



# AREA YIELD INDEX INSURANCE KENYA CHAPTER

PRESENTATION MADE DURING DISASTER RISK FINANCING WORKSHOP HELD AT  
GLENBURN LODGE AND SPA SOUTH AFRICA ON 6<sup>TH</sup> MARCH, 2024

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# Agricultural Insurance Background

- ▶ Smallholder farmers produce 80 per cent of the food in the country; however, the smallholder farmers are vulnerable to a range of natural perils.
- ▶ Exposure to these agricultural risks leads to reduced crops, livestock and fish production and diminished sources of livelihoods.
- ▶ The occurrence of these risks pushes well-to-do farmers into poverty and the poor farmers into destitution due to their low resilience.
- ▶ Between 2008-2011, the country experienced a drought event that led to a loss of US\$ 4.7B for livestock and US\$ 733M for crops
- ▶ Against this backdrop, the government commissioned a study to understand the agriculture insurance landscape in the country.

# Agricultural Insurance Landscape Study



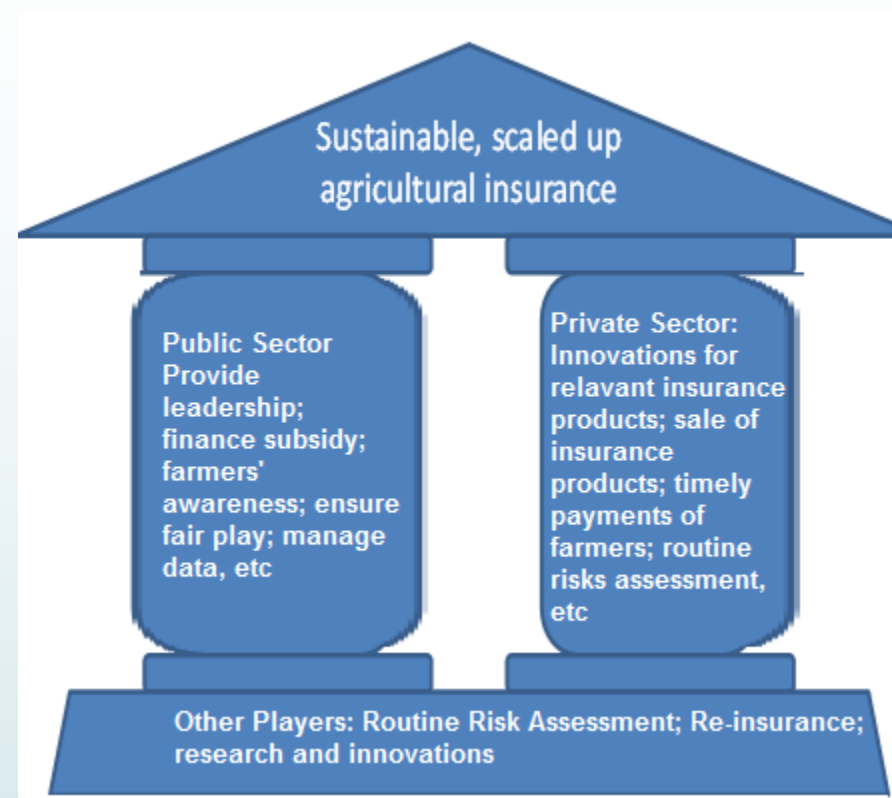
- From 2013 – 2015 this study was led by the WBG in conjunction with the Government of Kenya together with other stakeholders.
- The objective was to move from post disaster interventions to ex-ante approach;
- The study found out that:
  - I. Most farmers were unaware that risks in the sector are transferable to a third party.
  - II. The premiums on offer by the few Insurance companies were out of reach for the ordinary farmers.
  - III. **Area yield index** was the best approach to offer affordable insurance to majority of the farmers.
- ➔ Piloting 2016 to 2017 starting in 3 counties, 1,000 farmers procured cover for their crop
- ➔ Launch of Kenya Agricultural Insurance Programme (KAIP) in 2018



# Public Private Partnership (PPP) model

To be sustainable, the Government supported insurance programme takes a Public Private Partnership model

- ▶ Government support: data management, farmers mobilization, capacity dev; subsidies, policy and regulatory framework
- ▶ Private Insurance companies: form pool; develop and market insurance products; compensate farmers during losses
- ▶ Financial and Agri-input dealers: bundle credit lending or input supply with insurance
- ▶ Other players: Re-insurance, Dev partners, etc- Provide other support



# Public Private Partnership (PPP) model



- **Formation of the Pool and Role of the Insurance Regulator(IRA)**
- The Pool is made up of the Direct Insurers; with One of them being the Lead Insurer.
- The lead insurer receives premiums from the farmers and subsidy from the Government on behalf of the pool.
- Presently the lead insurer(APA insurance) manages the pool and they have entered into an MOU with other members on Insurance Scheme management.
- Product development is done by the pool and the Re-Insurers.
- The Insurance Regulator in supporting Agriculture insurance approves the product developed by underwriters. They should also carry out public sensitization and provide a conducive environment in which Agriculture insurance can be provided.



