



Weather Risk Management Pilot Program Tanzania

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Introduction

TechnoServe was contracted by the World Bank Commodity Risk Management Group (CRMG) and the Financial Sector Deepening Trust (FSDT) to support the CRMG in the implementation of an index based weather insurance pilot program in the Babati and Mbulu Districts of Northern Tanzania. TechnoServe's main task under the contract was to assist with the coordination of the stakeholders in the project; specifically to:

- i. Secure the participation of the financial institution and the implementing agencies in Babati and Mbulu districts
- ii. Gather data for the design of the insurance contract
- iii. Determine the market potential for the product
- iv. Finalize the workflows between the stakeholders
- v. Provide a detailed pilot project report

The project also required participation from other key stakeholders, namely the insurance companies to underwrite the risk and the Tanzania Meteorological Agency (TMA) to provide reliable rainfall data. As project manager, CRMG working with the Department for Financial Markets for Social Safety Net, Financial and Private Sector Development of the World Bank undertook the responsibility for securing the participation of the insurance companies and the TMA, and for the insurance contract design.

This report provides (1.) background information on the project (2.) outlines the work undertaken to implement the pilot (3.) documents lessons learned from the pilot and (4.) identifies the potential and requirements for scaling-up the project.

1. Background

Objectives of Project Sponsors

The World Bank has been investigating the use of index based weather risk management instruments in developing countries as a potential means to manage risk associated with agricultural production. In addition to providing the benefits associated with managing risk such as increased flexibility in farm management and greater investment in higher return farming activities, at times, these types of instruments can facilitate great access to finance and possibly finance at better terms.

In 2005 the World Bank researched the potential for index based weather insurance in Tanzania and found a possible market for these instruments. In addition some initial constraints were recognized to be lack of cash by farmers to pay premiums, a need to link the provision of these types of instruments to finance, and a need to improve knowledge and capacity in the insurance sector regarding the products. In tandem with that initial research, interest in these products has been growing among agricultural lenders and services providers in Tanzania. In a number of other countries the Commodity Risk Management Group at the World Bank has seen that a basic pilot can provide participants the experience they need to creatively grow the market. A pilot program can also reveal key areas for possible government or donor intervention in supporting the development of the market.

The overall aim of the Financial Sector Deepening Trust which, together with the World Bank, is a champion of the project, is to provide greater access for more people to engage with the financial system throughout Tanzania and to bring financial services to the rural populations.

Selection of Pilot Crop and Growing Regions

A feasibility study to select the crop(s) and the area(s) to be covered in this pilot phase was completed by TechnoServe in August of 2006. The study identified maize as the most appropriate crop to pilot because it was:

- Identified as the most important food crop in Tanzania;
- Grown mostly by smallholder farmers;
- Was highly susceptible to drought; and
- Ample agronomic information was available on maize cultivation and the water requirements of the maize plant.
- Given the rapid timeline for implementation international experience already existed which could guide the design of the contract

Although coffee was also recommended for inclusion in a weather insurance pilot project as an important export crop, given the tight time line for the implementation of the pilot, it would have been very difficult to gather the necessary information for the development of an index that clearly demonstrated the correlation between rainfall and coffee production. The development of a coffee index would have required significant time spent on research and development which was not available, thus limiting the ability of the project team to include it in the pilot for the 2006/2007 growing season.

The study recommended Mbulu and Babati districts based on the following factors:

- Availability of historical rainfall data
(Insurance companies require a minimum of 30 years of daily precipitation data in order to consider providing drought insurance for an area)
- Importance of the districts as maize growing areas
(60% of the land cultivated in Babati district and 80% in Mbulu district is devoted to maize)
- Susceptibility to regular occurrences of drought representing a measurable insurance risk
- Presence of an organized client pool in the form of farmer groups organized under the auspices of a national government/donor funded project, AMSDP

Potential Partners

The feasibility study identified National Microfinance Bank (NMB) and PRIDE Tanzania as potential micro-finance partners, who could assist with the distribution of loans to farmers secured by the weather insurance. Access to financial services in the Mbulu and Babati districts is extremely limited; NMB is the *only* bank with a presence in those districts, while Pride Tanzania is the only microfinance institution with a branch in one of the two districts - Babati.

NMB, with its rural branch network of over one hundred outlets and 1700 employees, was created in 1997 in a spin-off of assets of the state-owned National Bank of Commerce, and was TechnoServe's first choice of financial institution to recommend to the project team. NMB was acquired by a consortium led by Rabobank in September of 2005 and currently predominantly provides infrastructure for payments and offers savings products, although the bank has recently begun offering credit products mainly in the form of micro-loans.

Internationally, Rabobank focuses on the food, beverage and agribusiness sectors, offering specialized products and services. NMB's management had indicated that it expected to develop a number of products for lending to the agricultural sector and to bring on board an agricultural expert to assist in that effort. NMB, therefore, would have been an excellent choice of partner for the pilot project. A meeting with the bank's Chief Commercial Officer, facilitated by NMB's then Chief Executive Officer in Tanzania, was held to explore the possibility of NMB's participation. NMB declined to consider involvement in the pilot project, stating that the bank did not have any interest in the proposed product at that time.

On the other hand, PRIDE Tanzania indicated a strong interest and enthusiasm in collaborating with TechnoServe on the project.

Pride Tanzania, which was established in 1993 and has over 100,000 customers through 32 branch offices including a branch in Babati, appeared to be an excellent choice for a partner MFI. PRIDE Tanzania had recently commenced providing loans to agricultural enterprises as part of a pilot project in collaboration with The Centre International de Développement et de Recherche (CIDR) in the Iringa Region of Tanzania. During the first six months of 2006 a total of US\$17,600 was provided to onion farmer groups, and PRIDE Tanzania had plans to expand this agricultural portfolio to new areas.

It is difficult to predict if, given a considerable amount of additional time, another financial institution that does not currently have a presence in the pilot areas could have been convinced to participate in the pilot program.

In discussions during the feasibility study, Mbulu and Babati district personnel, SEIDA and Farm Africa also expressed a strong interest in working on the pilot program by communicating concept viability to local (village and ward) government officials, introductions to farmer groups and support at workshops with the farmer groups.

Proposed Implementation Structure

Figure 1 below details the proposed implementation structure, highlighting the key functions and stakeholder responsibilities

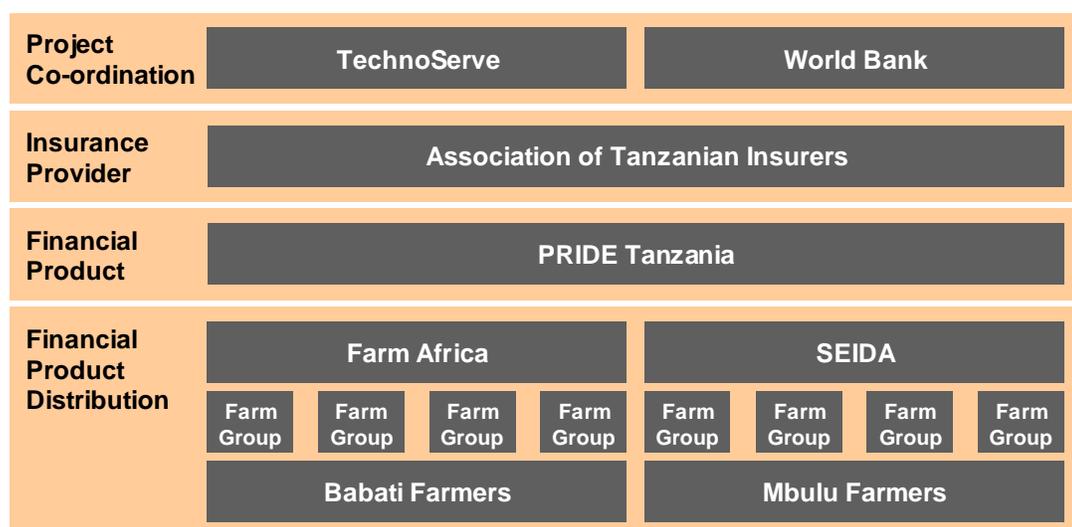


Figure #1

It was expected that the capacity building at the individual farmer level (through workshops for the farmer groups) would be carried out by Farm Africa and SEIDA under close guidance by TechnoServe as the Project Coordinator. It was anticipated that more than one round of workshops would be required for each Farmer group to inform the farmers of the availability of the product and to provide information on the structure, pricing and mechanics of the program.

The principal delivery mechanism of the weather insurance product was expected to be a part of an agro-input loan provided by PRIDE Tanzania.

