Index-based Insurance Policy Paper – Industry Workshop

By Adriaan Rowan, FIA
Consultant to the World Bank

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Introduction to index-based insurance

What is index-based insurance?

- Often used in agriculture to protect farmers from weather events
  - Specify triggers, increments and limit for rainfall – can have multiple triggers and periods
  - If rainfall measure at the station is less than a threshold, all farmers within certain radius of the station will receive a pay-out, irrespective of the rainfall on their farm
  - Suitable for small scale farmers exposed to weather risks, due to low cost for insurer
  - Index can be satellite images, rainfall meters, temperature or crop yield measures

- Is a policy that pays out based on the measured value of an objective and independent index
  - Liability is not based on the actual loss of the policyholder and no proof of loss required
  - Reduce moral hazard, since policyholder has no control over pay-out
  - Reduces the administration cost of verifying the extent of the loss incurred

- Also used for hurricane, earthquake, flood or other natural disasters
- No international standards are set – work is being pioneered in Kenya
Index-based insurance in Kenya

Current status of IBI in Kenya

Kenya Index-based insurance market

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>NAME OF PRODUCT</th>
<th>YEAR OF APPROVAL</th>
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<tbody>
<tr>
<td>APA Insurance</td>
<td>Index Based Weather Insurance</td>
<td>2010</td>
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<tr>
<td>AIG Kenya Insurance</td>
<td>Index Based Livestock Insurance</td>
<td>2010</td>
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<td>CIC General Insurance</td>
<td>Index Based Weather Insurance</td>
<td>2010</td>
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<td>UAP General Insurance</td>
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<td>2010</td>
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<td>Jubilee Insurance</td>
<td>Sorghum Index Crop Insurance Product</td>
<td>2011</td>
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<tr>
<td>Jubilee Insurance</td>
<td>Index Based Crop Insurance</td>
<td>2013</td>
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Index-based insurance is sold in 3 sectors – Micro, Meso and Macro

• Micro level policyholders are individuals and farmers
• Meso level policyholders are suppliers or MFIs
• Macro level policyholders are local and national government
Index-based insurance in Kenya

Current regulatory environment

**Micro-insurance focus**
- Very hard to explain basis risk and create correct expectations
- Difficult to achieve sufficient scale to make product viable

**Classified as Agri General Insurance**
- Commission caps makes it hard to encourage sales
- Capital and valuation requirements not reflect the specific risks faced

**Basis Risk**
- Fall-back payments currently being made to reduce impact
- Lack of weather infrastructure complicates accurate measurement

**Pilot status**
- Regulatory exemptions cause uncertainty for long-term designs
- Lack of consumer protection requirements can lead to badly designed products
Index-based insurance in Kenya

Challenges to implementing index-based insurance

1. Basis risk – difference between pay-out and actual loss
2. Limited Data available and lack of integrity of weather stations
3. Lack of capacity in industry and understanding of the product
4. Need to decide on the expected pay-out frequency of policy
5. Currently there are limited product designs used in the market
6. Lack of regulatory certainty for insurers designing and selling IBI
7. Lack of regulatory framework for IRA with which to protect consumer
Key Issues to be addressed

Basis risk, Indemnity cover and Insurable interest

Legal definition of Index-based insurance contract:
Contract where liability of insurer...triggered by, and amount payable set by one or more indexes, rather than on an assessment of the actual loss

Insurable interest
- Policyholder must prove occurrence causes damage/loss
- Allow for wider economic interest
- Insurer only allowed to sell IBI if policyholder has insurable interest

Not offer indemnity
- Fixed-sum cover
- Payout measured by index-level, not actual loss
- Max sum assured must be specified, reflect need
- Cannot be marketed as indemnity cover

Basis risk not addressed
- No fallback payments or minimum correlation
- Design must also attempt to minimize the risk
- Comment on risk in Actuarial report
- Report & monitor index value and payout made
Balance Consumer protection vs Market development

Consumer protection  Market Development
Consumer protection

1. Key features statements necessary to explain Insurable interest, non-indemnity and Basis Risk
2. Insurable interest only needed at inception
3. Auto claims notification and payment by insurer, within 30 days
4. Service level agreement with Aggregators and service providers to be approved by IRA
5. On-going monitoring of actual vs contractual payments
6. Specific reserving and capital requirements
7. Independent data verification and back-up process required
8. With Master policies, pay-out formula to individual policyholders must be agreed on and documented
9. Complaint resolution to be specified and enforced by IRA
Market Development

