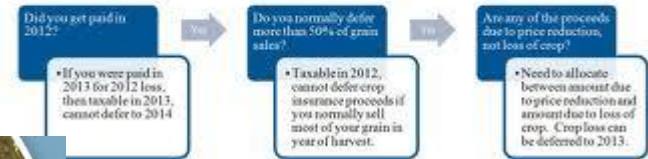


Agriculture insurance

Urgent needed actions and recommended Policy change to move Ag-Insurance forward



Crop Insurance Matrix



Gleason Crop Insurance
800-529-0008

BORTH CROP INSURANCE

YOUR CROP INSURANCE SPECIALISTS

620-846-2828

CROP INSURANCE

Keeps America Growing

With the financial uncertainties and volatilities facing today's farmers and ranchers, crop insurance is more important than ever before.

[sign up here](#)



WE SUPPORT CROP INSURANCE
cropinsuranceinamerica.org



JOHN DEERE

Crop Insurance

Why Crop Insurance



Contents of the presentation:

I . What is the agriculture Insurance?

II . Analysis of the Ag-Insurance current situation in Egypt.

III . what needs to be done.....urgently!!



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



I . What is the agriculture Insurance?

Agricultural Insurance:

Insurance applied to crops, livestock, aquaculture, and forestry.

Advantages of Agriculture Insurance:

Agriculture Insurance reduces the impact of risks in Agriculture, increase farmers' access to credit, and inputs, improve agricultural productivity, transition from subsistence to commercial farming, provide social protection to the poor, build resilience of vulnerable communities and reduce Food Aid and Ad-hoc expenditures during hazard periods



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



I . What is the agriculture Insurance?

Ad-hoc aid and insurance

When there are no market based instruments (such as insurance) available to manage natural risks, ad-hoc aids are given from the government budget in order to help farmers in case of calamities or natural catastrophes.

In some countries, as an alternative or a complementary to ad-hoc aids or providing catastrophic aid via funds, there is a public involvement in one of the following forms: · Provision of subsidies to private insurance; Direct provision of insurance; Provision of a security net.

Compulsory vs. voluntary insurance

In lower- middle income and low income countries, insurance is often compulsory for borrowers of agricultural credit. This type of credit-linked insurance may offer new opportunities to develop agricultural insurance in middle- and low-income countries. As the flow of credit to rural areas is often a problem, governments hope that financial institutions are more willing to provide loans to farmers if natural risks are covered through insurance schemes.



Why Crop Insurance

Crop Insurance Matrix

1. Did you get paid in 2012?

- If you were paid in 2013 for 2012 loss, then you do not need to contact the farmer for 2014.

2. No one (including you) filed a claim for 2013 or 2014.

- Available in 2015, contact your crop insurance provider if you are insured and want to know if you can get your grain in year of harvest.

3. No crop of the commodity due to perils reduction, loss of yield or other.

- Need to all farmer to receive impact due to perils reduction and other. Crop loss can be determined for 2015.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828

I . What is the agriculture Insurance?

Why Government Support for Agricultural Insurance?

To overcome Ag-Insurance challenges especially in countries at early Ag-Insurance phases , governments around the world have opted to provide support to agricultural insurance. The most common form of support are subsidies, in particular premium subsidies, insurance legislation specifically for agricultural insurance has been draft in almost half of all countries, and other forms of support, e.g. public investment in research and development (R&D), trainings, and infrastructure, are popular around the world too.

Delivery channels:

Delivery of Agricultural Insurance is highly dependent on the development status of private insurance markets. In low-income countries, where the insurance market is underdeveloped, agricultural insurance is provided mainly through cooperatives and farmers' groups.

The provision of agricultural insurance through rural banking networks, including microfinance institutions, is still very limited, although several initiatives are under preparation in Africa and Asia.

Why Crop Insurance

Crop Insurance Matrix

1. Eligible crop yield in 2012?

- If crop was paid in 2013 for 2012 loss, then eligible for 2013 contract offer for 2014

2. Do you currently have more than 50% of grain yield?

- Available in 2013, contract does not guarantee purchase of 3rd harvest, will insure 2nd year's grain in year of harvest.

