THE STATE OF AGRICULTURAL INSURANCE IN KENYA
Lessons for policy making
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Africa-Asia Conclave on Loss and Damage due to Climate Change:
Instituting a Global Agricultural Insurance Programme as a Risk Sharing and Transfer Mechanism for Developing Countries

Eastland Hotel Nairobi
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1. Introduction – Kenya’s agriculture and climatic events
2. History of agricultural insurance in Kenya
3. Background to current agric insurance in Kenya
   ✓ Success factors/stories
   ✓ Challenges to agricultural insurance in Kenya
4. Kenya’s response to agric insurance concerns
   ✓ Insurance types and target groups
   ✓ Institutional options proposed for Kenya
   ✓ Proposed Institutional Framework for agric insurance PPP in Kenya
5. KNAIP recommendations and steps taken
   ✓ Kenya Agriculture Insurance and Risk Management Program (KAIRMP)
   ✓ Partnering institutions roles and responsibilities
6. Conclusions
7. Recommendations
8. References
• Kenya’s agriculture is 98% rainfed, making it highly vulnerable/exposed to climatic hazards such as drought and floods, leading to heavy losses and damages.

• About 83 – 89% of Kenya is arid and semi-arid lands (ASAL), receiving very little, very erratic rainfall.

• Over 30% of Kenya’s population lives in the ASAL areas, depending mainly on agro pastoral livelihoods.

• About 75% of Kenya’s farmers/pastoralists are resource-poor subsistence crop producers/livestock keepers, who currently often depend on food aid in the event of major drought/flood events.

• Climate change makes the situation worse as it leads to increased weather variability, making it difficult for these farmers and pastoralists to effectively plan their crop production and livestock management.
Introduction – Kenya’s agriculture and climatic events

Number of people affected by droughts and flood disasters in Kenya 1971 – 2009

Source: Draft KCSAFP 2015
Total losses in Kenya attributed to drought alone between 2008-2011 was estimated to be $12.1 billion (KNAIP, 2014)

- About 72.2% of the loss was incurred in the livestock sub sector and 12.5% in the crops sub sector
- GDP growth rate dropped from 5.5% to 3.8%
- Agric sector GDP growth rate dropped from 3.6% to 0.6%

[The wider margin of shock shows how vulnerable agric sector is]

- Despite the vulnerability and the risks, resources to tackle the threats posed by the hazards are not adequate, and mainly covers food and basic needs, not recovery efforts

- In the period 1999 to 2011 devt partners in Kenya spent 74% of DRR funds on food assistance, 24% on basic needs and only 2% on recovery in the agric sector
• Analysis of the losses and damages due to the 2008-2011 drought and the combined response shows that total expenditure on crops and livestock over the 2008-2011 period amounted to only 17% of the total value of the losses and damages (KNAIP, 2014)

• This is a major gap in funding in the ag sector, and leaves the sector more vulnerable after each and every catastrophe
Agric insurance cover in Kenya dates back to 1942 with the creation of guaranteed minimum returns (GMR) scheme to provide:

- Seasonal crop credit
- Crop credit insurance for crop losses
- GMR for crop output

The insurance component was operated through a Fund, using free and/or subsidized premium.

Discontinued in 1978 due to unsustainable losses.

The fund itself was, however, not insured against catastrophic losses.

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History of agricultural insurance in Kenya

• Between 1978 and about 2006 there was very little involvement by the public sector in agric insurance in Kenya apart from the supervisory role of Insurance Regulatory Authority

• There was also very little interest from private insurers in Kenya for agric insurance, save for the traditional indemnity-based covers for large scale commercial farmers

• In the absence of a national policy/ strategy for agric insurance, the private insurance sector has been developing on its own, making own decisions as to which sectors and commodities to insure, without much public support or guidance
Background to current agric insurance in Kenya

• Currently there is a small but innovative agric insurance market in Kenya, undertaking many pilot projects on index-based weather insurance, often with external support
  ✓ There are up to nine private sector insurance underwriters, providing insurance covers for various agriculture risks