Insurance Company Participation

The CRMG together with the Department for Financial Markets for Social Safety Net, Financial and Private Sector Development of the World Bank secured the support and necessary government approvals from the Tanzania Commissioner of Insurance, and worked with the Association of Tanzania Insurers to obtain insurance industry commitment to the project.

Insurance Contract Design

The responsibility for insurance contract design was undertaken by the CRMG and the Department for Financial Markets for Social Safety Net, Financial and Private Sector Development of the World Bank. The group contracted with the International Research Institute for Climate and Society (IRI) for contract design.

During the feasibility study for the pilot project, TechnoServe expended considerable effort in gathering agronomic data for the contract design through research and meetings and discussions with seed suppliers, and with agriculture research and training institutes. This information, in addition to the rainfall data obtained from the Tanzania Meteorological Agency, was made available to IRI. Together with illustrative assumptions, IRI used the data to design examples of contracts. TechnoServe, jointly with IRI, used these sample contracts as a basis for a series of focus group discussions which were carried out in Mbulu and Babati in mid-November. The goals of the focus group discussions were to explain to the farmers how the contracts were designed, solicit feedback, verify the assumptions that were used in order to design more appropriate contracts.

The farmer discussions were very worthwhile and productive as farmers had a great deal of experience working with the different seed varieties. As a result of the information obtained during the focus groups, IRI was able to greatly improve its design process and devise more appropriate insurance contracts.

Detailed information on the work done with the focus groups is included under “Insurance Contract Design” below.

2. Pilot Implementation

Approach

Implementation of the pilot program required a detailed project plan that coordinated the inter-dependent stakeholder requirements and activities. The project plan was divided into four main sections:

- Stakeholder Management;
- Financial Product Development;
- Engagement with Farmers; and
- Monitoring & Evaluation

Figure #2 details the project plan from a high-level perspective. Appendix A shows the detailed project plan.



Figure #2

The farmer planting timetable was a key factor that the project plan had to incorporate. It was essential that all pilot set-up activities were completed prior to the sowing periods of mid-December in Mbulu and early January in Babati.

Stakeholder Management

A considerable amount of time was spent identifying and mobilizing stakeholders. Given the remote locations of Babati and Mbulu, several field trips were made to assess stakeholder suitability and commitment to the project.

Farmer Capacity Building

A number of organizations were keen to participate in the pilot, but struggled to commit the necessary resources within the pilot's tight timeframe. For example, in the Babati region, Farm Africa was the preferred institution for assisting TechnoServe on the ground, but due to a lack of sufficient qualified personnel to carry out the work, they were unable to participate in the pilot. Two other organizations with a presence in Babati district – FIDE and LAMP – were considered as possible replacements for Farm Africa. However, both organizations were unable to participate due to a lack of staff and insufficient time to recruit additional personnel.

In order to carry out the task of capacity building at the individual Babati farmer level, TechnoServe sought the assistance of AMSDP District Focal Person (DFP) and the District Executive Director's office for assistance with workshop logistics and communication with farmer groups. The assistance received from both organizations was barely adequate and required TechnoServe to make additional trips to Babati to schedule and coordinate workshops. The focus group discussions and workshops were conducted by TechnoServe together with PRIDE Tanzania, IRI or CRMG depending upon the objectives of the meetings.

Limited resource available at the Mbulu farm extension level also challenged implementation of the pilot in the Mbulu region. SEIDA was identified in the feasibility study as the preferred Mbulu farm extension contact, though SEIDA's participation was limited during the first part of the project due to the absence of the organization's principal staff person. Again, TechnoServe received the assistance of AMSDP's DFP with logistics and communication with the farmer groups. The majority of the coordination with farmer groups in Mbulu District was done by the AMSDP DFP who was very competent and responsive. SEIDA's participation in the project was limited to 6 working days, which included 2 days participation in focus group discussions, assisting with workshop logistics and obtaining information from Mbulu District seed providers. However, given adequate lead time for planning, SEIDA could be an effective partner in a future pilot. As in Babati district, meetings with the farmers were conducted in conjunction with CRMG, IRI and PRIDE Tanzania.

Financial Institution

The financial institution's commitment and participation was critical to the successful implementation of the weather insurance pilot as a distribution point of the weather insurance product to the local farmers. The feasibility study identified PRIDE Tanzania as an ideal candidate given its previous work with farmers in the Iringa Region of Tanzania and strategic commitment to improving rural access to finance.

A number of special efforts were made to secure PRIDE Tanzania's participation in the project. In particular:

- Support with defining the product definition;
- Support with developing budget and cost-benefit analysis;
- Support with defining process and system requirements;
- Support with conducting a market survey.

The pilot project was approved by the PRIDE Tanzania Board in early December after completion of the above items.

Unfortunately PRIDE Tanzania decided to withdraw from the project just prior to the distribution of the seed vouchers at the end of December. This was very disappointing for all parties involved as much work had been done to ensure successful implementation of the pilot project. PRIDE Tanzania's *stated* reasons for its withdrawal were the following:

- Pride felt that their computer system had not been properly programmed to adequately support the product and that time did not allow for the needed adjustments prior to disbursement of the loans. (Pride had voiced this concern several weeks prior to their withdrawal from the pilot, and TechnoServe consultants had repeatedly offered to assist to get the issue resolved. Pride declined the offer for assistance on the basis that this was an internal issue that they were capable of addressing themselves.)
- Time to prepare was not adequate enough to allow for any meaningful adjustments in critical areas prior to commitment of financial resources. PRIDE's experience in product development is that it takes up at least three months for concept development and testing prior to piloting and that time was not available for this particular product, which started late November. (TechnoServe's understanding is that Pride normally involves staff from all the affected departments in the organization on product development, including its financial and auditing staff. Neither department was involved in the development of the weather insurance loan product.)
- PRIDE's staff in the field felt strongly that parties to the pilot had not been adequately consulted and hence not prepared to play the role expected of them. (This comment stemmed principally from the fact that the chief technician at the Babati weather station had not been *formally* instructed regarding his role in the provision of rainfall data, although he was well aware of the pilot and the requirement for data transmission.)

The above reasons were presented by the General Manager of Pride in a meeting with TechnoServe subsequent to Pride's withdrawal from the pilot. However, it is TechnoServe's view that internally Pride did not have consensus on the new product. James Obama, the General Manager had championed the pilot project from the start. As TechnoServe consultants began work to support Pride in the development of the product, they encountered difficulties in communication with the Operations and Business Development Manager (OBDM) who was not accessible and did not return telephone calls for days at a time and even kept the staff assigned to the project and reporting directly to her waiting for days for minor decisions. It is TechnoServe's view that the General Manager did not have the buy-in of either the OBDM or the Executive Director for Transformation (Rashid Malima), and in the end was prevailed upon to withdraw from the project. It should be noted that Mr. Malima had been invited to the initial meeting to secure Pride's participation between Pride, WB and TechnoServe; Mr. Malima was not able to attend.

(Pride Tanzania is currently undergoing significant restructuring whereby it is anticipated that Rashid Malima will head up the microfinance organization while James Obama will be in charge of a new NGO.)

During the product development process it also became clear that Pride’s stance was extremely risk averse and this more than likely played a strong role in Pride’s decision to withdraw from the pilot.

Insurance Companies

The Association of Tanzania Insurers led the effort to develop a consortium of insurance companies, led by Tanzindia, to underwrite the contracts. The schedule of insurers participating as co-insurers is shown below:

Company	Share
Tanzindia Assurance Company Ltd.	10%
Alliance Insurance Corporation Ltd.	9%
Heritage All Insurance Company Ltd.	9%
Jubilee Insurance Company of Tanzania Ltd.	9%
Lion of Tanzania Insurance Company Ltd.	9%
National Insurance Company Ltd.	9%
Niko Insurance Tanzania Ltd.	9%
Phoenix of Tanzania Insurance Company Ltd.	9%
Reliance Insurance Company Ltd	9%
Royal Insurance Company Ltd	9%

Tanzindia, as lead insurer worked with CRMG and IRI on the final design and pricing of the insurance contracts.

Tanzania Meteorological Agency

The Tanzania Meteorological Agency agreed to participate in the project by providing the stakeholders rainfall data on a predetermined and regular basis. The task of bringing the TMA on board was undertaken primarily by and accomplished handily by World Bank staff.

