



### Kilimo Salama: Micro Crop Insurance through mobile

Eric Seuret, 26 November 2010, Bern







### **Overview**

- 1. Introduction and Background
  - 1. Syngenta Foundation for Sustainable Agriculture
  - 2. Why do farmers need insurance?
  - 3. What is weather index based insurance?
- 2. How does Kilimo Salama work
- 3. Experiences and challenges for implementation



### Introduction to the Syngenta Foundation for Sustainable Agriculture

- The Syngenta Foundation is a not for profit organisation, fully funded by the Syngenta Company, but operationally independent of it.
  - Syngenta is an international agro chemical and seeds company that works in over
     90 countries and has 24,000 employees
- The foundation works around the world on increasing productivity, access to markets, and mitigating risks for farmers owning less than 5 acres of land.
- We work directly with farmers, as well as support agricultural research and the development of innovative tools that can support smallholder farmers in improving their own food security.
- In Kenya, Syngenta Foundation developed a partnership with local insurer UAP insurance.



# Why do farmers need insurance: the case of Jane Simon

#### Jane Gathoni Simon

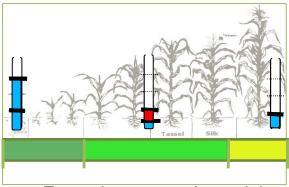
- Planted 1/2 acre of maize in Laikipia, Central Kenya in 2009
- Jane planted 4kg of hybrid maize seed in March worth 20
   USD
- That season she only harvested fodder
- Normally she would have planted relief seeds following such a drought, harvesting half a bag worth 15 USD
- Since she was insured she bought maize seed AGAIN from her payout of 15 USD in October 2009
- And harvested 2 bags of maize (60 USD) the following January
- The difference: 45 USD
- With the comfort of insurance, she planted 1 ½ acres of certified maize seed and is starting to use fertilizers.



### Weather index based insurance

- Weather station measures conditions
- No farm visits = low admin costs
- Relation rainfall & crop growth using agronomic models
- Covers defined weather risks (drought, excess rain, frost, weather related disease)
- If weather station shows loss, then all insured farmers are paid, irrespective of on-farm loss
- Farmers encouraged to take care of their farm
- Quick disbursement of payouts





Example agronomic model

**syngenta** foundation for sustainable agriculture

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- 2. How does Kilimo Salama work
  - 1. What is Kilimo Salama?
  - 2. How does it work?
  - 3. Mobile registration
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### Implementing weather insurance: Kilimo Salama

#### What is Kilimo Salama?

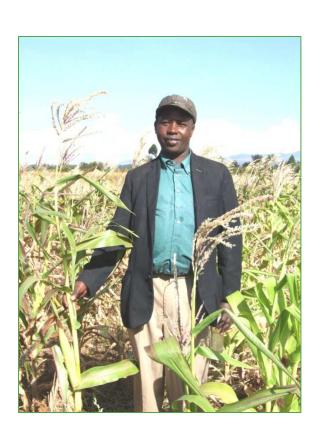
- Micro insurance product insuring farm inputs (seeds, fertilizer, chemicals) against drought or excess rain
- Insuring 200 farmers in 2009 and 11,000 farmers in 2010 season
- Using Agro dealers & groups as distributors
- Partnering with agribusinesses to reduce the cost to the farmer
- Paperless mobile registration and payout

#### What is Kilimo Salama Plus?

 Micro insurance product insuring the whole farm investment planned for Jan 2011.

#### Livestock insurance

 Pilot insuring pastoralists ongoing, using satellite data to insure livestock mortality



# KTN Video on Kilimo Salama process

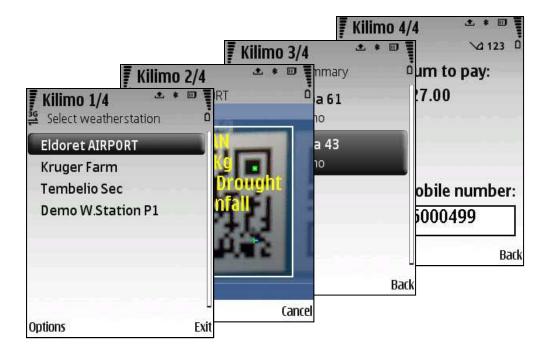


# The mobile application

Agrovets are given a mobile phone with the Kilimo Salama application



When a farmer wishes to purchase insurance the stockist starts the Kilimo Salama application and registers the farmer in a four-step process





# Farmer confirmation and payout



The insurance policy is automatically created on the server and the farmer receives an instant confirmation of her insurance coverage via SMS



Automated decision on payouts, if any

- To all farmers under the same weather station
- Directly to the farmer's mobile phone (M-Pesa)



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  - 1. Farmers feedback
  - 2. Overall challenges and success factors
  - 3. Elements for successfull pilots



### 2009: Farmer's feedback on insurance

 Survey of farmers who received a payout showed clearly that until payout, farmers do not trust insurance, but once they do, they invest more:



#### James Ndii Muchina, 1 Acre Insured

What is the best thing about the insurance?
There was a promise of compensation which they actually did

What did you think about insurance before the payout?

I was 50-50 about insurance paying, I had not heard of maize insurance before and I have known insurance to refuse to pay claims



#### Jennifer Mbiro,

a 39-year-old mother of four, said because she did not trust insurance so in 2010 she only insured fertilizer and not the seeds.

"This season I've insured my seeds, fertilizers as well as some chemicals that I'm trying for the first time. I now know that it is worth insuring all my inputs." Business Daily October 8 2010

# **Challenges and success factors**

#### 1. Payouts

- No one believes insurance until they or their relatives receive payouts
  - The first pilot season recorded the worst drought in last 20 years, the insurance paid out to the pilot group of 200 farmers.
  - In this region, insurance registrations increased threefold in the subsequent 2010 season
  - In 2010, we paid out to 135 farmers through M-Pesa in Siakago.
  - Here we see insured amounts have increased from 7 USD to 13 USD.



#### 2. Credibility of partners

- When insurance is linked to products farmers trust and sold by trusted distributors, farmers are willing to try
  - Distribution through agro dealers, partnerships with MoA, Churches, Schools,
     Agro Input companies

### Challenges and success factors cont'd

### 3. Affordability

Through partnerships premiums can be reduced

### 4. Mobile technology:

Scale is only viable if registration and payouts are paperless.

#### 5. Extension service via helpline

- Farmers see a benefit to the insurance in the bumper harvest years.
- 5. Historic weather data and stations
- 6. Financial literacy & distrust of farmers



**Eunice Wamaitha, 1 Acre insured** 

What did you think about insurance before the payout?

I thought they might not pay, our friends told us after the training that we were being lied to

# Thank you for your attention

### Parting thought:

'Kilimo Salama maize does better than our usual maize'! Say farmers in Embu and they sent us these proud pictures:





Insurance supports farmers to feel comfortable in investing in their farm, and can enable them to take advantage of their full potential!

# Thank you

For more information:

http://kilimosalama.wordpress.com

Or

www.syngentafoundation.org