• However, less than 1% of farmers in Kenya currently take up crop/livestock insurance
  • Livestock insurance penetration is even smaller than for crops
  • Very few have scaled up
  • Very few farmers have access to the products
  • The products are still considered “unaffordable”, though the pilots are subsidized
Since 2006-2008 there was a considerable re-emergence of interest in agric insurance in Kenya, stimulated by the growing interest among international agencies willing to partner with local insurance companies to develop and PILOT index-based crop/ livestock insurance programmes/ products with smallholder farmers

Index-based insurance products piloted in Kenya include weather index insurance (WII), area-yield index insurance (AYII), remotely-sensed Normalized Difference Vegetation Index (NDVI) and satellite-based rainfall index.

Building on diagnostic studies carried out in the period 2012-2014 with the support of the GIZ/ ASCU and World Bank/ FSD/ ILRI, the Government of Kenya has embarked on an ambitious Agriculture Insurance and Risk Management Program (KAIRMP)
Success factors/stories

• **Offering a holistic solution to mitigate weather risks, not just insurance**
  - customized insurance products using mobile technology, bundled with
    - weather data,
    - input credit
    - agricultural advisory services,

• **Increased investment and higher earnings**: farmers insured through ACRE Africa invested 19% more and earned 16% more than neighbouring uninsured counterparts (2012 impact study).

• Presence of international development partners willing to keep trying

• High level of mobile phone and mobile wallet penetration in Kenya, available to drive service delivery

• Remotely-sensed satellite weather data available, but production data still has to be collected
Challenges to agricultural insurance in Kenya

Although numerous private sector agriculture insurance pilots have been implemented in Kenya in recent years with support from donor partners, these programs have failed to reach significant scale.

Challenges include:

- Data gaps (weather, yield)
- Low density of reliable weather stations
- Where infrastructure exists, weather data is not always reliable and/or has not been properly archived
- The use of satellite data is gaining more and more momentum, but still needs to be further explored, and needs ground-truthing
- Financial literacy among the targeted farmers is low and affects demand
- Index based insurance is locality-specific: every locality has a different product and premium rating – difficult to scale up
- Low capacity of the national insurance (and re-insurance) sector to develop the right products
- Due to the pilot nature of the initiatives, there has been no strategic plan to develop a coherent agric insurance initiative in Kenya

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Challenges to agricultural insurance in Kenya

- Delivery channels: Low levels of access to agric insurance – very few insurance companies have the marketing and distribution channels to cost-effectively deliver agric insurance to non-organized farmers/pastoralists in geographically remote areas
- Market is small, premium has to be high; premium is high, can’t expand market

- Local reinsurers not well capitalized to absorb the catastrophic losses and damages inherent in systemic agric insurance risks

- International reinsurers charge high rates for local cover
Kenya’s response to agric insurance concerns

• Pilot program was tested in 2009 and officially launched in 2010 with 12,000 Kenyan maize and wheat farmers insuring their inputs against drought and excess rain
  • Total Insurance Portfolio (total sums insured) $12.3 million (sums insured 2013)
  • Insurance Payouts $370,405 (2013)
  • Average Cost of Insurance 5 to 25% of value of insured inputs or harvest

• Kilimo Salama Prgramme (now ACRE Africa Ltd), underwritted by UAP and supported by Syngenta Foundation and the Global Index Insurance Facility (GIIF), appears to be moving towards a sustainable model
  • was reaching over 200,000 clients in Kenya, Tanzania and Rwanda by 2013

• Situation analysis conducted, assisted by GIZ/ACCI, in preparation for agricultural insurance policy development process
• Improved data collection and management guidelines developed and tested, assisted by GIZ/ACCI
• Analysis of policy options done, assisted by GIZ/ACCI and the World Bank
### Institutional options proposed for Kenya