Financial Product Development

Financial Institution Preparation

A large amount of time was allocated to preparing PRIDE Tanzania for the Weather Insurance Pilot. The work load was such that a TechnoServe consultant worked closely with PRIDE Tanzania for a period of 5 weeks on product development. Renatus Mushi, Marketing and Business Development Executive, led Pride’s project team and was the point person for communications with Pride. Humbi Haroub, Chief Credit Officer for Pride, Mathais Msemu, Senior Systems Administrator, and Richard Madeni and Lucy Malle, Systems Analysts formed the balance of the core product development team. TechnoServe consultants also worked with Hilda Nsombo, Pride’s Northern Zone Manager.

The initial focus of the work was to develop the product definition in PRIDE Tanzania terminology and understand how the Weather Insurance financial product would fit into

the existing product portfolio. Figure #3 below details a high-level view of the PRIDE Tanzania product portfolio and the unique characteristic of the Weather Insurance loan.

PRIDE Financial Products			
	MEC Loan	Fahari Loan	Weather Insurance (WI) Loan
Target Market	Small-scale business entrepreneurs in the informal sector	Small and medium enterprise sector, comprising mainly informal micro enterprises	Small Maize farmers in the Babati and Mbulu region
Product Eligibility	<ul style="list-style-type: none"> * Owning and running business worth less than US\$1,400 * Located within branch offices * Self-selecting group of 5 guarantors 	<ul style="list-style-type: none"> * Customer 18yrs and above * Minimum 2yrs in business * Business operates with branch zone and from a fixed location * Licensed business and complies with tax laws * Loan used for retail, manufacturing, service or wholesale trade * Bank accounts are not necessary 	<ul style="list-style-type: none"> * Maize farmer in the Babati or Mbulu district * A member of one of the local farmer groups * Have a minimum of 1 acre fields * Located within 26km of the designated weather station * Been farming for the past 2 years * Good farming record * Self-selecting group of 3 - 5 guarantors
Product Definition	It is a Grameen lending model that creates an Enterprise Group (EG) of 5 members and combines 10 EG to create a Market Enterprise Committee (MEC) for ease of administration and enhancement of group guarantee	Existing PRIDE customers who have successfully repaid a minimum of 4 successive MEC loans are encouraged to re-group into Premium Enterprise Group (PEGs). A group of 3 - 5 self-selected members who meet eligibility requirements.	The loan combines weather insurance micro-finance to create a product that secures the farmers future income from the crop and protects both parties from the risk of default due to drought
Loan Size	100,000 TZS to 1,000,000 TZS	2,000,000 TZS to 15,000,000 TZS	1.) 1 Acre Loan Max 35,000 TZS 2.) 2 Acre Loan Max 70,000 TZS
Repayment			
<i>Repayment period</i>	25 weeks to 50 weeks (~6 months to ~12 months)	6 mths to 24 months	9 months
<i>Grace period</i>	No grace	1 month (upon clients request)	9 months
<i>Repayment method</i>	Weekly	Monthly with partial repayments allowed	Full repayment of loan, premium and interest post harvest
Product Pricing			
<i>Interest rate</i>	30% - 28%	24% - 28%	27.25% of principal (30% of seed cost)
<i>Registration and application fee</i>	1,000 TZS Registration fee No application fee for first loan, 1% for subsequent loans	No registration fee Application fee 1% of loan charged on approval	No registration 1,000 TZS application fee
<i>Life insurance</i>	1% of amount borrowed	1% of amount borrowed	1% of amount borrowed
<i>Weather insurance</i>	N/A	N/A	9% of amount borrowed
Security			
<i>Collateral</i>	<ul style="list-style-type: none"> * Peer group pressure via three-tier guarantee system * Weekly meetings of MEC * Forced savings of 1,500 TZS towards loan insurance scheme * Life insurance * Elected leadership is responsible for maintaining group discipline, appraisal, approval and ensuring loan repayment 	<ul style="list-style-type: none"> * Peer group pressure via cross-guarantor system * Monthly meetings * Savings contributes towards loan insurance scheme * Life insurance * Fixed assets 	<ul style="list-style-type: none"> * Peer group pressure via cross-guarantor system * Farm extension support from AMSDP, SEIDA & Babati Agricultural District Office * Weather insurance to mitigate against the risk of drought * Life insurance * Community leadership responsible for ensuring group discipline * Group and Community Leader verify farmer existence * PRIDE conduct 'spot' farmer verification visit
Deliver Period			
<i>Application, appraisal and disbursement</i>	5 working days	3 - 5 working days	3 - 5 working days

Figure #3

Creation of a new product is never easy as it requires much conceptual thinking and questioning of something that does not yet exist. The above product definition enabled PRIDE Tanzania to view the new Weather Insurance product relative to its existing product portfolio. Time was also spent crafting how the product would work from a

high-level process flow. Figure #4 outlines the information and cash process flow between the different stakeholders.

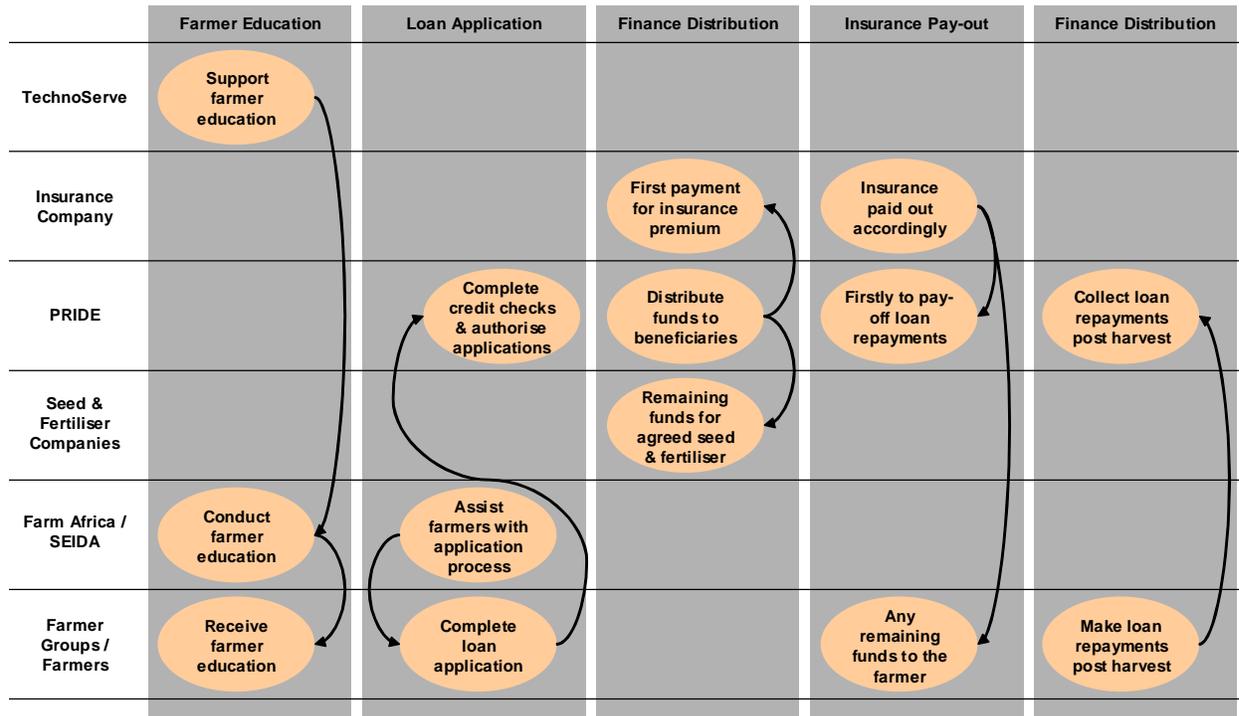


Figure #4

The high-level product definition and process flow helped PRIDE Tanzania understand and modify the Weather Insurance financial product to suit its existing business. Furthermore, they contributed to the development of a market survey to assess the farmers' readiness for Weather Insurance secured Loans.

The market survey assessed Farmers':

- Current access to finance;
- Interest in weather insurance;
- Product structure acceptance;
- Terms & conditions acceptance; and
- Loan execution process viability.

The findings from the market survey were positive and resulted in PRIDE Tanzania Board approval of the Weather Insurance Financial Product. A copy of the marketing survey and the findings is included in Appendix C,

The final requirement from PRIDE Tanzania's perspective was a Weather Insurance Policies & Procedures Document in PRIDE Tanzania terminology. In order for the policies and procedures manual to be formulated, work had to be carried out in all of the following areas, which also form the contents of the policies & procedures document;

A. Product Definition

- Target Market
- Product Eligibility

- Production Definition
- Loan Size
- Repayment
- Product Pricing
- Security
- Deliver Period
- B. Product Pricing Strategy**
 - Market Assessment
 - Conclusion
- C. Farmer Engagement Approach**
 - Business Processes
 - Implementation Calendar
- D. Appendices**
 - Application Forms
 - Appraisal Check-list
 - Bankers Realm User Guide
 - Bankers Realm System Definition

In addition, support was provided in developing:

- Detailed PRIDE Tanzania specific project workplan;
- Project budget and cost-benefit analysis;
- Structuring and completing the market survey;

Please refer to Appendix B for deliverables prepared by PRIDE Tanzania and TechnoServe in preparation for the pilot implementation.

