Macro Level
Weather Derivative Program

Daisi Kachingwe

Malawi Ministry of Agriculture and Food Security
Macro-level derivative program has focused on government exposure at macro-level

Maize is target crop

Technical work began in 2004;

Four (4) Transactions to date:
- 2008/9
- 2009/10
- 2010/11
- 2011/12
Objectives have been to:

1) improve drought risk assessment and early warning tools

2) identify contingent sources of financing that can be used to support responses

3) strengthen government’s risk management capacity
   • prepare Government to integrate market-based solutions into its own plans; and to work with market independently

4) improve planning - and budgeting - for national disasters
Malawi 2011/12 Contract Structure

<table>
<thead>
<tr>
<th>Type of Contract</th>
<th>Put Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium</td>
<td>$US 499,950</td>
</tr>
<tr>
<td>Maximum Payout</td>
<td>$US 4.41 Million</td>
</tr>
<tr>
<td>Payout per</td>
<td>$ US 147,000</td>
</tr>
<tr>
<td>commodity index</td>
<td></td>
</tr>
<tr>
<td>unit</td>
<td></td>
</tr>
<tr>
<td>Start Date</td>
<td>October 1, 2011</td>
</tr>
<tr>
<td>Final Date</td>
<td>April 30, 2012</td>
</tr>
<tr>
<td>Strike</td>
<td>10% below average</td>
</tr>
<tr>
<td></td>
<td>index value (90)</td>
</tr>
</tbody>
</table>

Potential Payout Gains

90% Trigger Level

Rainfall Index Value

Transaction Flow

Market Counterparty → Premium → World Bank → Premium → Government of Malawi (MoF)

Data Provider

Data Verification
2011/12 Contract Structure

Maximum Payout
US$4,410,000

Payout per Unit Index
US$147,000

Trigger Level
90

Long term average

Malawi Maize index (in Commodity Units)

Contract Payout (in USD)
Malawi Maize Index in 2011-2012
Next Steps

• **Policy Issue** – Whether or not government should continue with program

• **Technical Issue** – Review of modeling approach; Consider alternative approaches; Review transaction strategy

• **Institutional Issue** - How government could take advantage of funding & expertise from different areas to support this work:
Text

• Bullet one
• Bullet two
• Etc.
Next Steps

Text

• Bullet one
• Bullet two
• Etc.
Text

- Bullet one
- Bullet two
- Etc.