1. Provide legal certainty and ability to move beyond Agri-products
2. Micro-index-based insurance is supported – based on Sum Assured cap on benefit
3. Fixed-sum cover with no need for fall-back payments limits the risk insurers are exposed to
4. Provide for use of predictive variables and cover of consequential loss and mitigation cost
5. Exclusions allowed, no grace period or no right to cancel
6. Product bundling allowed with non-Index-based insurance
7. Make use of Aggregator or portfolio cover
8. Can use own or external data
Policy Framework

Policy paper consists of four sections:
1. Key regulatory considerations
2. Product approval guidelines
3. Sales, Reporting and Valuation requirements
4. Consumer protection requirements

Not everything to be included in index-based regulations
- Also use for general regulations, guidance notes, business conduct regulations and internal IRA policies
Policy Framework

1. Key regulatory considerations

The product must offer Fixed-sum instead of Indemnity insurance
- Allows for consequential losses and mitigation costs
- The index can only serve as a proxy for the actual loss
- Must have a maximum sum assured, but level not specified in the regulations

Insurable interest if the risk to be adverse to policyholder interest
- Contract must state the risk against which insurance is provided

Microinsurance regulations also apply to micro index-based insurance
- Impacts commission, sales channels and sum assured levels etc
- Specify Sum Assured Cap to monetary value of benefit in order to quality
- But where inconsistent, IBI get preference to MI regulations
  - Waiting period, Sales windows, Grace period and Cancellations
2. Product approval guidelines

1. Application to IRA to include an Actuarial report on how Basis Risk is addressed
2. Submit premiums on file-and-use basis only, one month prior to taking effect
3 – 6. State eligibility criteria, no waiting period, any exclusions, no grace period
7. Must specify the data sources and back-up sources or process
   - If the data source is not independent or reliable, IRA require independent validation
8. Design features necessary to minimize risk and improve transparency
   - Specify how index will be measure and results used to calculate the pay-out
   - Interested 3rd party be allowed to receive data and calculate the pay-out themselves
   - Must be a good predictor of the insured risk – no minimum level of correlation necessary
   - Allow predictive variable to pay out benefit before the insured event occurs
9. Policyholders do not need to lodge a claim – insurer must provide a notice
10. Insurer must specific a complaints resolution process prior to product launch
Index-based insurance should be a separate class of insurance
- Long-term, General or Micro Insurers be allowed to sell this class of business
- Micro IBI to be reported separately from conventional IBI
- Appropriate **commission caps** for this class of business should be specified

**Allowed to bundle the product with other insurance**
- Hybrid indices, benefits based on actual loss, life or disability cover

**Allowed to sell their product through various distribution channels:**
- Aggregators collect premium and pay claims – if a SLA is in place
- Master group policyholders must document the pay-out method to individuals
- Portfolio cover sold to organisations to protect against losses affecting their clients
Authority require performance monitoring to ensure value for money
- Insurer report index values vs. actual payments to ensure correctly paid
- Authority may require insurer to monitor extent of basis risk

Modify the Method of calculating technical liabilities
1. Calculation of the unearned premium reserves
   - Assume risk only expires at the end of the insured period; or
   - Assume risk expired proportionally over the cover window of the policy
2. Calculation of the outstanding claims incurred reserves
   - Appointed actuary use any method but describe method used in valuation report
3. Calculation of the capital requirements
   - The Authority should require specific capital requirements
4. Reinsurance requirements
   - The Authority should require Insurer to obtain appropriate catastrophe insurance
Marketing material should explain product and risks, including:
- That pay-out depends on the value of the index and not the actual loss
- **Which risks are covered** and which will not be; what index is used to calculate the pay-out and **expected frequency of payout**
- What basis risk is and what the sources and impact may be
- The eligibility criteria for buying the policy

Pay-outs must be verified, communicated and paid within 30 days.

If regulator requires independent validation of index data:
- An service level agreement is needed with the independent body
- Explain how to resolve conflicts over the data, index values and benefits
- Explain the penalties independent body is liable for if it makes mistakes
- The independent body to notify the Authority over any concerns regarding the insurer’s actions

Regulator to issue market conduct, complaint resolution requirements
Any Questions? - Thank you for listing