Insurance Contract Design

TechnoServe worked with the International Research Institute (IRI) to conduct a series of focus groups to representatives of farmer groups in both districts. The goal of the meetings was to provide examples of the insurance contracts to the participants and explain how the contracts were designed with a view to getting farmers’ feedback and to gather and verify the data necessary to build more appropriate contracts for their regions. Village and farmer group leaders from each of the target areas were invited to participate in the meetings. The table below shows the level of participation in each of the meetings.

Date	Venue	# of Attendees
November 14 th	Babati District	26
November 15th	Babati District	18
November 16th	Mbulu District	29
November 17th	Mbulu District	12

Some of the key points that farmers were asked their opinions about were:

- Worst drought years in memory
- Problems encountered during those years
- Typical sowing, flowering and filling periods
- Years of sowing failures
- Type of maize seed used
- Access to financing

IRI utilized the feedback from these discussions to cross-check against rainfall data supplied by the TMA, and to design insurance contracts appropriate for each reason.

Engagement with Farmers

Farmer Training

Insurance contracts were designed for both Mbulu and Babati districts. Training workshops were scheduled for Mbulu District were given priority - for the week of the 4th of December - because of the district's earlier sowing period of December 15th – 30th. However, negotiations on the legal documentation between Pride, the insurance companies and the Tanzania Meteorological Agency were not completed and agreements were not signed in time for the scheduled workshops. The delay in the contract negotiations would not have allowed for the project team to get maize seed to the farmers in time for the sowing period and the team decided to leave Mbulu district out of the current pilot rather than to cause a change in their farming practices by promoting later sowing.

A series of training workshops were held for targeted farmer groups in the Babati district on the 19th through the 21st of December at the Gallapo Secondary School and the Catholic Secondary School in Gallapo and Babati respectively. The table below shows the numbers of attendees at each of the workshops:

Date	Group(s)	# of Attendees
December 19 th - AM	Nyamuhali	90
December 19 th - PM	Wakulima	52
December 20 th - AM	Mapambano, Majengo, Tsilloli, Umoja	150
December 20 th - PM	Kumekucha, Tsilloli Gallapo, Majengo	97
December 21 st - AM	Hamasa	20
	Total	409

The numbers represented above are taken from the attendance sheets that farmers were asked to sign. While the majority of the participants were representatives from the groups indicated above, a small number of farmers who attended the workshops were not part of an organized group. Especially given the short notice given to the farmers for attendance at the workshops, the response indicated a strong interest in the product. Each workshop lasted between 2 ½ and 3 hours and included ample time for discussion and questions.

The workshops were divided into two segments:

- Drought insurance product - information presented by TechnoServe
- Loan product – information presented by PRIDE Tanzania

Insurance Contract Communication

A detailed explanation of the insurance contract was presented during each workshop and covered the following topics:

- Project Overview – Loan/insurance package
- Explanation of index insurance
- Definition of drought
- Rainfall measurement
- Perils covered by the contract
- Beginning and ending dates for coverage
- Cost of insurance coverage
- Phases of the insurance contracts
- Trigger points for insurance payouts
- Calculation of payouts
- Examples of payouts based on loan amounts and rainfall experience

A client information sheet (shown in Appendix D) was used as a basis for the training and a combination of blackboards/flip charts was used to communicate the material to the workshop participants. While the training materials used were not sophisticated, they were appropriate for the circumstances; farmers showed very good comprehension of the material presented as evidenced by the questions that were posed. Discussion and questions following this section of the workshop centered around coverage for other perils faced by farmers (pests, disease), coverage for excess rainfall and the level of payouts (e.g. 50% payout for a no-sowing condition), and indicated a good level of comprehension of the coverage being proposed.

Loan Product Communication

PRIDE Tanzania educated the farmers on the financial product by detailing the product description and characteristics. Renatus Mushi, Hilda Msombo (Northern Zone Manager), Humbi Haroub and Peter James (Babati Branch Manager) participated in the workshop presentations. The following topics were covered by PRIDE Tanzania:

- Eligibility requirements
- Type of loan (i.e. seed vs. cash)
- Maximum amount of loan
- Collateral requirements
- Loan pricing
- Application fees
- Application/approval/disbursement processes
- Requirement for cross-guarantors
- Term of Loan
- Repayment period
- Inclusion of premium financing in loan amount
- Calculation of premium
- Selection of seed and seed supplier

Farmers expressed a concern about the perceived high (30%) interest rate for the loan and the modest size of the financing being offered. Farmers also expressed an interest in financing for other crops in addition to maize.

Farmer Application

Since loan disbursement (seed pick-up) had to be completed within a few days of the workshops, the PRIDE Tanzania team had scheduled time immediately following each workshop to assist interested farmers with loan applications and had come prepared to input applicant data, process and approve loan applications during the week of the workshop. PRIDE Tanzania accepted 355 loan applications and agreed with the applicants to return to Babati the following week to complete the approval process and to distribute vouchers for seed pick-up prior to the 1st of January.

TechnoServe and Pride agreed that Pride would continue with the “back-office” tasks of ensuring that application data was input into Pride’s computer systems and that the appraisal and approval processes would be completed by the 27th of December. Pride and TechnoServe planned to return to Babati on Thursday the 28th to complete any remaining tasks and to distribute vouchers. Pride field staff was prepared to return to Babati on the appointed date and requested authorization for transportation from the OBDM. Pride staff was unable to reach the OBDM on the 27th or the 28th - telephone calls were not returned.

TechnoServe made numerous attempts to reach Pride management with the same results, and it was not until the evening of Friday the 29th of December that an E-mail was finally received from James Obama regarding Pride’s decision to from the pilot.

During follow-up meetings with farmers, farmer group leaders and AMSDP personnel, TechnoServe attempted to determine the reasons that were given to the farmers for Pride’s withdrawal, and how this information was communicated to the farmers; (It should be noted that the information presented below was obtained from farmers and their representatives):

- Farmers waiting at Pride’s Babati branch office on Thursday the 28th were told that Pride was unable to proceed with the applications on that day because “TechnoServe personnel could not be found.”
- The AMSDP DFP in Babati was informed by the Babati branch manager that it was a “problems with the insurers” that was the cause for the delay in distributing the vouchers.
- Pride’s Babati branch manager traveled to Gallapo Secondary School (where the workshops were held and where they had agreed to meet again) on Friday the 29th and informed the farmers that Pride was withdrawing from the pilot because the product was “janja janja” which means sly, cunning, crafty or deceitful.

Information about Pride’s withdrawal from the project was communicated to the farmers well before the project team was informed.

Monitoring & Evaluation

Two farmer group leader meetings were convened in early January. 17 farmers in Mbulu and 11 in Babati attended the meetings. The results of the discussions are summarized below:

Interest in the program for future years.

Groups in both districts stressed that they would like to see the product offered again. In Babati, access to financing was cited as the more important component of the package that was offered. Farmers in the Mbulu district considered both, access to drought insurance and financing, important. Farmers also expressed an interest in the following add-on services:

- Coverage for excess rainfall.
- Inclusion of beans (both districts), and pigeon peas and sunflower for Babati
- Financing for a minimum of 4 acres of maize seed. (Babati)
- Financing for fertilizer.
- Seminars to educate farmers on the benefits of using improved seed and fertilizer.
- Extension services to assist farmers in the selection of the right seed and fertilizer.
- Allowances for food and transport.
- Workshops at the village level to get the most participation.
- Coupon distribution in December for Babati and November for Mbulu. (Mbulu farmers apparently have a more difficult time accessing their preferred variety of seed from local stockists and would like to get seed ahead of time, even if it meant paying a little additional interest)
- Market linkage information (Babati farmers)

Timing and usefulness of training workshops.

The Babati group stated that they were able to get a good understanding of the product being offered and were not left with any unexplained issues. However, they felt that the workshops were somewhat rushed and would have preferred smaller groups and a little more time allocated. Workshops should start in September, but no later than October.

If this product were offered in 2007, Mbulu farmers would also like to have training workshops as early as September, and at least a week's notice to allow them to plan their time.