3. Do any of the products close to price reduction, more than 50%?

- Need to all counter business impact due to price reduction from 2012 crop. Crop loss can be delivered for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828

I . What is the agriculture Insurance?

How Should Governments Support Agricultural Insurance?

Agricultural insurance is part of a comprehensive agricultural risk management framework. It can contribute to the modernization of agriculture.

Agricultural insurance programs need to be customized to beneficiaries. The emerging commercial agricultural sector needs more standardized insurance products offered through cooperatives or rural finance institutions, such as credit-linked agricultural insurance.

The traditional farming sector may not be geared toward commercial insurance; governments may therefore need to consider alternative support mechanisms, in the form of social safety net schemes.

The primary role of governments should be to address market and regulatory imperfections in order to encourage participation by the private insurance and reinsurance industry.

Why Crop Insurance

Crop Insurance Matrix

1. Did you get paid in 2012?

- If you were paid in 2013 for 2012 loss, then you do not need to 2013, contact the for 2014

2. Do you currently have more than 50% of grain water?

- Transfer in 2012, contact the crop insurance program if you currently will have of your grain in year of harvest.

3. Do any of the products due to price reduction, not found 2012?

- Need to all cover insurance impact due to price reduction on and amount due to loss of crop. Crop loss can be deducted for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828

I . What is the agriculture Insurance?

In start-up situations, where market infrastructure is not yet developed, a technical support unit could be established to provide specialized services to agricultural insurance companies and other risk-pooling vehicles. This unit should have support from the government, insurers, and reinsurers. The goals of the technical support unit would include the following:

- Create a center of expertise able to support the development and scaling up of agricultural insurance, in which a core team of agricultural insurance experts is formed to provide technical support to agricultural insurers in underwriting, product development, pricing, product delivery, loss adjustment, catastrophe risk financing, and so forth.
- Create and manage a centralized database of agricultural and weather statistics, and make the database available to agricultural insurance practitioners, and promote the exchange of expertise among insurance companies and access to international best practice through training courses, operations manuals, and other means.



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



II. Analysis of the Current situation

In analyzing current situation will explore:

1-current legal framework.

2-donor initiatives.



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



II. Analysis of the Current situation

1-current legal framework.

Despite the fact that there are some pitfalls and shortcomings of the phrasing in the existing new enacted legislations (will see them at the coming slides), but from a holistic point of view some of the major problems of these legislations as follow:

First: it seems that policy makers have no clear vision about the future of the Agro-Insurance in Egypt, as some of these legislations are not complementing each other if not contradicting, and with no unified objective.

Second: current legislations have dealt with each type of Agro related insurance individually (crop-health-pension, etc.), instead of grouping them into an integrated scheme of one Agro-related insurance package for the farmer, to fit with Egypt Ag-Insurance start up conditions such as: low awareness rates among farmers, lack of technical knowledge among insurance companies, etc.



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



II. Analysis of the Current situation

1-current legal framework.

At the end of 2015, SFD has contracted with Knowledge Economy Foundation & Egyptian National Competitiveness Council. The contract was funded by the African development bank through the rural Income and Economic Enhancement Project (RIEEP).

The activity aims at organizing Policy Dialogue Workshops and Development of a Policy Brief for a Clear and Regulatory Framework for solidarity fund and Contract Farming laws.

The result were some proposed policy change on the recently enacted legislations, as well as some needed next steps.

Why Crop Insurance

Crop Insurance Matrix

1. Did you get paid in 2012?

- If you were paid in 2013 for 2012 loss, then you did in 2013, comment the fee for 2014

2. Do you currently have more than 50% of grain yield?

- If you have more than 50% of grain yield, comment the fee for 2014

3. Do you have more than 50% of grain yield?

- If you have more than 50% of grain yield, comment the fee for 2014

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

Recommended next Steps in the short term for the current legal framework

A Meeting with the Ministry of Agriculture should be organized to present these results, the anticipated Executive Regulations cannot introduce items, which are not originated in both laws, keeping in mind that recommendations mostly require that new provisions are drafted and introduced. As a result, both laws should be reconsidered.

There is a need to educate the new Parliament members about these recommendations, establish communication between the government and civil society especially in areas of agriculture, food security and knowledge.

