

Challenges and Recommendations for Agriculture Insurance in Africa, Kigali, 29th August 2017

Agrotosh Mookerjee, Managing Director, Chief Actuary, Risk Shield Consultants Ltd.



Background to Risk Shield Consultants Ltd.

- We are a network of consultants based in UK, Zambia, Zimbabwe, Malawi, Uganda, Kenya and Bangladesh. Combination of consultants and field staff in some countries;
- Areas of specialization- Actuarial services, Micro-insurance, Microfinance, Banking, Agri-business; Specialize in developing Weather-Index insurance, other types of Agriculture Insurance products, Health insurance, Life and Personal Accident insurance, Mobile and other Mass-Market insurance products; We implement feasibility studies, diagnostics, technical development (data analytics, product design, pricing, reinsurance placement, weather monitoring), operational development (marketing, client management, claims handling), capacity building and trainings;

2015 highlights	2016 highlights	2017 highlights	
Zambia (WII scaling 60,000 farmers)	Zambia (consumer education)	Zambia (social security)	
Zambia (different aggregators)	Malawi (WII and Life)	Zambia (livestock)	
Zambia (capacity building)	Zimbabwe (WII for out-grower)	Zambia (mobile-insurance)	
Ghana (mobile-insurance, regulations)	Nigeria (products for credit linked)	Malawi (WII for contract farming)	
Zimbabwe and Tanzania (trainings)	Bangladesh (products)	Kenya (WII and AYII)	
Sri Lanka (feasibility)	Sri Lanka (WII in national scheme)	Angola (products for farmer coops)	
Uganda (capacity building)	Albania (feasibility, livestock)	Tanzania (WII for inputs)	
Armenia (Agric insurance)	Bosnia (feasibility, flood)	Zambia (FISP scale-up)	
Bangladesh (WII, AYII, Livestock)	Nepal (WII for farmer groups)	Nigeria (product development, regulations)	





EXPERIENCE IN ZAMBIA (2013-2017)



- Access to insurance (often for the first time) to 75,000 farmers for life (funeral) insurance and approx. 72,000 farmers (in 500+ locations in Zambia) for weather-index insurance;
- Affordable for farmers- cost is K 30- K 200 per hectare insured;
- Many life insurance payouts- approx. 45 pay-outs for funeral costs in case of farmer deaths (over 2 seasons);
- Reduction in side-selling and increased farmer deliveries to contract farming companies in some documented cases;
- WII used as effective tool for incentive based contract farming (to encourage loyalty for farmer sign-up and renewals);
- WII used as tool for rewarding lead farmers or more loyal farmers and to influence planting and selling behaviour;
- Placing risks with 3 insurance companies in Zambia and 4 international reinsurance companies;
- Training 20+ professionals in insurance, agriculture and development sectors with on-the-job experience of weather index and life insurance for farmers
- Renewals over the years with contract farming company;
- Positive feedback from farmers and field staff on both Weather Index and Life Insurance products. Strong demand for renewals from farmers and demand for increase/extension of coverage to family for Funeral cover.

SUMMARY OF TYPES OF AGGREGATORS



				KIJK JIILL
TYPE OF AGGREGATOR	CROP	EXAMPLE	NUMBER OF FARMERS INSURED (NO. OF SEASONS)	PROVINCES
Contract Farming	Cotton, Soya	Out-grower schemes	62,500 (4)	Central, Eastern, Southern, Copperbelt
Ministry of Agriculture	Maize, general Drought cover	Directly to farmer cooperatives and clubs	1,750 (2)	Southern
Farmer organization	Maize	District Farmers Associations	600 (1)	Central
Input supplier	Maize	Seed and Fertilizer companies	400 (1)	Central
Bank	Soya	Financing farmer groups	3,000 (2)	Copperbelt, Central, Eastern
Outgrower scheme	Legumes	Growing Legumes as part of conservation farming	1,800 (1)	Central, Southern, Eastern
Development agency	Soya	Part of youth in agriculture program	2,200 (2)	Northern, Central, Copperbelt

KEY CHALLENGES AND BARRIERS



- A) Business case (and price sensitivity) for aggregators e.g. fertilizer suppliers in Zambia;
- **B) Premium Amount**: amount reflecting good-value product vis a vis farmer's and aggregator's margins e.g. Loan to Value analysis in Tanzania;
- **C) Timing of the premium payment**: difficulty for farmers to pay premium upfront e.g. takeup rate of insurance among contract farmers in Zambia and Malawi;
- **D)** Underlying core data: access to multiple sources of weather data, yield and crop data e.g. data landscape in Angola;
- E) Operational data: lack of *operational data* points e.g. GPS coordinates in Zambia;
- **F) Basis Risk**: e.g. expectation of indemnity insurance among emergent-medium scale farmers in Zambia;
- G) Yield Data and infrastructure for yield assessments e.g. irrigated rice farming in Nigeria;
- H) Product awareness and understanding: on basics of product and claims calculations
- I) Insurance & Reinsurance appetite e.g. lack of reinsurance appetite for Kenyan Tea WII;
- J) Incentives for field operatives in order to enroll and educate farmers e.g. agro-dealers.

POTENTIAL SOLUTIONS & RECOMMENDATIONS



- **A)** Business case (and price sensitivity) for aggregators: insurance as driving loyalty, retention, sales promotion e.g. Incentive Based Contract Farming Model in Malawi;
- **B) Premium amount**: demonstrate value of different options to aggregators and farmers;
- **C)** Timing of the premium payment: consider premium payment from loan deposit, prefinancing by aggregator, scope of payment in instalments;
- **D)** Underlying core data: engage with relevant ministries and sources of satellite data e.g. Ministry of Agriculture in Botswana;
- E) Operational data: use GIS mapping, GPS from land survey maps etc.;
- **F) Basis Risk**: ensure product is clearly communicated, decision on nature of the product in terms of frequency and severity;
- G) Yield Data and infrastructure for yield assessments e.g. hybrid products in Zambia;
- H) Product awareness and understanding: awareness raising at start and end of season;
- I) Insurance & Reinsurance appetite: engage with local markets e.g. WII in Zimbabwe;
- J) Incentives for field operatives: commission, marketing materials, free insurance cover.

Contract Farming model- case study from Zambia



Insurance seems to incentivize farmers to repay their input debt and deliver more produce to the conract farming company



ROLE OF GOVERNMENT AND NATIONAL SCHEMES

A) <u>Linkage with national credit and input schemes</u>- keeping in mind timing of disbursements of loans, inputs vis a vis insurance coverage dates;



- **B)** <u>Regulations on mandatory insurance</u>: linkage to Govt. loans, input packs;
- **C)** <u>Using field operatives</u>, such as agriculture extension officers to leverage on existing structures e.g. AAIB scheme in Sri Lanka;
- **D)** <u>Premium subsidies and pre-financing</u>: smart subsidies and pre-financing e.g. recover from farmers at end of season, paying difference between Actuarial premium and fixed premium;
- **E)** <u>**Data facilitation**</u>: yield, agronomical, locations, agriculture stats;
- **F)** <u>Role for yield assessments</u>: carry out accurate and timely yield assessments and improve methodology for yield assessments;
- **G)** <u>Basis Risk fund (BRF)</u>: potentially co-finance a BRF, triggered in case of specific Basis Risk events;
- H) Linkage with national electronic and Digital Financial Services initiatives e.g. Mobile Money schemes for purchase of farming inputs;
- I) Linkage with existing Social Protection programs e.g. cash-transfer schemes.