INDEX-BASED WEATHER INSURANCE

A CASE FOR MALAWI

ERIC EMMANUEL CHAPOLA
CHIEF EXECUTIVE OFFICER

NICO GENERAL INSURANCE COMPANY LIMITED
MALAWI

PRESENTATION OVERVIEW

- Why weather index insurance.
- Objective of the insurance.
- Effects of the 2004/5 drought and the Malawian background.
- Stakeholders to the project
- Project workflows
- Portfolio Results
- Pre-requisites for program expansion.
- Major challenges encountered.
- The success of Harry Kafakaluanda
- Necessary investments
OVERVIEW CONTINUED

- Challenges from insurers perspective
- How government can expand outreach
- Conclusion

KEY STAKEHOLDERS

- Farmers/farmer groups.
- Banks, micro finance institutions.
- Government - meteological office.
- Insurance companies (Association).
- Reinsurance companies.
WHY WEATHER INSURANCE?

- Smallholder farmers need input financing every year.
- Have little or no savings to buy high yielding seeds and other chemicals.
- Need to borrow from banks and other financial institutions.
- Have no collateral.
- High risks from weather and high loan default rates deter financing institutions.

THE OBJECTIVES OF WEATHER INSURANCE

- Give farmers access to finance to buy high yielding hybrid seeds and chemicals.
- In times of drought, all or part of loan paid off by insurance, allowing farmers to get fresh financing the following season.
- Protect lenders’ capital.
- Provides income for the Insurance industry.
- Other stakeholders - extension services and high quality seed will improve long term production and revenues.
EFFECTS OF 2004/5 DROUGHT IN MALAWI AND BACKGROUND

- Recovery rates for lenders in the range 50-70%.
- One big bank lost $110,000 to smallholders farmers in one area.
- That bank has stopped lending to those farmers-about 1000 households affected.
- 2 microfinance institutions stopped lending to agriculture.
- THIS IS BAD NEWS BECAUSE:
  - 85% of Malawi is Rural based.
  - 36% of GDP comes from Agric
  - 87% of total employment is in Agric.
  - 64% of Rural income is from Agric.
  - 90% of country forex comes from Agric.
- Weather insurance concept then introduced by World Bank in 2005.
- World Bank had pilot tested the concept in India in 2003.

PORTFOLIO RESULTS

<table>
<thead>
<tr>
<th></th>
<th>2005/6</th>
<th>2006/7</th>
<th>2007/8</th>
<th>2008/9</th>
<th>2009/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insured Crops</td>
<td>Groundnuts</td>
<td>Groundnuts and maize</td>
<td>Tobacco</td>
<td>Tobacco</td>
<td>Tobacco</td>
</tr>
<tr>
<td>Number of Stations</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Number of insured farmers</td>
<td>892</td>
<td>1716</td>
<td>605</td>
<td>2606</td>
<td>706</td>
</tr>
<tr>
<td>USD Sum Insured</td>
<td>$40,000</td>
<td>$110,000</td>
<td>$308,000</td>
<td>$2,543,345</td>
<td>$712,521</td>
</tr>
<tr>
<td>Premium Rates</td>
<td>5-7%</td>
<td>5-14% (Maize high)</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

HIGHEST LOSS RATIO SO FAR IS 14% BUT IF THERE IS A CATASTROPHE IT WILL JUMP UP.
Prerequisites for program expansion

- Weather infrastructure (only 16 weather stations are automated in Malawi)
  - High station density will increase outreach and also reduce basis risk.

- Marketing organizations with sufficient outreach
  - Started with NASFAM and now working with Tobacco companies.
  - Other bigger organizations willing to participate in expansion project.

- A local insurance company and distributor champion willing to sell policies and intermediate the risk
  - Nine insurance companies grouped together to underwrite risk.
  - For pilot, NO regulatory approval was necessary BUT now regulator to know of every new product.
  - For expansion program will work with Government and World Bank to develop enabling regulatory framework.

Major Challenge for Malawi

- Unwillingness to buy by farmers
  - Stand alone product - no takers.
  - Product has to be linked to other financial services such as loans.

- Affordability
  - Financiers and farmers not willing to pay more than 5% premium.
  - Weather infrastructure not available in key farming areas.
  - This has led to very slow growth in portfolio.
  - World Bank working with Malawi Met to install stations in these key areas.

- Marketing channels.
  - Groundnuts market prone to side-selling.
  - Tobacco chain well established.
  - Tobacco prices have an effect on renewal rate.
  - Potential outreach can be high if proper marketing plan is developed.

- Contract design work and capacity building - Need for locals to be trained.
THE SUCCESS STORY OF HARRY KAFALUANDA
"The benefits for me are a better living standard, better food, I have been able to build a better house, and I have bought an ox cart from last year’s earnings. This would not have been possible before"
NECESSARY INVESTMENTS

- Building of local capacity to design contracts in local institutions
- More automated weather stations in key agriculture areas
- Training of bank staff, loan officers and extension officers to act as communication channels for insurers
- Encouragement of more reinsurers to enter the market leading to low premium rates
- Development of more marketing channels

CHALLENGES FROM INSURERS PERSPECTIVE

- Product is new and more complex relative to traditional products
- Lack of skills in designing products
- Limited reinsurers leading to lack of competition
- Premium rates are higher than traditional products hence marketing the products not easy
HOW GOVT. CAN EXPAND OUTREACH

- Speed up the upgrade and installation of automated weather stations
- Ensure proper maintenance of the existing and future weather stations
- Reduce or remove VAT on premiums as this is targeted at lower income farmers

CONCLUSION

- Weather Index is not the panacea, it has to be combined with other risk mitigation strategies such as good extension services and good produce markets.

- There are few institutions actively involved in the designing, pricing and marketing of weather index insurance and COMESA should assist member countries in developing this skill so that more people can benefit.

- The impact of this product can be very high, but more work is needed by all key stakeholders to make it work.
• THANK YOU!
• ZIKOMO KWAMBIRI!
• ASANTE SANA!
• WEBALE NYO!
• NATOTELA SANA!