Both groups agreed that the method that we had used to get word out about the workshops and the product (through village and farmer group leaders) was the most effective. However, both groups would like more than a few days' notice which was the best we were able to do last year. In both areas the AMSDP District Focal Persons were the most helpful in arranging the meetings.

Familiarity with financial institutions.

Groups in both districts are familiar with NMB as the only bank that has branches in Babati and Mbulu. The group in Babati has had some exposure to CRDB which is participating in the Warehouse Receipts Program through AMSDP. The farmer group leaders in Babati are also aware that CRDB provides loans to SACCOS, but do not have detailed familiarity with the program.

Some Babati district farmers who are members of SACCOS were able to get small (insufficient) loans for seed depending on the number of their membership shares. Farmers in Mbulu did not have access to any financing.

3. Project Challenges, Lessons Learned and Recommendations for the Way Forward.

Lead Time Required

By far the most critical challenge that was faced by the project was the lack of sufficient time for planning and implementation. As mentioned earlier in this report, all the activities for the pilot, including securing the participation of key stakeholders, obtaining formal agreements between the stakeholders, product development, insurance contract design, farmer group and village leader sensitization, farmer training, loan application, loan appraisal, loan sanctioning, seed voucher distribution and seed collection, had to be completed in a period of less than seven weeks.

In any project, and especially a pilot project, issues are bound to surface that need to be addressed during the course of the undertaking. It is crucial that ample time is allowed for project planning and implementation. In addition to the generally slow pace of business in Tanzania, it takes time for lenders and other implementing partners to get comfortable with a new concept and product, and gain confidence in its efficacy. Sufficient time needs to be allowed for product development and for changes in the loan system to ensure proper interface of the new loan/insurance product data into the financial reporting systems.

As importantly, implementing partners need to be brought on board in a timely fashion with contracts and budgets in place so that the partners have time to plan their resources.

The World Bank and TechnoServe worked extremely effectively to secure the participation of the insurers and the Tanzania Meteorological Agency, to get insurance contracts designed that were acceptable to both the farmers and to the insurers, to conduct farmer sensitization and training and to gain product acceptance from the farmers. Most project challenges, such as the lack of an implementing agency in Babati, were handily managed by the World Bank and TechnoServe by putting additional effort into the project. Given additional time, it may have been possible to help PRIDE Tanzania build consensus and confidence within the organization around the new product.

Capacity and suitability of stakeholders

It is unclear whether PRIDE Tanzania would be interested in participating in a new pilot because of PRIDE Tanzania's extreme risk-averse stance. Given PRIDE Tanzania's last-minute withdrawal from the project, it is likely that farmers would be skeptical about engaging with the institution again. It would also be difficult for PRIDE Tanzania to effectively market the weather insurance package as the product was portrayed to the farmers as detrimental, as detailed above, to both PRIDE Tanzania and the farmers as PRIDE Tanzania's reason for withdrawing from the project. In addition, the manner in which PRIDE's withdrawal from the pilot was handled and communicated to the farmers would be a cause of great concern for any follow-on project.

If the decision for a follow-on project is positive, conversations with NMB, Dunduliza, and SACCOS in the areas selected should be started in the very near future.

Although SEIDA's participation in the pilot was limited, with adequate lead time, it is anticipated that SEIDA would be willing and able to participate satisfactorily in a future program.

While Farm Africa did not participate in the current pilot, it would be worthwhile including them in the pool of organizations to be considered for a future project.

Planning

A stakeholder meeting was not convened until the 29th of November, several weeks after the start of the project. From a planning perspective, it is very important to organize a stakeholder meeting right at the beginning of the project. The meeting would be to establish stakeholder relationships define and agree stakeholder roles and responsibilities agree on a timeline for the completion of activities and get stakeholder buy-in for the approach to and processes for the various tasks.

A stakeholder meeting convened at the beginning of the project would also allow for identification of stakeholders' needs and project risks and the time to develop strategies for risk mitigation.

Funding

The budget allocations for the implementing partners were very modest (\$2,000 for SEIDA and Farm Africa and \$6,500 for Pride Africa). In order to get a commitment from the implementing agencies and provide them with an incentive to put forth the required effort it is important to offer fair compensation. This could include paying a percentage of the salaries for the individuals involved and reimbursement for additional expenses. A project of this nature puts an additional burden on the resources of the agency, and frequently the agency's resources are already committed to other projects. This was the case with Farm Africa, who after having expressed an interest early on to participate in the project declined citing lack of resources.

Again, provision should be made in the budget for a small fee to the Tanzania Meteorological Agency for its participation in the project.

Project Time Line

The contract for the project coordinator ended on January 12th, less than two weeks after the expected distribution of the seed. Pride expressed its discomfort with not having TechnoServe on board until the end of the harvest season. The contracts for the project coordinator and the implementing agencies should start with the first planning meeting and extend through the period of harvesting, repayment of the loans and the final report. This will ensure that there is follow-up at regular intervals and will serve to bolster the confidence of the lender.

Extension Services

Pride expressed concern about the lack of follow-up extension services for the farmers to ensure good farming practices. While agricultural extension services are not essential, their inclusion as part of the weather insurance loan package would not only be beneficial to the farmers but would again help enhance the confidence of the lender in the prospects of loan repayment.

Contracts and MOUs

During the negotiation of the legal documentation between Pride, the Insurers and the Tanzania Meteorological Agency, Pride raised objections to provisions that were considered standard in the industry. Agreement between the parties was delayed and Mbulu District, with its earlier sowing period, had to be dropped from the pilot. Provision of sample insurance policies, payout schedules and MOUs to the stakeholders early in the project would allow the parties to get familiar with the provisions of such contracts. Negotiating the contracts at an earlier stage would reduce last minute hold-ups in signing the documents.

Recommendations for Enhancements

Insurance Contract

A question regarding insurance coverage for excess rainfall as well as drought was brought up in all the focus group discussion and workshop that were held during this pilot in both Babati and Mbulu districts. Consideration should be given to providing the additional coverage in a follow-on project

Additional Crops

If possible, consideration should be given to providing coverage for a cash crop such as coffee. The Agricultural Insurance Company of India provides drought insurance to coffee farmers in India. Agronomic information on coffee is available from the Coffee Research Institute in India and it may be possible to adapt the insurance contracts to fit coffee cultivation in Tanzania.

Farmers in Babati and Mbulu also expressed an interest for insurance coverage for beans, pigeon peas and sunflower.

Secured/automated rainfall stations

Consideration should be given to the installation of automated stations that are properly secured. This would help boost the confidence level of the stakeholders.

4. Potential for Project Scale-Up

Considerable amounts of effort and resources were expended by all stakeholders in the current pilot project. While the project results fell short of expectations, and despite the many challenges faced by the project, an important number of the project components are strong and the progress made in the past few months is impressive. A discussion of the project team's accomplishments follows:

Loan/Drought Insurance Product Acceptance

Governmental Support

The World Bank secured the support and government approval for introduction of this innovative product to Tanzania. In addition, TechnoServe made presentations to Babati and Mbulu District Executive Directors and District Agriculture and Land Development Officers in both districts. The project was well received by both districts and was perceived as having the potential to significantly assist the farmers in their districts.

Support of village and farmer group leaders

Village and farmer group leaders were requested to attend meetings on a number of occasions for focus group discussions, for sensitization and training, and project assessment. Leaders showed strong support for the project by committing significant amounts of time, frequently at short notice, to attend meetings and to help get word out to their communities.

Enthusiasm for the product

Based on the attendance at the training workshops (again at very short notice) and the number of loan applications received by PRIDE Tanzania in less than a week, it is clear that there is significant enthusiasm for the product. Despite their disappointment, groups in both districts stressed that they would like to see the product offered again.

Comprehension of terms and conditions

The questions that were raised by the farmers during focus group meetings and sensitization and training workshops clearly demonstrate the general level of understanding of the insurance contract which farmers were exposed to for the first time in 2006.

Interest in other add-on services

The interest shown by farmers in other add-on services (listed above) indicates good potential for the program in the long run.

Insurance Contract Design

Contracts designed by WB and IRI appear to have been well received by Babati district farmers (they were not presented in Mbulu) and have been accepted by the insurance companies. The data gathered and the design work completed would significantly reduce the effort required if the program was revived in the coming season.

Insurance Industry Participation

The support shown by the Association of Tanzania Insurers as demonstrated by the number of participants in the project bodes well for the future of the program.

Tanzania Meteorological Agency Participation

The TMA now has familiarity with the project and the role that TMA would play in a future project.

Systems Development Work for PRIDE Tanzania

The product development support effort that was undertaken by TechnoServe for PRIDE Tanzania could be adapted to another financial institution which uses Banker Realm microfinance system.

