Weather Index Insurance
Zambia – Nigeria Knowledge Exchange Session

24th November 2021
Presenter: Africa Re Team
1. Africa Re at a Glance
2. Our Partners
3. Calculating Agents
4. Nigerian Agriculture Insurance Market Players
5. Weather Index Programs in Nigeria
6. Possible Interventions to key challenges facing Nigeria Agric. Insurance
7. Examples of new product designs proposed
8. Role of Africa Re
**Establishment:** February 1976 by member States of the then Organisation of African Unity (now the African Union), at the initiative of the African Development Bank (AfDB).

**Mission:** The purpose of Africa Re is to foster the development of the insurance and re-insurance industry in Africa, to promote the growth of the national, regional and sub-regional underwriting and retention capacities and to support African economic development.

**Financial Strength & Credit Rating:** A- by S&P (Strong/Stable Outlook) and A by AM Best (Excellent/Stable outlook). Most mega clients require the support of A-rated securities. Fortunately, we are the only African reinsurer in that position.

**A very strong organization and renowned brand:** very high solvency ratio (144%) / SHE ($1017m) / Total Assets (over $1.84bn) / very strong corporate governance / strong market leadership position / strategic partnership with Allianz SE, Fairfax and AXA
Footprints

Africa Re – Adding value to Partnership

- **Security**: Local Player, International Standard
- **Customized Training**: via Bootcamp concept
- **Risk Survey/Pricing and Post Loss Survey**: very experienced Risk Engineers
- **Facultative Solution**: Portfolio Management based on Survey, Risk Management. There is a dedicated team.
- **Claims Reviews Assistance**
- **Strategic Partnership**: Excellent market knowledge
- **Portfolio/Actuarial analysis and counselling**
IFC / GIIF

IFC, through the GII facility, supports the development and growth of local markets for indexed/catastrophic insurance in developing countries by expanding access to index-based insurance.
Calculating Agents

**Acre Africa**
Agriculture and Climate Risk Enterprise Ltd (ACRE Africa), a social for-profit business headquartered in Kenya designs agriculture micro-insurance solutions.

**Pula**
Pula is an agricultural insurance and technology company that designs and delivers innovative agricultural insurance and digital products to help smallholder farmers endure yield risks, improve their farming practices, and bolster their incomes over time.
Nigeria’s Agric. Insurance Market Players

- Nigerian Agricultural Insurance Company (NAIC)
- AXA Mansard Insurance
- IGI
- Leadway Assurance
- AIICO Insurance
- FIN Insurance
- NSIA
- Zenith

- Sterling Assurance
- Cornerstone Ins.
- Royal Exchange Ins.
- Lasaco Assurance
- Prestige Assurance
- Veritas Kapital Assurance
- NEM
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<th>S/N</th>
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<th>Values (USD)</th>
<th>No. of Farmers</th>
<th>Location</th>
<th>Product Type</th>
<th>Premium (USD)</th>
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<td>Kaduna</td>
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<td>8,890,777</td>
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<td>3 AFEX Nigeria Limited</td>
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Possible Interventions to key challenges facing Nigeria Agric. Insurance - Product Design

**Appropriate mix of insurance models and ideal cover designs**

- **Nigeria has two major cropping seasons**: Wet & Dry seasons with varied risk exposure levels given that most farmers in wet season practice rainfed production systems whilst in dry season farmers practice irrigated agriculture. The historical yield experience is therefore different in the two production systems.

  - **As such, there need to design insurance products and set up cover parameters specific to the two seasons’ historical experience.**

- **Uniform cover parameters**: The design of Area Yield Index Insurance has been found to apply uniform cover parameters across the entire country. This leaves the scheme exposed to cases of possible basis risks given that the insured farms may come from different agro-ecological zones and the production experience is different.

  - **Therefore mapping of insurance units based on agro-ecological zones and setting up of insurable thresholds specific to production history is recommended.**
  - **Portfolio risk pricing can be done to apply uniform premium rate but with varied insurable thresholds per unit area of insurance.**
Possible Interventions to key challenges facing Nigeria Agric. Insurance - Product Design

- **Product bundling options**: Agric Insurance in Nigeria is majorly bundled with credit as it is other markets. This one of the most ideal approach of distributing insurance. There is need to explore other options to increase penetration of agric insurance in Nigeria. The following as some of bundling options that can be scaled or adapted in Nigeria;

  - **Agricultural input/crop insurance** – This option is mostly used by agricultural input companies to promote sales for their products where insurance is used as marketing tool. A good example is a Kenyan context called RPG (Replanting Guarantee), a weather index insurance that covers germination phase for seeds purchased by individual farmers. ACRE Africa in partnership with AIICO and CoAmana piloted this concept in 2020 in Kaduna state.