Organizing a series of community dialogues with all stakeholders to obtain details of amendments required to both laws so that these changes reflect the needs of all stakeholders. Recommendations from the two events are just preliminary.

It is necessary to create a taskforce to amend both laws, consisting of: (1) agricultural economics experts and specialists for both laws to achieve their social objectives; and (2) lawyers and legislators to avoid the above-mentioned legal shortcoming.

Why Crop Insurance

Crop Insurance Matrix

1. Eligible area paid in 2012?

- If area was paid in 2012 for 2012 loss, then transfer to 2013 contract for 2014

2. No area (or partially) paid above than 50% of gross value?

- Transfer to 2012 contract due to crop insurance provision if you eventually will harvest your grains in year of harvest.

3. No crop of the producer due to perils reduction, not harvested?

- Need to all farmer business impact due to price reduction and adjustment to the crop - Crop loss can be deducted to 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

2-Donor initiatives:

PlaNNet Guarantee and Social Fund for Development have signed a contract (January 2012), the contract was funded by the African Development bank through Rural Income and Economic Enhancement Project.

The aim was to assess the feasibility of a crop-insurance that will cover the climatic risk on the horticultural crops. The Insurance should help protect the agribusiness sector as it will insure small farmers against the risks they face. Furthermore, it should protect financial intermediaries' portfolios since borrowers are insured against risk, thus enabling them to increase their lending activities to this segment of the sector.



Crop Insurance Matrix

1. Did you not plant in 2012?

- If you were paid in 2013 for 2012 loss, then you will be in 2013, cannot do for 2014

2. No crop insurance policy above 100% of grain value?

- Available in 2012, cannot do crop insurance policy in 2013, must do your grain in year of harvest.

3. No crop of the products due to price reduction, less than 2012?

- Need to all farmer buy crop insurance due to price reduction, less than 2012. Crop loss can be deducted for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828



II. Analysis of the Current situation

Parties involved in the Product development

- SFD/AdB: Donor
- PlaNet Guarantee (broker): coordinator of the project.
- PF (NGO): Partners of PlaNet Guarantee to execute the project
- IFPRI (research institute): Index insurance providers



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



II. Analysis of the Current situation

Methodology of the insurance product development:

- Existing body of literature was thoroughly reviewed including any previous studies in the area. This documentary analysis has aid in the identification of the most suitable Governorate (among Minya, Assuit and Sohag) and crops for the development of insurance.
- Field missions were organized to conduct all the necessary activities related to the confirmation of the selected crops, the collection of data and the assessment of farmers' demand.
- Once the data was collected, IFPRI analyzed it to build the product.
- The product has then been priced by an international reinsurer and presented to local Insurers and distribution channels to assess their interest in the product



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828

II. Analysis of the Current situation

Main Risks identified

Based on risks and constraints identified with experts' and key persons' met in the framework of the feasibility study and according to some data and references founded in literature the main risks and constraints identified are:

- Fragmentation of cultivated land among small farmers;
- Market changes in price indicator is unpredictable;
- Disease and crop devastation due to the high cost of pest control;
- Availability of water ;
- Weather risks (extreme low and high temperatures, wind, sunburn) ;
- High cost, unavailability and low quality of inputs supplies.

=> It's important to note that it is not possible to cover every risk by index-based insurance either because they do not affect all farmers at the same time or because they are not insurable. All risks associated with human factors are indeed manageable by tailored crop practices and impossible to cover by an insurance product as for Pest and Diseases (use of pesticide), Price fluctuations or Fertilizer Deficiency.



Why Crop Insurance

Crop Insurance Matrix

<p>1. Did you not plant in 2012?</p> <ul style="list-style-type: none">• If you were paid in 2013 for 2012 loss, then you do not need to pay for 2014.	<p>2. No crop (extremely dry) or more than 50% of grain, water?</p> <ul style="list-style-type: none">• If you do not plant in 2013, you cannot claim crop insurance proceeds in 2014 because of your grain in year of harvest.	<p>3. No crop of the previous year due to price reduction, low yield or loss?</p> <ul style="list-style-type: none">• Need to all farmer insurance impact due to price reduction and low yield of crop. Crop loss can be declared in 2013.
--	---	--

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

Selected Crops :