5. Conclusion

A weather insurance product that combines financing for agricultural inputs with a drought/excess rainfall insurance policy has a great deal of potential in Tanzania. One of the keys to successful implementation is the total commitment of all the implementing stakeholders. A high level of confidence can be built with the stakeholders through a thorough understanding of the product, needs assessment and comprehensive risk analysis. This level of understanding and acceptance can only be achieved if sufficient time is available for both the planning and implementation. The ground work that has been completed together with the lessons learned during this initial pilot, and the enthusiasm from the farmers for the product points to the considerable potential of a successful follow-on pilot.

The weather insurance program coupled with agricultural input financing has the potential to bring significant benefits to Tanzanian farmers by increasing farmers' incomes. Farmers generally do not plant the recommended quantity of maize seed per acre (8 kg per acre vs. 10kg) for optimal yield because of cost considerations. Farmers who have additional land for cultivation will frequently use a combination of local and improved seed. Fertilizer use is also limited because of lack of funding and a lack of understanding of the benefits of fertilizer. Access to financing for seed and fertilizer together with a strong extension program has the likelihood of better livelihoods for farmers cultivating the acreage currently available to them. The benefits that would accrue to the farmers can only be quantified by careful monitoring and evaluation of a successful program.

Appendices

A. Detailed Project Plan

Program Structure					
Donors	World Bank FSDT				
Stakeholders	World Bank/FSDT	TechnoServe	Lender	Insurance Companies	Tanzania Meteorological Agency
Project Co-ordinators	World Bank TechnoServe				
Responsibilities	Establish Stakeholder Relationships Conduct Initial Partner Meetings Design Insurance Contract Recruit Insurance Providers Engage Tanzania Meteorological Agency Coordinate interaction between Insurers, Lenders and TMA	Establish Stakeholder Relationships Conduct Initial Partner Meetings Recruit MicroFinance Lender Recruit Partner Agencies Define Partner Roles and Responsibilities	Develop Financial Product Market Financial Product	Develop Insurance Contract and Policy Develop Premium Schedules	Provision of accurate and timely rainfall data
Agreements Required	Insurance Contract Insurance Policy Joint MOU TMA/Insurers/Lender MOU Lender/Insurer Contract WB/TechnoServe	Contracts Donors/ TechnoServe TechnoServe/Lender TechnoServe/Partner NGOs	Joint MOU TMA/Insurers/Lender MOU Lender/Insurer	Joint MOU TMA/Insurers/Lender MOU Lender/Insurer	Joint MOU TMA/Insurers/Lender
Documents/Forms			Registration Form Application Form Loan Agreement Affidavit of Insurable Interest	Insurance Contract Insurance Policy Premium Schedules	

B. Final Deliverables

Risk Log

Issue #	Risk / Issue	Status	Heading	Description	Mitigation	Owner
1.	Risk	Open	Bankers Realm	There are still a number of 'wrinkles' that need to be ironed out with the system. Eg. Insurance rate and interest rate calculation, Set-up of independent data bases.	MIS Administrator has accepted ownership of the task and allocated time to ensure the system is 100% operational before 'go-live'.	MIS Admin
2.	Risk	Open	Seed Supplier Information	Need to identify the seed suppliers farmers can buy from and understand the available seed.	Nargis has planned a special field trip to capture the necessary information.	Nargis
3.	Risk	Open	PRIDE Agreements	PRIDE needs to sign an agreement with the insurance company and TechnoServe while the PRIDE GM is absent. There is a chance this could hold-up the pilot.	Nargis has communicated this risk to the PRIDE GM and he has given Shimi authority to promptly sign any agreements while he is away.	Nargis Renatus
4.	Risk	Open	Farmer Education	Farm education will play a very important role in managing farmer expectations and ensuring they fully understand the loan and insurance terms and conditions prior to application. It cannot be rushed or else farmers might not properly understand how to collect their seed or worse still default on the loan because of poor communication	Nargis and Renatus have allocated 2 full days to prepare the education material. In addition we have 2 days in Mbulu and 3 days in Babati to train the farmers on the loan and insurance product.	Nargis Renatus

PRIDE 'Go-Live' Action List

Process (11)

1. **Application Forms1** - Translate application forms from English to Kswahili
2. **Application Forms2** - Fax a copy to farm extension people
3. **Car** - Confirm PRIDE car available for 3 week field trip to Babati and Mbulu
4. **Communication Material** - Cofirm t-shirts, hats broucher etc.
5. **Farmer Education** - Develop farmer education material
6. **Finance** - Ensure PRIDE has sufficient funds to pay farmer loans
7. **Paper** - Ensure white and blue paper is available for printing seed vouchers and other reports
8. **Pricing Strategy** - Finalise and agree Weather Insurance Loan pricing strategy
9. **Seed Suppliers1** - Confirm seed suppliers and available seed for loan application process
10. **Seed Suppliers2** - Educate on the loan application and seed distribution process
11. **Sign-off** - Ensure Insurance Co and TechnoServe agreements are authorise by PRIDE
- 12.
- 13.
- 14.
- 15.

People (3)

1. **Resources** - Get authorisation for Assistant Field Officer
2. **Stakeholders** - Ensure sufficient communication is provided. In particular, Shimi and Finance Manager
3. **Staff Trainging** - Ensure staff fully understand the Weather Insurance Loan Policies & Procedures etc.
- 4.
- 5.

Technology (5)

1. **Back-up** - Ensure appropriate measures are taken to back-up information while in the field
2. **Hardware1** - Computer, extra battery and printer
3. **Hardware2** - Digital camera
4. **Secutrity** - Ensure the data base system and hardware is secure at all times when in the field
5. **System** - Ensure Weather Insurance Loan product is sufficiently tested and piloted in the Bankers Realm System
- 6.
- 7.
- 8.
- 9.
- 10.

Frequently Asked Questions

How does index-based weather insurance work?

Index based weather insurance provides protection against severe drought (deficit rainfall) during the crop year. It is called index-based weather insurance because the insurance uses rainfall data from national meteorological stations as a proxy for crop yield losses. By determining the relationship between reduced rainfall and the effects on plant growth it is possible to determine compensation for farmers affected by the drought.

How is index-based weather insurance different from traditional insurance products?

Index-based insurance has a number of advantages over traditional insurance products. Traditional weather insurance measures actual losses. This type of insurance can be very costly because it requires farm visits to estimate the losses. On the other hand index based weather insurance estimates losses based on changes in weather at a locally designated rainfall station. In essence by measuring changes in the weather relative to the needs of the particular crops it is possible to estimate losses of farmers near the weather station. One of the primary benefits of index based insurance is that because payouts are based on the level of deficit rainfall at the station payouts are objective. The second key benefit is that because this type of insurance does not require farm inspections to determine payouts administrative costs are significantly reduced.

Where has this index-based weather insurance previously been used?

The World Bank has been investigating the use of index-based weather risk management instruments in a number of countries. Pilots have already been conducted in Malawi with Opportunity International and India with BASIX, and other pilots are planned for Kenya with Equity Bank and BAAC in Thailand.

How does index-based weather insurance enable financial institutions to lend funds to small farmers?

Index-based weather can provide a win-win for farmers and financial institutions. Because lenders hold the same risks as their borrowers, managing weather risk such as drought is critical in order to provide financial institutions sufficient security to expand their lending to agriculture. While index based weather insurance can protect farmers from the negative impacts of drought, it also protects a financial institution's portfolio from default due to drought.

Where does PRIDE fit?

PRIDE has a commitment to rural communities and expanding access to finance to previously excluded borrowers. This project can provide PRIDE an opportunity to gain entry into new agricultural markets while mitigating some of the risks that have previously made it difficult to service these potential clients.