<table>
<thead>
<tr>
<th>Option</th>
<th>Remarks</th>
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<tbody>
<tr>
<td><strong>1.</strong> Private sector be left to spearhead the process as per market forces; in the fullness of time they will scale up and out sustainably</td>
<td>Index-based insurance is systemic and not attractive to under-capitalized insurers/re-insurers in a purely private mechanism; the Kenya govt had also shown interest to engage by the time of concluding the study.</td>
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<td><strong>2.</strong> Public sector to intervene and lead the process; create a public sector agric insurance entity to spearhead the process of institutionalizing agric insurance</td>
<td>Nearly all public sector agric insurance programmes in Africa and Asia have failed on account of bad governance and conflicting objectives/intentions. Public sector should only intervene in cases of market failure; use govt funds for studies and to take premiums for catastrophic/sovereign insurance through the private sector</td>
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<td><strong>3.</strong> Design a suitable PPP programme to build on the strengths of the private sector insurers as the risk owners and govt support as a promoter/facilitator through a range of support mechanisms</td>
<td>This model is the most widely adopted internationally; mechanisms can include premium subsidies, operating costs, re-insurance cover, etc. It is the most recommended for Kenya</td>
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Adaptation to Climate Change and Insurance (ACCI)
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Action taken</th>
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<tbody>
<tr>
<td>Large-scale agricultural insurance, if implemented as a public-private partnership (PPP), can smooth agricultural income during shocks and thereby provide protection for vulnerable populations</td>
<td>Being implemented</td>
</tr>
<tr>
<td>Establish Directorate of Agric Risk Management at the Ministry to coordinate the implementation of various policies/strategies/programmes with MDAs and private sector at all levels</td>
<td>A Directorate not formed but CCU expanded to take up additional responsibilities</td>
</tr>
<tr>
<td>Form a broad-based steering committee to continue the insurance policy dialogue, to develop an agric insurance policy</td>
<td>Draft index based insurance policy in place (by IRA)</td>
</tr>
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<td></td>
<td>Agriculture Insurance and Risk Management Technical Committee by KAIMRP program: National policy for agriculture insurance to be developed</td>
</tr>
<tr>
<td>Strengthen access to climatic and agric data in Kenya and avail the data at affordable cost</td>
<td>Data collection and management in catered for in the KAIMRP program</td>
</tr>
<tr>
<td>Establish an Agric Risk Magnt Agency (ARMA) to spearhead agric risk assessments and modelling</td>
<td>Not yet done</td>
</tr>
<tr>
<td>Create an insurance scheme, as pool or separate actors individually</td>
<td>Both schemes to be tried: KNAIRMP, KCSAP, KCSAFP,</td>
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Kenya Agriculture Insurance and Risk Management Program (KAIRMP)

- Kenya has adopted the concept of agricultural insurance solutions through a Public Private Partnership (PPP) Program covering both crop and livestock insurance.
- Government will provide core support services such as agricultural statistics, farmer sensitization, capacity building, networking and collaboration with other key agencies, program monitoring and evaluation.
- The roles of the private sector include development of and provision of innovative insurance and financial products to farmers, farmers’ capacity building, advocacy, and policy monitoring and support.
- KAIRMP is a comprehensive agricultural and risk management program covering the livestock and crop sub-sectors:
  - Livestock: Normalized Difference Vegetation Index (NDVI): pasture.
  - Crops: Area Yield Index Insurance (AYII): first – maize and wheat – AYII will be the main crop insurance scheme supported by the GoK during KAIRMP’s initial stage, but the program will leave room for the later development, promotion and adoption of other crop insurance programs based on need.
- Estimated number of producers covered 161,000.
- Average cost per producer per year (K Shs) 2,100 – 9,200.
Partnering institutions roles and responsibilities

- **Government (both at national and county level)** Ministry for Agriculture, Livestock and Fisheries (MOAL&F),
  - Participate in the development of a national agriculture insurance policy and legal framework, jointly with Insurance Regulatory Authority (IRA)
  - Undertake the public functions (public goods/services) component of the programme