# AYII Coverage & Value Chains

COVERAGE	VALUE CHAINS
<ol style="list-style-type: none"><li>1. Program piloted in 3 counties covering one sub county each. Presently spread to 40 counties out of 47 counties in the country.</li><li>2. The program has cumulatively reached over 1,800,000 farmers covered with crop insurance in the last 5 years</li></ol>	<p>5 Value chains have been covered by the crop insurance program</p> <ul style="list-style-type: none"><li>• Maize</li><li>• Sorghum</li><li>• Green grams - a legume</li><li>• Potatoes</li><li>• Onions</li></ul> <p><b>3 more Value Chains to be added</b></p> <ul style="list-style-type: none"><li>• Rice</li><li>• Coffee</li><li>• Cotton</li></ul>



# Premium subsidies

## Crop Insurance Subsidy

Government supported  
Crop Insurance Program

Provision of premium subsidy support of 50% on premiums paid by farmers for 0.5 to 20 acres of the insured crop.

**In the last 5 years a total of US\$ 3M has been paid in for subsidy support by the National Government GoK-SDA for farmers in crop insurance.**

**The premium is included into the Programs Annual Budgets.**

For Sustainability of the Agriculture Insurance Programs, moving forward it would be prudent to integrate insurance in County Risk management plans.

Crop Insurance is also given through other agents without the subsidy support and farmers have still shown an ability to pay up the premiums as they understand the risks they face.





# Data collection & management

**Crop insurance and data**

**Agricultural Insurance is made more effective by availability of reliable; available and verifiable data.**

**Crop Insurance Program and Data**

DATA IS A KEY INGREDIENT IN AGRICULTURAL INSURANCE.

- a. Production Data is collected from the County Governments and corroborated with the farmers' data through Focused Group Discussions.
- b. Auxiliary data is collected from other agents like Regional Centre for Management of Resources for Development and Kenya Meteorological Department

# Data collection & management

## Yield estimation in AYII (crop cutting)



- ▶ Before claim compensations are paid; the program carries out yield estimations in the field. The outcome of this exercise is an estimated yield for each UAI which is compared with the insured yield.
- ▶ The difference determines the compensation for the farmers in each UAI.
- ▶ Using GIS/GPS farmers are selected in each UAI ranging from 5-15 in number.
- ▶ A sampling spot measuring 5m by 5m for cereals and 2m by 2m for pulses is scientifically determined.
- ▶ The yield in the sampling spot is harvested and weighed and aggregated per UAI.
- ▶ The results are conveyed to the data agency in the Country(KNBS) for analysis to avoid bias.
- ▶ Data Quality in terms of adequacy and relevance **sometimes is a challenge.**
- ▶ **Data Storage has been a challenge** but the statistics unit is getting support to improve their management; storage and analysis of agricultural data.

