money at higher interest rates
- Seek foreign currency on the parallel market (auction system)
- Distribute inputs based on controlled prices (monitored system)

- “Opportunities”
  - Creation of 000s of new “larger smallholders”
  - Attraction of cotton sector as source of forex

- Cotton sector has survived, but change
  (forever?)
  - New challenges from new industry structure
Macro-Economic Instability: the Real Exchange Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Effective Exchange Rate (ZWS/US$)</th>
<th>Inflation Rate (year-on-year, August)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>55</td>
<td>56%</td>
</tr>
<tr>
<td>2001</td>
<td>172</td>
<td>77%</td>
</tr>
<tr>
<td>2002</td>
<td>600</td>
<td>140%</td>
</tr>
<tr>
<td>2003</td>
<td>2412</td>
<td>456%</td>
</tr>
<tr>
<td>2004</td>
<td>4210</td>
<td>314%</td>
</tr>
</tbody>
</table>

Seed Cotton Pricing

Number of companies: 2000/01 = 4 → 2002/03 = 12
Climatic Impact

- 2001/02 drought
- 2002/03 also poor season
  ⇒ Low production exacerbated “scramble” for available seed cotton

How Far Has Competition Increased?

- Many new entrants, but have they challenged dominance of established companies?
- Cottco market share:
  79% (1999/2000) → 70% (2001/02)
  → 58% (2002/03) → 58% (2003/04)
- 2002/03: Cottco, Cargill and FSI Agricom compete amongst themselves; others remain “fringe”
  ⇒ Big players not obliged to follow their pricing
- 2003/04: FSI Agricom fall back; other small companies capture 20%
- Market structure now similar to Ghana in the 1990s
  ⇒ Can sustain an intensive production system …
  ⇒ … but only if you get the coordination mechanisms right!
Trends in market share proportions

1998/99
- Cargill: 21%
- Cottco: 67%
- Others: 12%

2002/03
- Cargill: 18%
- Cottco: 58%
- FSI: 13%
- Others: 11%

Seed cotton pricing in Gokwe South District 2003

Chart showing producer prices in ZS/kg from March to August, with different brands and lines indicating price trends.
Credit Provision

Heightened competition has:-

• Increased access to credit
  ⇒ New companies offering credit to challenge Cottco
  ⇒ Cargill has increased credit scheme
  ⇒ Of surveyed households, 107/279 (38%) received credit
    from companies in 2003/04, c/w 97/265 (37%) in 2001/02

• Increased problem of side-marketing
  ⇒ Poor repayment 2001/02, but poor season
  ⇒ Good repayment rates 2002/03, but deceptive
  ⇒ Threats of pull-out by Cottco, FSI Agricom 2003
  ⇒ More intensive monitoring by Cottco staff (more emphasis
    on loans, less on extension?)

• However, culture of credit repayment still intact

Quality Control

• Mounting fears – quality compromised (reduced output +
  increased competition)

• Abandonment of grading at primary marketing
  ⇒ Driven by new entrants (mobile buying + no grading)
  ⇒ Established – spot price system (dual grading system)

• Price differentials – disappeared

• Result – more poor quality seed cotton purchased

• Not (yet?) reflected in feedback from international buyers
  ⇒ One exception: explicitly linked lower premium to
    relaxed grading since entry of new players
Seed Cotton Pricing

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>2001/02</th>
<th>2002/03</th>
<th>2003/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate</td>
<td>742</td>
<td>2,412</td>
<td>5,601</td>
</tr>
<tr>
<td>Seed cotton price (ZW$/kg)</td>
<td>56</td>
<td>600</td>
<td>1,900</td>
</tr>
<tr>
<td>Lint equivalent price (ZW$/kg)</td>
<td>140</td>
<td>1,500</td>
<td>4,750</td>
</tr>
<tr>
<td>Lint equivalent price (US$/kg)</td>
<td>0.19</td>
<td>0.62</td>
<td>0.85</td>
</tr>
<tr>
<td>“A” Index price (US$/kg)</td>
<td>1.05</td>
<td>1.52</td>
<td>1.06</td>
</tr>
<tr>
<td>Including 10% premium (US$/kg)</td>
<td>1.15</td>
<td>1.59</td>
<td>1.17</td>
</tr>
<tr>
<td>f.o.b. export price (US$/kg)</td>
<td>0.95</td>
<td>1.39</td>
<td>1.09</td>
</tr>
<tr>
<td>Producer price as share of f.o.b.</td>
<td>25%</td>
<td>45%</td>
<td>78%</td>
</tr>
</tbody>
</table>

Modelling the Poverty Impact of Alternative Seed Cotton Prices

- Micro-economic models of seven smallholder cotton household types
  - Calibrated on 2001/02 survey data from Muz + GSDs

- Base case (with actual 2002 prices)
  - 56% of households below nationally-defined Total Poverty Line (TPL)

- Scenario 2: seed cotton raised to ZW$80 (to give farmers 35% of f.o.b. export value)
  - 38% of households below nationally-defined Total Poverty Line (TPL)
Households **without access** to credit show much more variable seed cotton production as prices change.

<table>
<thead>
<tr>
<th>Household Type</th>
<th>Credit?</th>
<th>Area Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No</td>
<td>578%</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>32%</td>
</tr>
<tr>
<td>3</td>
<td>Yes</td>
<td>36%</td>
</tr>
<tr>
<td>4</td>
<td>No</td>
<td>78%</td>
</tr>
<tr>
<td>5</td>
<td>Yes</td>
<td>0%</td>
</tr>
<tr>
<td>6</td>
<td>Yes</td>
<td>5%</td>
</tr>
<tr>
<td>7</td>
<td>Yes</td>
<td>44%</td>
</tr>
</tbody>
</table>

**The Need for a New Regulatory Framework**

- Loose/informal coordination (NCC) - ineffective
- Established companies – through NCC – proposed new cotton regulations
  - NCC as main regulatory authority
  - Emphasis (Legislation + regulation)
- However, progress has stalled
- Could be overtaken by re-establishment of AMA
Prospects for the Future

Input Credit:
- Side-marketing threatens existing schemes
- New entrants + competition (new schemes)

Quality Control:
- Est. companies – quality – not giving Fs incentives
- New entrants – sending diff message (quality not important)
- Quality standards – not yet fully collapsed (time)

Thank You !!!