



by: Munir Duri
The Hague, Sept. 2015



Introducing GIACIS

GIACIS Consortia

ITC, University Twente - **Public**

Kifiya Financial Technology Plc - **Private**

Agricultural Transformation Agency [ATA]

National Metrology Agency [NMA]

Partners

Swiss Re

Insurance Companies (4)

MFIs (4)

Product

Index-based drought-insurance (single-peril), bundled with micro-credit contracts (existing scheme)


Area/Crops

All highlands of Ethiopia (>800masl)

Focused on major cereal crops: teff, wheat, barley, maize, sorghum

Index

NDVI at 1km² at 10-day intervals



G4AW
GEODATA FOR AGRICULTURE AND WATER

Netherlands Space Office

kifiya **ITC** **ATA**

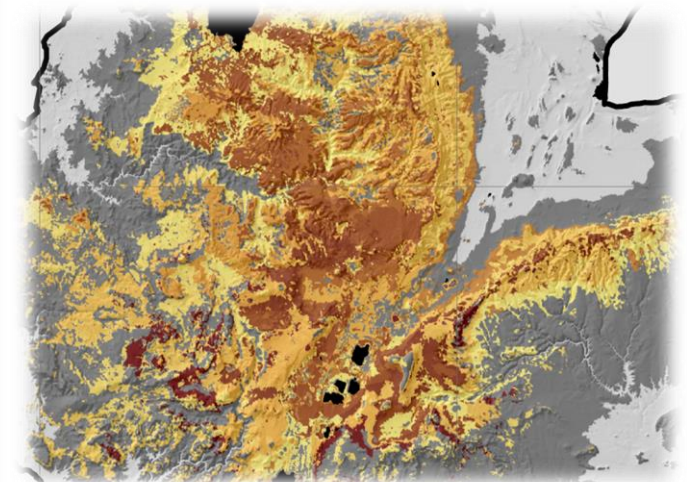
NMA **Swiss Re**

A systematic and synergetic approach for financial inclusion, promotion of investment in agriculture, broker sustainable production methods and risk transfer tools

Geodata for Innovative Agricultural Credit Insurance Schemes (GIACIS)



A **PPP**-approach
based on a 100%
complementary
Partnership



Our work to date



Consortia Background Work	National Workshop	Ecosystem & Product Design	Pilot Date
<ul style="list-style-type: none">❑ ITC University of Twente❑ Kifiya❑ Agriculture Transformation Agency❑ National Metrology Agency <p>Inception Report + scope + detail roles and responsibility work completed</p>	<ul style="list-style-type: none">❑ One day work shop to present and build broader stakeholder that incl.<ul style="list-style-type: none">▪ Government organizations (5)▪ Insurance companies(4)▪ Microfinance Institutions (6)▪ Federal Cooperative Agency▪ Knowledge Institutions and▪ Development organizations (4)▪ Regulator (NBE)	<ul style="list-style-type: none">❑ Design Risk Model – ITC❑ Design ecosystem – Kifiya❑ Detail demand side study (incl. need) + development of business case to all stakeholder – Micro Save	<ul style="list-style-type: none">❑ Preliminary pilot date determined by all stakeholders <p>January 2015</p>

Our work to date



Package 1: Build capacity in NMA

- ☐ GeoNetcast equipment procured and installed
- ☐ Forty staff trained on data processing
- ☐ Start taking 1kmX1km grid NDVI data every 10days

Package 2: Risk Model

- ☐ ITC completed the risk model based on NDVI data
- ☐ Defined Ethiopia into agricultural zones
- ☐ First product will cover risk against crop
- ☐ NDVIA index at pixel level

Package 3: Demand Study & BC

- ☐ Detailed study completed
- ☐ Business cases presented to stakeholders
 - Insurance Companies
 - MFIs & Coops
 - Pilot Farmers

Package 4: Alignment with stakeholders

- ☐ Stakeholder meetings conducted at
 - Federal Level
 - Regional Level
 - Local Level
- ☐ Program alignment with input credit program of ATA

Package 5: Technology

- ☐ Micro Insurance Platform is under construction
- ☐ DFS platform ready
- ☐ Producing detailed image-maps of farmers fields is on-going
- ☐ Validation logic of NDVI-based results is under preparation
- ☐ Design of “Announcements” by NMA is pending

Lessons learnt to date



Demand Side

- ☐ The need for further product bundling (Crop, Livestock, Funeral, Credit Life and Health Micro-insurance)
- ☐ Address also other perils than drought (basket approach of products)
- ☐ The need to insure also monetary values (other than input credit alone)

Risk Modelling

- ☐ The used Index-based MI-model enabled us to:
 - Overcome lack of preconditions
 - Enable scalability
 - Address technically complex issues
 - Highly accurately define trigger and exit thresholds
 - Carry out actuary work related to the risk-component
 - Drastically reduce field-based costs
 - Overcome the key basis-risk issues
- ☐ Pixel level implementation can be achieved if we can geo-locate the small holder farmer plot

Technology

- ☐ Integrated approach required solving challenges traditionally 'owned' by insurance companies
- ☐ Integrated approach required trust and ample communication between partners. Mutual strengths are thus fully utilized.

Scale

- ☐ For micro insurance to succeed financially, required is:
 - Achieving scale
 - Achieving links (providing services) to existing schemes
 - Achieving visibility at national level (key-stakeholders)
 - Aligning GIACIS services/products to government ambitions/needs



Thank You