- If we consider the climatic risks (rain, frost, water deficiency, wind, sunburn), that can be considered as the insurable risks, the following ranking comes out: 1-Tomato; 2-Pomegranate; 3-Potato; 4-Onion.
- Based on the desk analysis, the potential for the development of crop insurance products in the Upper Egypt region appears considerable, especially in the governorate of Minya that displays the widest cultivated area. Both Potato and Tomato crops reveal a particular potential due to the important level of cultivated areas and level of production they represent and their exposure to the climatic risks. Tomato is on top as it is a highly profitable crop which will make the payment of insurance easier.
- A field mission of PlaNet Guarantee and IFPRI, with the support of SFD, was conducted in Minya in June 2013 in order to validate the selected crops.
- A second field mission was conducted by PlaNet Guarantee in December 2013 to present the product to SFD and meet insurance companies.



BORTH CROP INSURANCE

YOUR CROP INSURANCE SPECIALISTS

620-846-2828

A photograph of a field with rows of young green plants in dark soil.

II. Analysis of the Current situation

The product: *What is traditional crop insurance?*

Traditional insurance companies have a direct damages observation system in order to decide whether they will or will not cover the damage, and evaluate the financial consequences. The same applies to traditional crop insurance systems, and the cost of the damage assessment is considered to be the major functioning cost for those insurances.

The difficulty and cost of damage assessment could be particularly important in small (and poor) farmers' fields since access to those fields could be difficult (they are generally scattered) and homogeneity of fields is generally low, i.e. most of the time it is difficult to clearly assess the losses due to a specific factor. Based on this, another negative point is the possibility of conflict between the insurer and the farmer about the importance of the damage.

Why Crop Insurance

Crop Insurance Matrix

1. Did you not plant in 2012?
• If you were paid in 2013 for 2012 loss, then you will be in 2013, comment the fee for 2014

2. No one intentionally did not know than 50% of grains were?
• Available in 2012, constant dollar crop insurance program if 3 or more years of loss of your grains in year of harvest.

3. No crop of the proceeds due to particle reduction, not based on 2012?
• Need to all counter insurance impact due to particle reduction from and amount of loss in loss of crop. • Crop loss can be determined for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

The product: What is index crop insurance?

- Index based crop insurances were developed to overcome those difficulties: instead of a direct damage assessment, the damage is indirectly evaluated by the value of an index. The index must be defined properly in such a way that its values are correlated with yields and/or losses. Moreover, since indexes are established for an area, they allow many insurance contracts to be managed simultaneously, thus reducing the costs.

• Two kinds of indexes could be considered in crop insurance systems:

Index based on a physical parameter, such as meteorological or hydrological data: In aggregated/average yield index based insurance, insurance indemnity is triggered when the aggregated yield of the area goes under a defined value, corresponding to a determined percentage of the historical (multi-annual) mean of aggregate yields. For instance indemnities can be triggered when the annual aggregated yield goes under 70% of the historical mean. The area referred to is at a low level of disaggregation (group of farms or village) and requires the availability of transparent and official data as well as an homogeneity in crop practices and yields among the area.

Why Crop Insurance

Crop Insurance Matrix

- 1. Indemnity not paid in 2013?
 - If cover was paid in 2013 for 2012 loss, then insured for 2013, cannot do for 2014
- 2. No one indemnity defined above 100% of grain yield?
 - True for 2012, cannot do crop insurance properly if 3rd anniversary and above of your grain in year of harvest.
- 3. No crop of the insurance due to particle reduction, tree loss and other?
 - Need to all locate insurance agent that can give you a list of agents in the area of crop. • Crop loss can be determined for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

The product: What is index crop insurance?

- Index based on aggregated (average) yield: meteorological or hydrological index based insurances are systems where the cause of yield variation is clearly identified and is used to trigger and assess the value of the indemnity. The index is calculated using meteorological or hydrological data. The most famous system is “drought insurance”, i.e. an insurance that protects farmers in case of drought: here the index is based on rainfall data and/or crop water balance indicators. The Index Insurance could also be based on temperatures in situations where it is established that some extreme temperatures impact yields



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



II. Analysis of the Current situation

The product: What are the limitations of index insurance?