  - **Bundling with other rider products** – Inclusion of other rider products in provision of agriculture-related insurance products has also been seen to increase demand for insurance amongst farming communities. These products are primarily intended to retain clients as they see more value in purchasing insurance. Some of the possible insurance products that can be offered as rider products include:
    - Funeral cover also known as last expense
    - Hospitalization cash benefit
    - Credit life
    - Permanent Total Disability
Possible Interventions to key challenges facing Nigeria Agric. Insurance - Product Design

- **Insurance product fit:** The distribution channels of insurances should be able to advise customers on the ideal insurance products given their unique crop production characteristics. For instance, a rainfall index insurance would not be an ideal insurance product for farmers practicing irrigated agriculture. On the other hand, a Multiperil Crop Insurance would not be an ideal insurance product to a one-Ha farmer located in the remotest state where crop inspection costs cannot be sustained by the charged premium. Similarly, an Area Yield Index Insurance product will not be ideal for the only one farmer in the entire state. Weather Index insurance would be ideal for farms where crop inspections or crop cut activities are not possible to execute.

  - *It is therefore recommended periodic refresher trainings (could be physical or virtual to the underwriting teams).*

- **Efficiency in administration of insurance contracts**

  - **Delayed pricing requests:** Reinsurers have been receiving pricing requests very late in the season which majorly attributed to delayed submission of risk details from the customers. This leads to other operational challenges of stained risk monitoring and yield estimations activities. In cases of extreme delayed very close to end of season could also lead to delayed payment of claims or even declining of insurance proposals which may create a negative perception about insurance/reputational risk.
Possible Interventions to key challenges facing Nigeria Agric. Insurance - Product Design

- We recommend forward pricing where location-crop-based cover terms are agreed and signed off three to two months prior to the season onset.
- Reinsurers, calculating agents and underwriters to have structured meetings and procedure to generate pipeline based on previous contracts and map seasonal implementation roadmaps.
- Use of the digital tool to manage pricing requests.
  - Security challenges affecting access to insured sites: Some insurance schemes have experienced security issues which have hindered access of insured sites by insurance companies and their agents. In some cases, delivery of agricultural inputs has also been affected leading to delays in crop establishment or even no planting at all.
  - This would require a collective responsibility with relevant stakeholders to address this matter.
  - We would also recommend a map out of areas with security challenges and offer weather index insurance products that would require no or minimum field visits.
Possible Interventions to key challenges facing Nigeria Agric.Insurance - Product Design

- **Risk monitoring:** This function starts for verification and certification of the risk to be insured, on-season risk monitoring and certification of losses. Most insurers have faced challenges of either lack of risk visibility or credible picture of the actual risk performance attribute to lack of reliable risks monitoring structures. For instance, an insurer confirms cover for schedule of farms based on a declaration list shared by an aggregator without structures to confirm that the crop has been planted.
  - We recommend digital inclusion at the point of customer registration to capture subject matter details, random checks to verify risk details and mapping of risk monitoring protocol with customers before issuance of cover.
  - We also recommend a two-level insurance scheme audit:
    - Internal audit – to be conducted by the insurer/consortium’s appointed risk surveyor based on a pre-approved protocol by the insurer and reinsurer.
    - External audit – appointed by the Reinsurer

- **Consumer education:** There seems to have product knowledge gaps amongst insured clients.
  - There is need to have a clear consumer education at the point of sale.
  - Provide simplified cover certificates to insured farmers in aggregated model.
Examples of New Product Designs Proposed

1) Weather Index Insurance (Bundling with Funeral cover, Hose-Cash, PTD & Credit Life)

2) Hybrid Product (Weather & Area Yield Index Insurance)
Role of Africa Re

01 Reinsurance Capacity:
Africa Re currently provides reinsurance capacity (both on indemnity and index products) to agriculture underwriters.

02 Trainings:
Continue to provide tailor made trainings across Nigeria.

03 Product Development:
Based on client needs, Africa Re is working to expand the Weather Index & Enhanced Area Yield Index Covers – Bundling & Hybrid models. Target crops – Maize, Sorghum & Rice

04 Digital Solution:
Currently working with our partners to develop a digital platform for agriculture underwriters in order to solve lack of data challenges in the future. The tool will assist clients with insurance contracts administration, pricing and quotation preparation and claims management.

05 Protection of Client’s Net Account:
Protection of client’s net account by arranging a stop loss cover facility with our partners IFC/GIIF. So far several market risk carriers have benefitted from this facility.
THANK YOU