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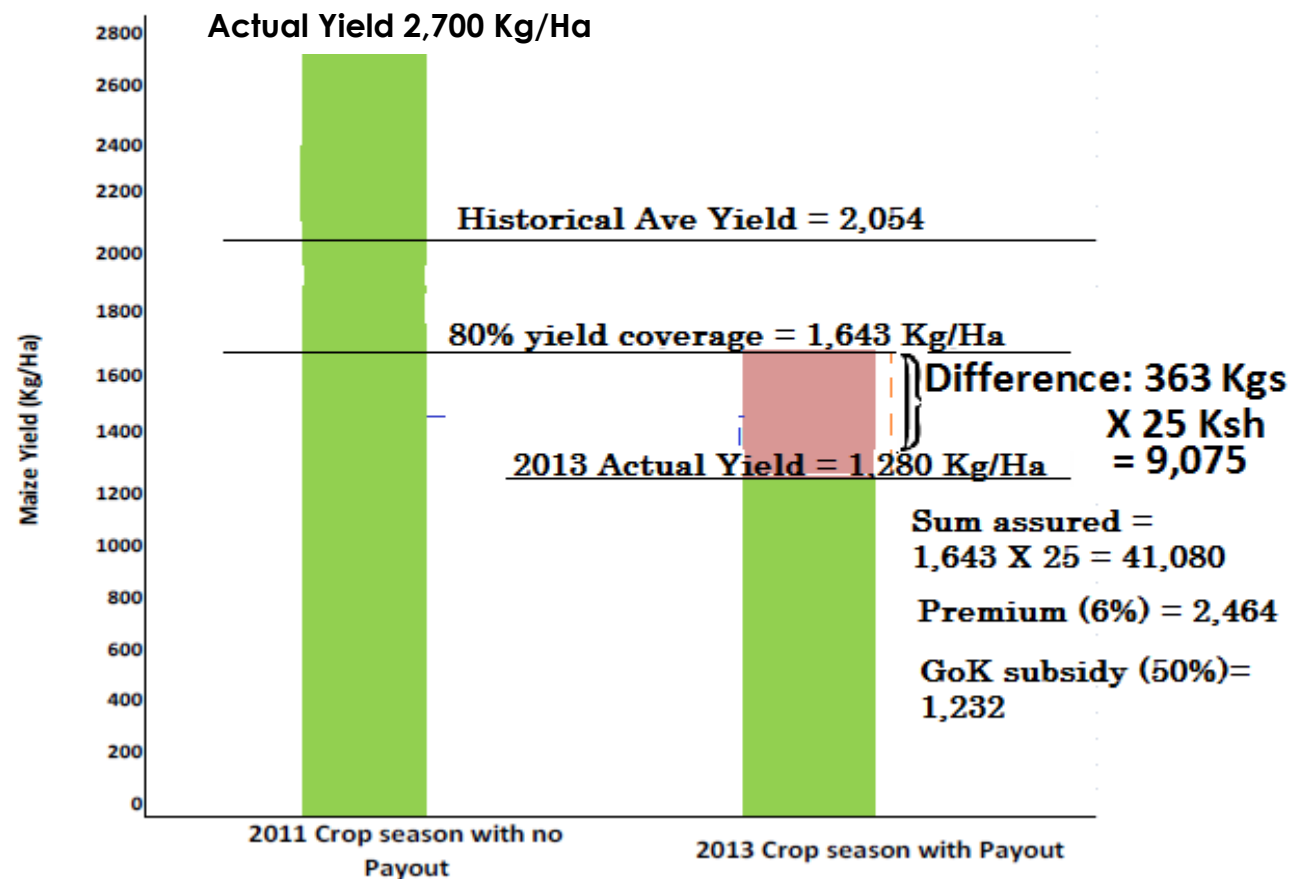
# Management of CCEs

- Crop Cuts Experiments are carried out by a pool of Crop cutting agents trained by the SDA Program. These are Technical Staff in every County in which the program is implemented.
- The technical staff are trained from the ward level.
- Crop cuts are carried out by 2 persons who are trained or one of them must be trained.
- Random sampling points are developed with assistance from RCMRD and technical staff in statistics unit. These GPS points are used to identify farms on which crop cuts are done.
- The officers use the GPS points/coordinates to Identify the farms. Once on the farms, the crop cutting teams also randomly identify the sampling spots and/or the parcel on which to carry out the crop cuts.
- A maximum of 2 crop cuts can be successfully done in one day at an average cost of US \$ 30.



# AYII payouts depend on the % yield cover; and actual yield at the end of the season

Example: Model of AYII Season with and Without Payouts  
Coverage of 80% Of Historical Average





# Achievements

- Farmers reached 1.8 million against a target of 5 Million. Of the 1.8 million farmers reached; 42 % were women.
- We have delineated 3500 UAs in the 41 Program implementing Counties covering over 750,000 acres.
- 55,000 farmers have received claim compensation amounting to US\$ 2.5M
- Capacity of insurance service providers to develop agriculture insurance products and implement agriculture insurance has increased. This has also resulted in more companies providing agriculture insurance products in their menus.
- Digital UAs Atlas
- Currently penetration of crop insurance among small holder farmers is still below 0.5% in Kenya.



## Lessons learned

- Public Private Partnerships are vital for sustainability of Agricultural Insurance.
- Retailing of Agriculture insurance as a stand alone is not fast enough.
- There is a growing interest by farmers to procure crop cover across the program implementing counties.
- There is need for Innovation in product development and distribution to address the multiplicity of risks in the agriculture sector.
- Agriculture insurance requires Government support due to its inherent risks.
- Basis Risk arose from UAs which are not homogeneous.



# Challenges

- ▶ Limited awareness amongst the farming community on agricultural insurance.
- ▶ Mistrust for insurance companies
- ▶ Culture of no-insurance in the population.
- ▶ Inadequate funding – Program request vs Actual allocation.
- ▶ Inadequate underwriting capacity



## What needs to be done

- Diversify products to cater for industrial and horticultural crops.
- **Bundling of crop insurance with inputs and agricultural credit.**
- Enhanced community awareness on agricultural insurance.
- Urge county governments to integrate crop and animal insurance in their county budgets .



# CROP INSURANCE FOR RESILIENCE BUILDING IS OUR DREAM FOR EVERY KENYAN FARMER

Kwani, kampuni ya bima itaweza kugharamia hilo kupitia malipo ambayo humwezesha mkulima kuzipata hela zake ambazo angezipata pasingelikuwa na kiangazi.