- **Financial Sector Deepening Kenya (FSD)**
  - assist MOAL&F in all matters related to private sector project management and coordination

- **World Bank Group (WBG)**
  - principal technical adviser to MOAL&F through the initial stages of the program

- **Insurance companies**
  - develop, distribute and administer insurance products for the targeted farmers

- **Agriculture credit institutions**
  - supply of input credit to targeted farmers
  - support the distribution of insurance products to targeted farmers

Adaptation to Climate Change and Insurance (ACCI)
Pure Premium Rates at 80 Percent Coverage Level of Maize Crop in Kenya

Program title: Kenya Agriculture Insurance and Risk Management Program
Program symbol: KAIRMP
Implementation Period: 2015/16 to 2019/20 Fiscal Year
Starting date: 1 May 2015
Completion date: 2020
Target Beneficiaries: 87,000 smallholder farmers
Program Coverage: 30 crop producing counties
Sources of funding: Government of Kenya
Implementing Agency: Ministry of Agriculture, Livestock and Fisheries

Adaptation to Climate change and Insurance
## Indicative Fiscal Costing for Agricultural Insurance Programs by 2019

<table>
<thead>
<tr>
<th>Program Description (2019)</th>
<th>Annual fiscal cost (K Shs millions)</th>
<th>Estimated number of producers covered</th>
<th>Average cost per producer per year (K Shs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maize: area yield index insurance</strong></td>
<td>345</td>
<td>70,000</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>Wheat: area yield index insurance</strong></td>
<td>49</td>
<td>5,000</td>
<td>9,200</td>
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<tr>
<td><strong>Pastoralists:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satellite-based livestock protection insurance (fully subsidized)</td>
<td>300</td>
<td>71,000</td>
<td>4,200</td>
</tr>
<tr>
<td><strong>Pastoralists:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satellite-based livestock protection insurance (partially subsidized)</td>
<td>31</td>
<td>15,000</td>
<td>2,100</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>725</td>
<td>161,000</td>
<td></td>
</tr>
<tr>
<td>Form of financial protection against disasters</td>
<td>Income level of beneficiary(^a)</td>
<td>Number of pastoralists expected to be covered across four counties over next five years (of 470,000 total)</td>
<td>Government’s contribution to cost of premium or welfare payments (%)</td>
</tr>
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<td>---------------------------------------------</td>
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<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>Unsubsidized livestock insurance</td>
<td>Middle-income [US$1/day or more](^b)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Partially subsidized livestock insurance</td>
<td>Low-income [below US$1/day](^b)</td>
<td>15,000 [by 2019]</td>
<td>50, 25(^b)</td>
</tr>
<tr>
<td>Macro-level insurance program</td>
<td>Ultra poor [below national rural poverty line of US$0.5/day](^c)</td>
<td>71,000</td>
<td>100(^b)</td>
</tr>
<tr>
<td>Hunger Safety Net Program scalable cash transfers</td>
<td>Hardcore poor [below national food poverty line of US$0.3/day]</td>
<td>100,000</td>
<td>100(^c)</td>
</tr>
</tbody>
</table>

Note: n.a. = not applicable.

a. Classification based on distribution livestock holding size for Marsabit County, which may not be similar in other HSNP counties.
b. Contribution is from State Department of Livestock, based on annual assumed budget of K Sh 300 million per year.
c. Contribution is from National Drought Management Authority.
Conclusions

• This presentation has shown that Kenya is moving in the right direction in terms of implementing recommendations of past studies on index-based agric insurance

• However, more still needs to be done.
Recommendations

• Support the development of agric insurance market to enable private sector to achieve scale and sustainability

• Strengthen the legal and regulatory framework for index-based agric insurance
References

• KENYA: Situation Analysis for a National Agricultural Insurance Policy (KNAIP) – February 2014
• KENYA: Agriculture Insurance Solutions Appraisal, July 2014 (Kenya Background report) – July 2014