#### Global Index Insurance Conference 2017









# CROP INSURANCE PRODUCTS FOR FARMERS IN ZAMBIA

- Zambia has 1,000 commercial farmers and 2 million small scale farmers.
- Mayfair made a strategic decision to develop products for small scale farmers to grow the agriculture portfolio.
- Developed weather Index insurance product that uses satellite technology to monitor weather data.
- Satellite data is more widely available and used due to limited number of weather stations.
- 2014/2015 farming season 1500 farmers insured with 1 aggregator.
- 2015/2016 farming season 8,500 insured with 6 aggregators.
- 2016/2017 farming season 18,500 farmers insured 9 aggregators.





#### POTENTIAL BENEFITS FOR FARMERS

- Protection from weather eventsreduces volatility of income over time;
- Better and more sustainable access to inputs and credit;
- ☐ Reduces burden of repaying input loan in bad years;

- ☐ Increases yield due to more investment;
- Easier access to farm inputs in bad years;
- ☐ Allows farmers to replant and try again;





#### WHAT DID WE DO AND WHY?

| WHAT DID WE DO?   | WHAT WAS THE OBJECTIVE?   |
|---|---|
| Partnering with contract farming buyer                          | Scaling up is crucial and partnering with agri-business is a route to scale up(bundling with credit)            |
| Weather Index Insurance for approx. 28,000 farmers              | Reduce risk for farmers/business, increase take-up, better access to inputs                                     |
| Sharing insurance premium between farmers and agri-business     | Make product affordable, reward farmers, incentivise higher yields  |
| Used Satellite technology                                       | Give insurance access to all farmers on an accurate basis   |
| Partnering with reputable regional and international reinsurers | Build internal capacity for sustainability of these programs (claims paid on time hence increased client value) |
| Customer education campaigns                                    | Understanding of insurance products, better relationship, lower sideselling                                     |
| Digital Claims Monitoring                                       | Speedy claim pay-outs   |
| Impact Evaluation   | Understand impact on yields and reduced side-selling  |





### **IMPACT OF THE PRODUCTS (2014-2017)**

- Access to insurance 28,000 farmers (in 300+ locations in Zambia) for weather-index insurance;
- <u>USD 600,000</u> in Premium (2014-2017) and <u>USD 800,000</u> in Claims;
- Reduction in side-selling and increased farmer deliveries to contract farming companies in some documented cases;
- Tool for incentive based contract farming (to encourage loyalty for farmer sign-up and renewals);
- Tool for rewarding lead farmers or more loyal farmers and to influence planting and selling behaviour;
- Positive feedback from farmers and field staff on Weather Index.







#### SUMMARY OF TYPES OF AGGREGATORS IN ZAMBIA

| TYPE OF AGGREGATOR   | CROP                         | EXAMPLE   |
|----------------------|------------------------------|---|
| Contract Farming     | Cotton, Soya                 | NWK Agri-Services, Alliance Ginneries           |
| FISP                 | Maize, general Drought cover | E-Voucherscheme over 2 seasons                  |
| Farmer organizations | Maize                        | District Farmers Associations                   |
| Input suppliers      | Maize                        | Seed and Fertilizer companies                   |
| Banks                | Soya                         | Financing farmer groups                         |
| Out grower scheme    | Legumes                      | Growing Legumes as part of conservation farming |
| Development agencies | Soya                         | Part of youth program                           |





#### SUMMARY OF INDEX EXPERIENCE

| NAME OF AGGREGATOR/ INSURED             | YEAR/ FARMING<br>SEASON | NUMBER OF INSURED FARMERS | TOTAL SUM INSURED | TOTAL PREMIUM (ZMW) |
|---|-------------------------|---------------------------|-------------------|---------------------|
| GOVERNMENT                              |                         |                           |                   |                     |
| FISP/ Musika                            | 2016/2017               | 2,880                     | 1,728,000.00      | 288,000.00          |
| FISP/ Musika                            | 2015/2016               | 1,750                     | 2,164,400.00      | 104,973.00          |
| NGO's                                   |                         |                           |                   |                     |
| World Food Program (WFP)                | 2015/2016               | 500                       | 846,525.00        | 104,969.00          |
| International Labor Organization (ILO)  | 2015/2016               | 500                       | 1,848,000.00      | 89,708.00           |
| World Food Program (WFP)                | 2016/2017               | 2,845                     | 5,032,021.00      | 850,000.00          |
| International Labor Organization (ILO)  | 2016/2017               | 3,000                     | 4,856,065.00      | 403,053.00          |
| Food and Agriculture Organization (FAO) | 2016/2017               | 1,349                     | 4,962,305.00      | 356,798.00          |
| PRIVATE SECTOR                          |                         |                           |                   |                     |
| NWK-Agro Services                       | 2015/2016               | 200                       | 23,650,000.00     | 1,076,075.00        |
| Alliance Ginneries                      | 2016/2017               | 1,800                     | 180,000.00        | 15,000.00           |
| NWK-Agro Services                       | 2016/2017               | 6,037                     | 1,837,200.00      | 153,099.00          |
| Zambia National Farmers Union           | 2014/2015               | 3,000                     | 4,109,400.00      | 45,016.00           |
| ZNFU/ Lima Credit Scheme                | 2015/2016               | 6,000                     | 8,654,294.00      | 335,786.00          |
| Mumbwa District farmers Association     | 2016/2017               | 588                       | 1,222,000.00      | 61,000.00           |
| TOTAL                                   |                         | <u>30199</u>              | 61,090,210.00     | 3,883,477.00        |

## **CURRENT SEASON**

| NAME OF AGGREGATOR/<br>INSURED | YEAR/ FARMING SEASON | NUMBER OF INSURED FARMERS | TOTAL SUM INSURED USD | TOTAL PREMIUM (ZMW) |
|--------------------------------|----------------------|---------------------------|-----------------------|---------------------|
| FISP                           | 2017/2018            | 1,024,000                 | 174,080,000.00        | 10,240,000.00       |
| WFP                            | 2017/2018            | 3,442                     | 721,250.00            | 112,000.00          |





#### **CHALLANGES**

| CHALLANGE                                     | WHAT WE HAVE DONE TO OVERCOME   |  |
|---|---|--|
| Basis risk                                    | Some limited ground verification and provision within the policy to make pay outs based on this. Automated rain gauges and automated weather stations as in the case of WFP |  |
| Lack of internal actuarial services           | Training of internal staff with the assistance from our partners to reduce the role of external consultants who are expensive.  |  |
| Lack of technology                            | Used satellite data but internal systems not suitable for WII hence use of spreadsheets.  |  |
| Distribution - Limited branch network         | We rely on our the network of our partners to distribute the product and disseminate information.   |  |
| Effects of Climate change(High Claims ratios) | Consolidated panel of reinsurers with expertise and financially sound   |  |
| Farmer Education                              | Continuous sensitization of farmers which is long term  |  |







## Thank You for Listening!!