- A major disadvantage of those indexes is that they might introduce errors in compensation due to the spatial variation of the physical parameters they are based on. This risk is called “basis risk”. The latter could be particularly important for instance in drought insurance since the spacio-temporal rainfall variability could be important at small and medium distances. Considering temperature index based insurance the “basis risk” will be quite low since temperatures are spatially much more homogeneous than rainfalls.
- A key question is the following: which factor would be able to impact a majority of parcels simultaneously? Indeed, index based insurance can be developed only if one general factor, capable of influencing the yield of all the farmers potentially covered by the insurance, is identified.



Why Crop Insurance

Crop Insurance Matrix

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

1. Droughts are paid for 2012-2013:
• If you were paid in 2013 for 2012 loss, then you'd be in 2013, cannot do for 2014

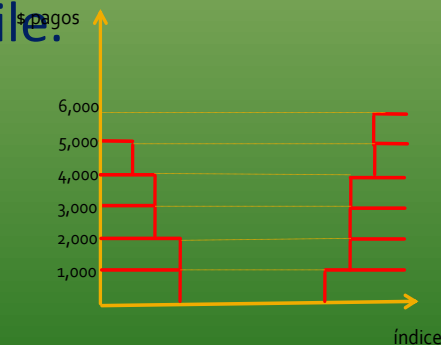
2. No one currently defines above 50% of grain yield:
• That's in 2012, constant the crop insurance process is if you eventually will have of your grains in year of harvest.

3. No one of the producers close to get production, more than 50%:
• Need to all farmer to have impact that to get production and amount that is then of crop. • Crop loss can be defined for 2013.

II. Analysis of the Current situation

The Product:

- The index Product for Tomato and Potato in Egypt was designed to cover for high and/or low temperature, as this is a risk that impacts yields through several mechanisms and thus has a large potential to protect farmers' income. Moreover, as an additional insight, many pests and diseases grow and thrive under hot and low weather conditions. This way, an insurance product covering for hot and low weather could implicitly cover for a large number of pests and diseases.
- The product will take the form of weather coupons to cover for high temperature and/or low temperature. Producers will have the opportunity to purchase multiple weather coupons. i.e Each farmer chooses his weather coupon portfolio and payout profile.
- Coverage for low and high index values:



Crop Insurance Matrix

<p>1. If you were paid in 2013 for 2012 loss, then you will be in 2013, contact the for 2014</p>	<p>2. No one currently offers above than 50% of grain value</p>	<p>3. No crop of the products due to price reduction, more than 50% of</p>
<p>• If you were paid in 2013 for 2012 loss, then you will be in 2013, contact the for 2014</p>	<p>• Available in 2012, constant dollar crop insurance program of 50% available, will protect your grain in year of harvest.</p>	<p>• Need to all counter business impact due to price reduction, more than 50% of crop. • Crop loss can be delivered to 2013.</p>

BORTH CROP INSURANCE

YOUR CROP INSURANCE SPECIALISTS

620-846-2828

II. Analysis of the Current situation

The product:

In order to design the product, they need to make a decision on:

- 1) The risk covered: Extreme temperature and plant disease risk

The optimal way to face plant disease is by incentivizing farmers to take preventive and early control measures. As experts and farmers have reported good practices appear to be more important to minimize this type of risk than developing an insurance product. Also an insurance product might dis-incentivize farmers' good practice with respect to how to treat plant disease.

A public policy aiming to develop crop insurance must complement rather than substitute good agricultural practices.

However as early and late blight are two diseases which have been identified as serious concerns for tomato and potato by farmers in the area and that one important characteristic of such diseases is that they spread rapidly in cool, wet weather, we can capture this risk by covering extreme temperature.



Why Crop Insurance

Crop Insurance Matrix

- Did you get paid in 2012?**
 - If you were paid in 2013 for 2012 loss, then you do not need to pay for 2014.
- Do you currently have more than 50% of grain water?**
 - That's in 2012, constant dollar crop insurance premium is 3% annually, all about of your grain in year of harvest.
- Are any of the products due to price reduction, not paid in 2012?**
 - Need to all cover business impact due to price reduction and amount due to loss of crop. Crop loss can be deducted in 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

The product:

Two options to capture extreme temperature:

