“Highlights”
Sector Policy Maize
Training BPR Agribusiness Team
Elies Fongers & Marc van Strydonck
Kigali, July 2012
Highlights – Sector Policy for Maize

- Value Chain

- Key Risks

- Target clients

- Financing Needs
Maize Sector in Rwanda – Key Figures

- About 150,000 hectares used for maize production
- Production of 400 – 700,000 MT in 2-3 seasons
- Average yields 1 – 2.5MT/ha per season
- Lack of adequate seeds and suitable fertilisers
Maize Sector Policy - General

Why do we focus on the maize sector?
- Strong government support (CIP, Subsidies)
- Very significant growth over the past years
- Potential for self-sufficiency
- Significant financing needs & opportunities
Maize Sector Policy - Seasons

Maize Growing Seasons in Rwanda

- **Maize Season A**
  - Harvest
  - Sowing
  - Growing

- **Maize Season B**
  - Sowing
  - Growing
  - Harvest

- **Maize Season C**
  - Sowing
  - Gr.
  - Harvest

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*BPR* – Maize Sector Training – Page 5
Maize Value Chain

- Seeds
- Fertiliser
- Pesticides

Farmer / Cooperative
- Ploughing
- Weeding
- Harvesting
- Drying

Storage
- Collection
- Storage
- Drying
- Fumigation

Processing
- Flour
- Grit
- Bran

Own use/Market
- Export
- Domestic

Pre-Harvest
Post-Harvest

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Maize Value Chain - Inputs

Maize inputs
- Seeds are distributed for free or without payment until after harvest (Availability of seeds can be problem)
- Fertiliser, currently with 50% subsidy (voucher system)
- Pesticides, often available free of charge

Inputs (less than 10% of production costs) through cooperatives!

Maize Value Chain – Farmer/Cooperative

Maize farming
- Maize part of the “Crop Intensification Program” with land consolidation and specific Minagri support
- Maize is a “relatively” new crop in Rwanda
- Average yields are low, maize is very sensitive to lack of water and fertilisers
Maize Value Chain – Storage

Maize storage
- Current post-harvest losses estimated at 30%
- Adequate storage lacking, essential part of national objectives
- Storage requires good drying, grading and pest control
- Storage essential for raw material collection finance or inventory finance solutions
Maize Value Chain - Processing

**Maize processing**
- About 100 small mills and 2 large commercial mills

- Milling of maize is compulsory for commercialisation

- Products are Flour, Grit & Bran (uses for food, brewing & animal feed)

- Only fraction of total maize production is processed (20-25%)
Maize Value Chain – Market

**Maize market**

- Maize prices are volatile

- Minimum maize price is set by government (RWF 150/kg), but current price high (RWF 250/kg)

- Majority of maize is sold on domestic market, some exports to DRC

- Market demand not fully met by domestic production
Maize Value Chain – Market

BPR – Maize Sector Training – Page 12
Maize Sector – Financing Needs

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<th>Input finance</th>
<th>Raw material collection finance</th>
<th>Inventory finance</th>
<th>Asset Finance</th>
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<tbody>
<tr>
<td>Farmers</td>
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<td>Cooperatives</td>
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<td>Store Operators</td>
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<td>Processors</td>
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BPR – Maize Sector Training – Page 13
# Maize Sector – SWOT

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<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
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<tr>
<td>- Suitable soil &amp; climate (eastern half of Rwanda) for maize production</td>
<td>- Relatively new crop for farmers in Rwanda (lack of expertise)</td>
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<td>- Potential for 2 crops per year</td>
<td>- Limited availability of adapted seeds</td>
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<td>- Strong government support</td>
<td>- Low yields</td>
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<td>- Large areas of suitable land to develop maize production</td>
<td>- Not cost competitive with some neighbouring countries</td>
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<td>- Better quality maize than neighbouring countries</td>
<td>- Lack of “cooperative” experience and management skills</td>
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<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
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<tr>
<td>- Large areas of land available for maize production expansion</td>
<td>- Regional competition</td>
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<td>- Unsatisfied domestic demand and export market potential in DRC</td>
<td>- High risk of crop failure in case of inadequate rain or fertiliser</td>
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<td>- High degree of government intervention</td>
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Target clients
- Cooperatives
- Storage operators
- Processors
## Maize Sector – Risks

<table>
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<tr>
<th>Key risks</th>
<th>Mitigants</th>
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<tr>
<td>Low yields of maize</td>
<td>Training and experience of farmers, adequate farming techniques &amp; fertilisation</td>
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<td>Post harvest losses</td>
<td>Adequate drying, grading, pest control and storage infrastructure</td>
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<td>Side-selling of fertiliser (subsidised) and grain</td>
<td>Integrated value chains, contracts with cooperative</td>
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<td>Price risk: intervention by government and impact imports</td>
<td>Financing amounts based on market prices</td>
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Maize Sector – Case Study

Maize case study
- Maize & bean cooperative with 350 members
- Annual turnover of cooperative in 2011 was RWF 100 million (maize only)
- Requesting RWF 80 million annual working capital finance
- Cooperative owns storage with capacity of 350MT
- Off-take agreement with WFP for 300 MT
- Cooperative has RWF 10 million in cash
- Cooperative management has good reputation & track record
Maize Sector – Case Analysis

Case study analysis
- Is financing request in line with actual cooperative needs?
- What are the main risks?
- How to mitigate the risks?
- How secure is the repayment?
- Does the bank need additional collateral? In what form?
- Is the income from other activities important?
- Which key questions need to be asked from the cooperative?