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Pride Cost Benefit Analysis

Inputs

Farmers

650	Babati farmers	
237	Mbulu farmers	
887	Total	
30%	266	Min number of farmers
60%	532	Medium
90%	798	Max number of farmers
2.0	Average farmer acreage	

Fees

TZS 1,000	Registration & Application Fee	
-----------	--------------------------------	--

Seed

10	Kg per acre	
TZS 3,500	Cost per Kg	

Insurance

10.0%	Insurance premium of amount financed	
-------	--------------------------------------	--

Interest

27.25%	Interest rate	2.3% Monthly interest rate
9	Number of months	

Exchange Rate

TZS 1,250	TZS to USD	
-----------	------------	--

PRIDE Cost Benefit Scenarios

		30% of Farmers	60% of Farmers	90% of Farmers
		Min	Med	Max
Farmers				
Number of farmers		266	532	798
Total average acreage	2.0	532	1,064	1,596
Fee				
Registration & Application	TZS 1,000	TZS 266,000	TZS 532,000	TZS 798,000
Seed				
Kg	10	5,320	10,640	15,960
Cost (Amount to be financed)	TZS 3,500	TZS 18,620,000	TZS 37,240,000	TZS 55,860,000
Insurance				
Premium	10.0%	TZS 2,068,889	TZS 4,137,778	TZS 6,206,667
Interest				
Principal		TZS 20,688,889	TZS 41,377,778	TZS 62,066,667
Interest	27.25% 9	TZS 4,633,421	TZS 9,266,842	TZS 13,900,263
Total				
Gross Benefits		TZS 4,899,421	TZS 9,798,842	TZS 14,698,263
Budget		-TZS 7,948,113	-TZS 7,948,113	-TZS 7,948,113
Net Benefits		TZS -TZS 3,048,692	TZS 1,850,729	TZS 6,750,150
	TZS 1,250	USD -USD 2,439	USD 1,481	USD 5,400

Farmer Cost Benefit Scenarios

Weather Insurance (WI) Loan		1 Acre	2 Acre
Fee		1	2
Registration & Application	TZS 1,000	TZS 1,000	TZS 1,000
Seed			
Kg	10	10	20
Cost (Amount to be financed)	TZS 3,500	TZS 35,000	TZS 70,000
Insurance			
Premium	10%	TZS 3,889	TZS 7,778
Interest			
Principal		TZS 38,889	TZS 77,778
Interest	27.25% 9	TZS 8,709	TZS 17,419
Total			
Repayment		TZS 47,598	TZS 95,197
	TZS 1,250	USD 38	USD 76
Farmer's Cost Benefit Analysis		1 Acre	2 Acre
Number of bags		15	30
Sale price per bag	TZS 12,000		
Harvest Gross Benefit		TZS 180,000	TZS 360,000
WI Registration & Application Fee		-TZS 1,000	-TZS 1,000
WI Loan Repayment		-TZS 47,598	-TZS 95,197
Net Benefits		TZS 131,402	TZS 263,803
	TZS 1,250	USD 105	USD 211

Note: Yield is normally between 15 and 20 bags, so we have selected the lower of the two figures
Sale price per bag of TZS 12,000 is also a conservative estimate

PRIDE Tanzania

Weather Insurance Loan

PRIDE

– Policies & Procedures

November 2006

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A. Product Definition

Target Market

Small Maize farmers in the Babati and Mbulu region.

Product Eligibility

Eligibility Criteria	Requirements
Farm Location	<ul style="list-style-type: none">Maize farmer in the Babati or Mbulu district.
Farmer Group	<ul style="list-style-type: none">A member of one of the local farmer groups.
Farm Size	<ul style="list-style-type: none">Have a minimum of 1 acre fields.
Proximity to Weather Station	<ul style="list-style-type: none">Located within 26km of the designated weather station.
Farming Experience	<ul style="list-style-type: none">Been farming for the past 2 years.
Farming Record	<ul style="list-style-type: none">Good farming record.
Guarantors	<ul style="list-style-type: none">Self-selecting group of 3 - 5 guarantors.

Product Definition

The loan combines weather insurance micro-finance to create a product that secures the farmers future income from the crop and protects both parties from the risk of default due to drought.

Loan Size

The Weather Insurance Loan will be set by management within the following guidelines:

Loan #1 – 1Acre Loan Maximum Size of 35,000 TZS

Loan #2 – 2 Acre Loan, Maximum Size of 70,000 TZS

Repayment

Repayment period

Customers will be expected to repay the loan within a 9 month time period that starts from the point of seed collection

Grace period

There will be a 9 month grace period for the Weather Insurance Loan. Grace period shall apply to the cost of the seed and the insurance premium cost. Interest chargeable shall be recognized but will be payable together with the principal payment on expiry of the grace period.

Repayment method – Full repayment of loan, insurance premium and interest post harvest.

Customers will have to make full repayment of the loan, insurance premium and interest post the 9 month grace period. It is intended that this will occur shortly after harvest time.

B. Product Pricing Strategy

The Weather Insurance Loan pricing strategy has been developed by analysing the current market situation to reach an informed conclusion.

Market Analysis

Context

PRIDE Tanzania has not traditionally provided the agricultural industry with microfinance. Historically it has been a space that many African microfinance organisations have struggled to successfully penetrate. The low customer incomes, combined with a lack of security, vulnerability to weather conditions and poor customer knowledge of microfinance makes market entry very challenging.

It is well recognised that much opportunity exists in Africa for microfinance organisation to better service the agricultural industry with specific agricultural financial products. A number of microfinance organisations in India have been able to successfully penetrate the agricultural industry with innovative products and it is expected that in time African microfinance organisations will be able to achieve similar results.

Customer Demand

The Babati and Mbulu farmers are very keen to borrow money, but they struggle to find appropriate financial institutions and financial products that will permit them to borrow. The three biggest challenges that restrict the farmers' from borrowing are their:

1. Low incomes;
2. Lack of security; and
3. Vulnerability to weather conditions.

Any financial product provided to the farmers will need to address these three points.

PRIDE Tanzania's Supply Perspective

The Weather Insurance Loan will address the farmers' lack of security (points 2.) and vulnerability to weather conditions (point 3.) by providing the farmers and PRIDE Tanzania with liquid security in the form of income protection against drought.

The financial product will need to be priced so as to ensure the farmers' low income can support repayment (point 1.) and the pilot delivers a break-even return to PRIDE Tanzania.

Over pricing of the Weather Insurance Loan may negatively impact farmer demand and drive down the total revenue captured by PRIDE Tanzania. At the same time, underpricing the product may generate demand but not provide PRIDE Tanzania with insufficient revenue.

Conclusion

Given that farmer registration and application processing will occur at the same time, it has been agreed that there will be no registration fee and a loan application fee of 1,000 TZS. PRIDE Tanzania's existing loans have a registration fee of 1,000 TZS and loan application is set at 1% of the amount borrowed. This means that the Weather Insurance Loan application fee is comparable with existing loan products.

The farmers will be charged interest at 27.25% of the principal (seed cost and insurance premium), which is equivalent to charging the farmers 30% of the seed cost only. This interest rate is at the lower end of PRIDE Tanzania's existing small group loan products, where the interest rates ranges from 30% – 28%.

From a communication perspective PRIDE Tanzania will be able to inform Farmers that they are being charged an interest rate of 30% calculated on the seed cost, which internally equates to an interest rate of 27.25% of the principal (seed cost and insurance premium). Based on results from the needs assessment, many farmers will be accepting of the 30% figure because it is comparable with the interest charged on other PRIDE Tanzania financial products. Further more, many farmers will appreciate that the insurance premium will not directly be charged interest.

If 60% of the available farmers sign-up for a 2 acre Weather Insurance Loan then it is expected that PRIDE Tanzania will receive a net benefit of 1,850,729 TZS (\$1,481 USD). PRIDE Tanzania will then be in a position to report that they have successfully developed a new agricultural financial product for Tanzania at no cost to the business. At the same time, if only 30% of the farmers sign-up then the pilot will cost PRIDE Tanzania 3,048,692 TZS (\$2,439 USD) and if 90% of farmers sign-up PRIDE Tanzania will receive net benefits of 6,750,150 TZS (\$5,400 USD). Given the positive response received during the needs assessment, it is estimate that over 60% of the farmers will apply for the loan.

C. Farmer Engagement Approach

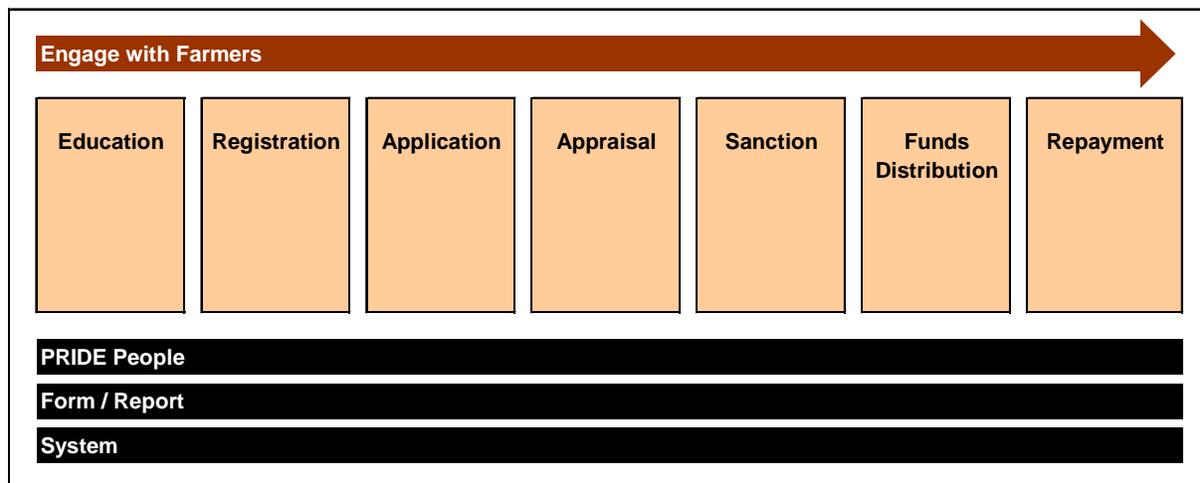
Business Processes

PRIDE Tanzania has developed detailed business processes to ensure that farmer engagement runs smoothly and efficiently. Figure 1 below outlines the seven key components to the farmer engagement process.