- Average daily temperature: As the temperature is generally recorded several times a day, after which an average is calculated, a long-lasting hot spell would have a larger incidence over this average relative to a very short spell of high temperature => average temperature during any three consecutive days along the coverage period. In this way, if for three consecutive days the daily average temperature exceeds a trigger value then a payment will be delivered to the insured farmer (IFPRI recommendation). Daily Average Temperature, is calculated as $0.5 * (T_{max} + T_{min})$
- Maximum or Minimum daily temperature: It is easy to understand, but working with daily max or min temperature might be misleading as might reflect only a very short period of time (some minutes) during a day in which an extreme temperature has been recorded/ For example a temperature of 40 degrees during 30 minutes may not be as damaging as a temperature of 38 degrees during 4 hours.



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



II. Analysis of the Current situation

The product:

2) The coverage period:

-Tomato: In the case of the summer tomato, the most risky period for high temperature is from March to June, that is, since the planting of the seedlings to the beginning of the fruit set stage. This period can also be shortened to decrease the insurance premium. We will call this the 'summer tomato coverage period'.

-Potato: In the case of the nili potato, the period with the highest stakes in terms of high temperature seems to be September and October, that is, during the period in which the plant is young and growing. We will call this the 'nili potato coverage period'.



Why Crop Insurance

Crop Insurance Matrix

1. Did you not plant in 2012? <ul style="list-style-type: none">• If you were paid in 2013 for 2012 loss, then you do not need to plant the crop for 2014.	2. Do you currently have more than 50% of your acres? <ul style="list-style-type: none">• Available in 2012, constant dollar crop insurance provides up to 90% availability and amount of your grains in year of harvest.	3. Do any of the products show to get a reduction, more than 50%? <ul style="list-style-type: none">• Need to all cover insurance amount that is greater than the amount of crop. Crop loss can be deducted for 2013.
---	--	--

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

The Product:

3) Where the index will be measured (the reference weather station):

To prepare this product, IFPRI downloaded historical daily temperature data available at the Global Climate Observing System (GCOS) data from the National Climatic Data Center (NCDC) of the U.S. National Oceanic and Atmospheric Administration (NOAA).

***These data come from an official World Meteorological Organization (WMO) accredited weather station (with WMO number 623870), located in Minya, at latitude 28.08° North and longitude 30.73° East. **“Due to the lack of national data”**

Why Crop Insurance

Crop Insurance Matrix

- 1. Planting and growth in 2012:**
 - If you were paid in 2013 for 2012 loss, then you'd be in 2013, contact the for 2014
- 2. No crop insurance claim above than 50% of gross value:**
 - Available in 2012, contact the crop insurance provider if you are eligible and want to your grain in year of harvest.
- 3. No crop of the proceeds due to price reduction, not found 2012:**
 - Need to all future business impact due to price reduction and amount due to loss of crop. Crop loss can be deducted for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

The product:

4) Criteria for determining the amount of the payout:

We decided to set this value to on average 25% of the production cost per feddan of selected crops. It seems like EP 2,500 could be a reasonable amount, since it represents about half of the cost of production for one feddan of tomatoes, roughly a quarter of the cost of production for one feddan of potatoes. Each farmer can determine the level of coverage by adjusting is coupon portfolio.

5) Trigger for payout:

We need to set a trigger upon which the weather coupon will determine a payout. Since the risk to be hedged is high or low temperature, the weather coupons will provide a payout only when the index is equal to or greater (high temperature) or lower (low temperature) than the trigger.

The level of the trigger will determine the price of the insurance premium.

Why Crop Insurance

Crop Insurance Matrix

1. Did you not plant in 2012?
• If you were paid in 2013 for 2012 loss, then you do not need to pay for 2014.

2. No one previously defined above than 50% of grain value?
• Available in 2012, constant dollar crop insurance purchase of 50% annually will protect your grains in year of harvest.

3. No crop of the purchase due to price reduction, not based on 2012?
• Need to all locate insurance amount due to price reduction from seed amount due to loss of crop. • Crop loss can be determined to 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

II. Analysis of the Current situation

PRODUCT 1:

OPTION 1: HIGH TEMPERATURE (3 or more consecutive days)

Coverage period: March-June

Index	Description	Percentiles					
		0.70	0.75	0.80	0.85	0.90	0.95
Summer tomato	Any three or more consecutive days during March-June with daily average temperature equal or above:	32.76	33.07	33.34	33.52	33.99	35.06
Nili potato	Any three or more consecutive days during September-October with daily average temperature equal or above:	29.92	30.14	30.30	30.52	30.84	31.34
Payout:		2,500	2,500	2,500	2,500	2,500	2,500
Probability of a payout:		30%	25%	20%	15%	10%	5%
Price:		750	625	500	375	250	125

The premium estimate is the minimum premium for these insurance products by calculating The expected value of their payouts. Such a premium is commonly referred to as the actuarially fair premium, since it equals the expected payout to the actual price. The insurance and Reinsurance companies need to cover administration and other costs, plus make provisions for the implicit uncertainty in the calculation of the probabilities given the triggers. This would reflect in a higher premium than the one consider here.



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



II. Analysis of the Current situation

PRODUCT 2: HIGH TEMPERATURE (maximum temperature)

Coverage period : April - June

- Product 1a provides coverage for only extremely daily high temperature events
- Product 1b provides coverage for less extreme daily high temperature events

	Degrees Celsius	Probability of occurrence	Proposed payout	Actuarially fair premium
Product 1a ... higher than:	44	2.9%	EP 2,500	EP 72.5
Product 1b ... higher than:	43	9.6%	EP 2,500	EP 240.0

This table refers to Tomato. If the option maximum temperature is retained, we will calculate the same trigger for potato.



BORTH CROP INSURANCE
 YOUR CROP INSURANCE SPECIALISTS
 620-846-2828



II. Analysis of the Current situation

PRODUCT 3: LOW TEMPERATURE (Minimum temperature/Tomato only)

Coverage period : April - June

These products intend to provide coverage against abnormal low temperature events and therefore against the risk of blight outbreak.

- Product 2a provides coverage for only extreme daily low temperature events
- Product 2b provides for less extreme daily low temperature events (9% probability of occurrence)

Product 2a ... lower than:	22	5.0%	EP 2,500	EP 125.0
Product 2b ... lower than:	23	9.3%	EP 2,500	EP 232.5

The proposed indexes are provisory=> need to validate their relevance for early and late blight disease.

Why Crop Insurance



Crop Insurance Matrix

1. Did you not plant in 2012?

• If yes, you are paid in 2013 for 2012 loss. If no, then you are in the contract for 2013.

2. No crop, or severely damaged, above than 50% of gross value?

• If yes, in 2013, constant dollar crop insurance proceeds of 3% of gross value (net of your grants in year of harvest).

3. No crop, or the proceeds due to price reduction, more than 50%?

• Need to adjust the insurance amount due to price reduction in year of crop. • Crop loss can be deducted for 2013.

BORTH CROP INSURANCE
 YOUR CROP INSURANCE SPECIALISTS

620-846-2828



II. Analysis of the Current situation

PRODUCT 4 : HIGH OR LOW TEMPERATURE

Coverage period : April - June

We propose one product to combine product 1 and 2 such that can bring simultaneous coverage to both events, high and low daily extreme events.

Product 3	... higher than: OR lower than:	44 22	7.8%	EP 2,500	EP 195.0
-----------	--	----------	------	----------	----------



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828



II. Analysis of the Current situation

What needs to be done to launch these ready insurance products:

- Validation of the Product by the solidarity fund.
- Focus groups with farmers to re-assess their interests
- Agreement with a local insurance company
- Final pricing by insurer and reinsurer
- Launch of the pilot.
- If launching is successful Will go to the scaling phase.



BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828



III. What needs to be done..Urgently!!

Frankfurt school of management and Social Fund for Development have signed a contract (late 2015), the contract was funded by the African Development bank through Rural Income and Economic Enhancement Project.

The objective of this contract was to organize a study tour for a delegation from SFD and other commercial banks to visit Germany, to learn about the Ag-insurance international best practises.

The group visited one of the biggest Re-Insurers worldwide, the **MunichRE** to study best practices in agricultural insurances Mrs. Mayer-Bosse (company CEO) pointed out, that from the experience of the company, weather index insurances as standalone products, mostly do not meet the expectations. Where weather index insurances are successfully in place (e.g. in India), they are linked with compulsory loans.

Why Crop Insurance

Crop Insurance Matrix

1. Did you get paid in 2012?
• If you were paid in 2013 for 2012 loss, then you did for 2013, contact the insurer for 2014

2. No one (or only a few) above 50% of gross sales?
• Talk to 2013, contact the crop insurance provider if you are eligible and report your losses in year of harvest.

3. No sign of the proceeds due to price reduction, low yield?
• Need to all farmer business impact due to price reduction and low yield - Crop loss can be deducted for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

III. What needs to be done..Urgently!!

Based on best practices gathered from all over the world, yield insurances are more appropriate.

For yield insurances an average yield is calculated for different regions. The insurance covers the crop failure up to a certain amount (e.g. up to 80%) which in any case is lower than the calculated average. This way, the farmer has to cover a loss on his own even if the insured event occurs, thus giving him an incentive to still produce more than the average.

In addition, the public sector needs to co-finance premium rates as unsubsidized risk-adequate rates are not affordable to farmers and a high market penetration rate is needed to provide products in the long run.

Why Crop Insurance

Crop Insurance Matrix

1. Yields are good in 2012?

- If yes, we will pay in 2013 for 2012 loss. Then we will be in 2013, we must do for 2014

2. No crop insurance, yield above than 50% of grain, what?

- That's in 2012, we must do crop insurance program if you are not in 50% of your grain in year of harvest.

3. No crop of the insurance due to price reduction, how to deal with?

- Need to all farmer buy crop insurance due to price reduction and crop. Crop loss can be deal with in 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828

III. What needs to be done..Urgently!!

In conclusion, **Munich-RE** strongly recommend that Egypt should simultaneously start developing and piloting two insurance products on the same time.

For example, a weather index-based insurance product can be piloted in an area that are likely more exposed to weather averse conditions such as upper Egypt, while it can develop and pilot yield insurance product in an area that is characterized by higher production rates and less exposed to weather averse conditions such as lower Egypt.

As a result of the above, we will be able to compare and select whether implementing a standalone product or a mix of two products in all areas is a feasible option or not, otherwise the other direction will be the only viable option (in which two products are introduced in two different areas).

Why Crop Insurance

Crop Insurance Matrix

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

1. Did you get paid in 2012?
• If you were paid in 2013 for 2012 loss, then you do not need to comment for 2014.

2. Do you currently plant more than 50% of grain, wheat?
• If you do not, you cannot obtain crop insurance coverage of 50% or more of the amount of your grain in year of harvest.

3. Is any of the proceeds due to perils production, not loss of yield?
• Need to all cover the loss impact due to perils production and loss of yield. Crop loss can be determined for 2013.

III. What needs to be done..Urgently!!

In a word, Egypt should carry out the following two tasks:

First is to amend the enacted laws to avoid their pitfalls in order to achieve the desired goals of the Agricultural Insurance System.

Second is to pilot the weather index based product after modifying the controversial triggering points of the product. In parallel, to develop the yield insurance product and then pilot it in a different pilot area.



Why Crop Insurance

Crop Insurance Matrix

1. Did you get paid in 2012? <ul style="list-style-type: none">• If you were paid in 2013 for 2012 loss, then you do not need to comment for 2014.	2. Do you currently have more than 50% of grain water? <ul style="list-style-type: none">• Available in 2012, constant dollar crop insurance proceeds of 30% annually will boost of your grain in year of harvest.	3. Is any of the proceeds due to price reduction, not loss of crop? <ul style="list-style-type: none">• Need to all locate insurance amount due to price reduction and amount due to loss of crop. Crop loss can be determined for 2013.
---	---	---

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS
620-846-2828

THANKS

Why Crop Insurance



Crop Insurance Matrix

Did you get paid in 2012?

• If you were paid in 2013 for 2012 loss, then you do not need to contact the insurer for 2014.

Yes

Did you experience a loss above than 50% of grain value?

• Available in 2012, constant dollar crop insurance provides up to 30% protection and payout of your grain in year of harvest.

Yes

Are any of the products close to getting production, more than 50%?

• Need to adjust the insurance amount close to actual production and crop. Crop loss can be determined for 2013.

BORTH CROP INSURANCE
YOUR CROP INSURANCE SPECIALISTS

620-846-2828