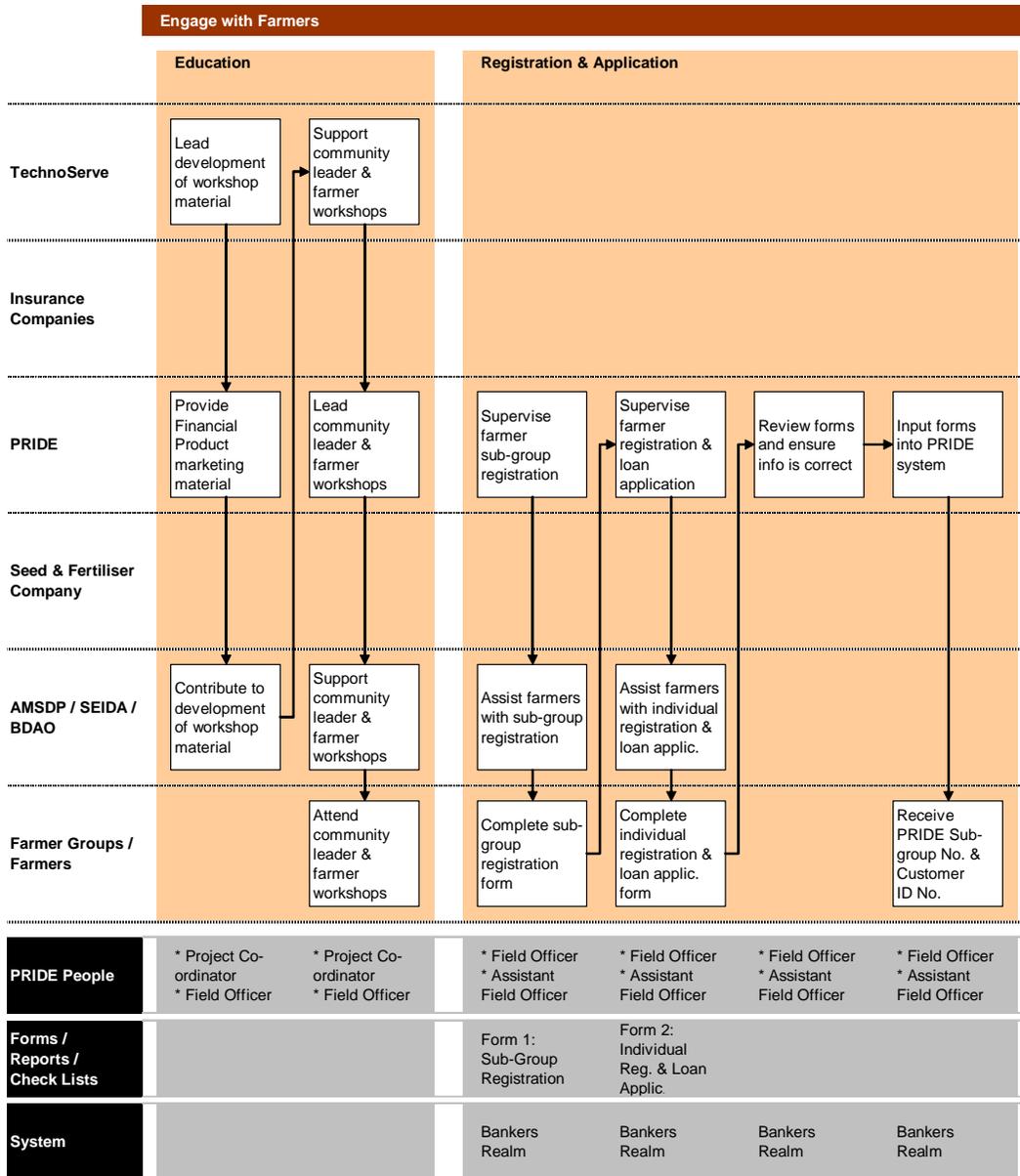
1. Education
2. Registration
3. Application
4. Appraisal
5. Sanction
6. Funds Distribution
7. Repayment

The business processes have been defined from an input and output perspective, with particular attention to the input from PRIDE Tanzania's people, forms / reports and the Bankers Realm system.

Figure 1 – PRIDE Tanzania Business Processes



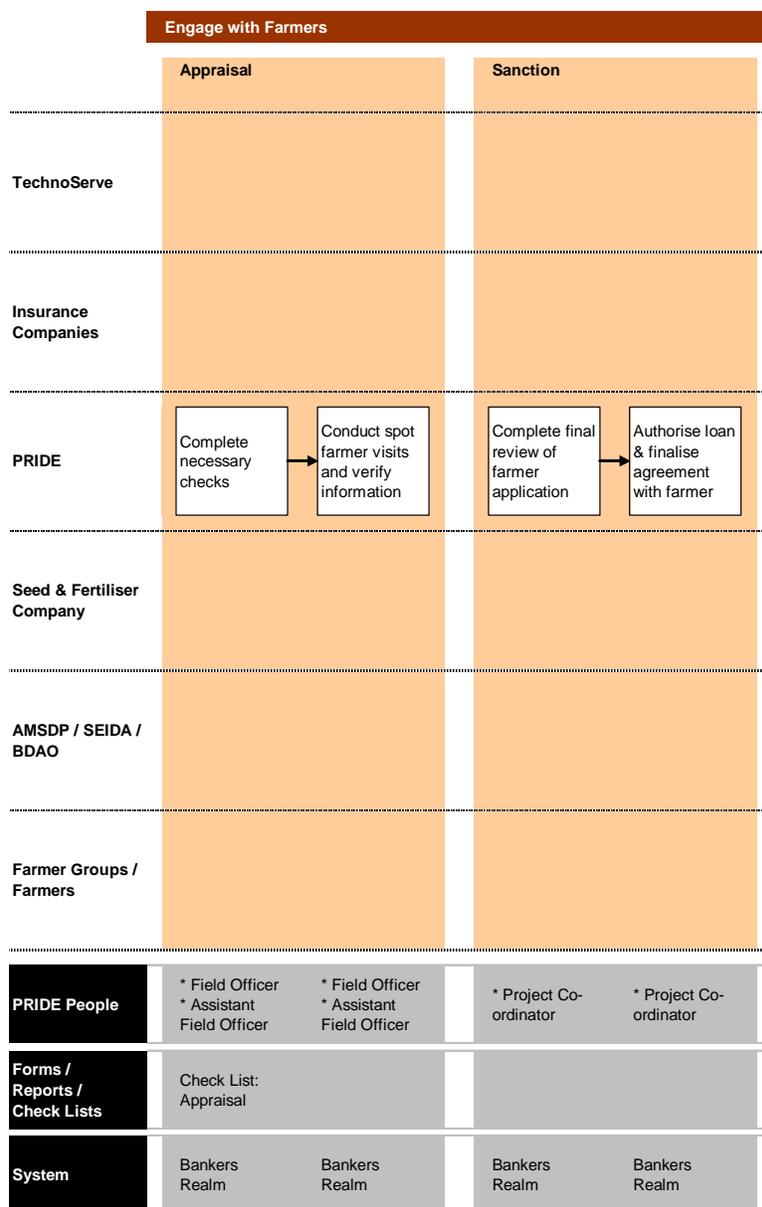
Education, Registration, Application



Comments

- Successful implementation of the pilot will depend upon comprehensive and thorough farmer and seed supplier training. A significant amount of time will be allocated to both the Babati and Mbulu districts to ensure this is achieved
- It is intended that Sub-Group registration (Form 1) and Individual Registration & Loan Application (Form 2) will occur at the same time. Normally PRIDE Tanzania separates the two processes, but due to time and resource constraints it is appropriate that they are completed at the same time

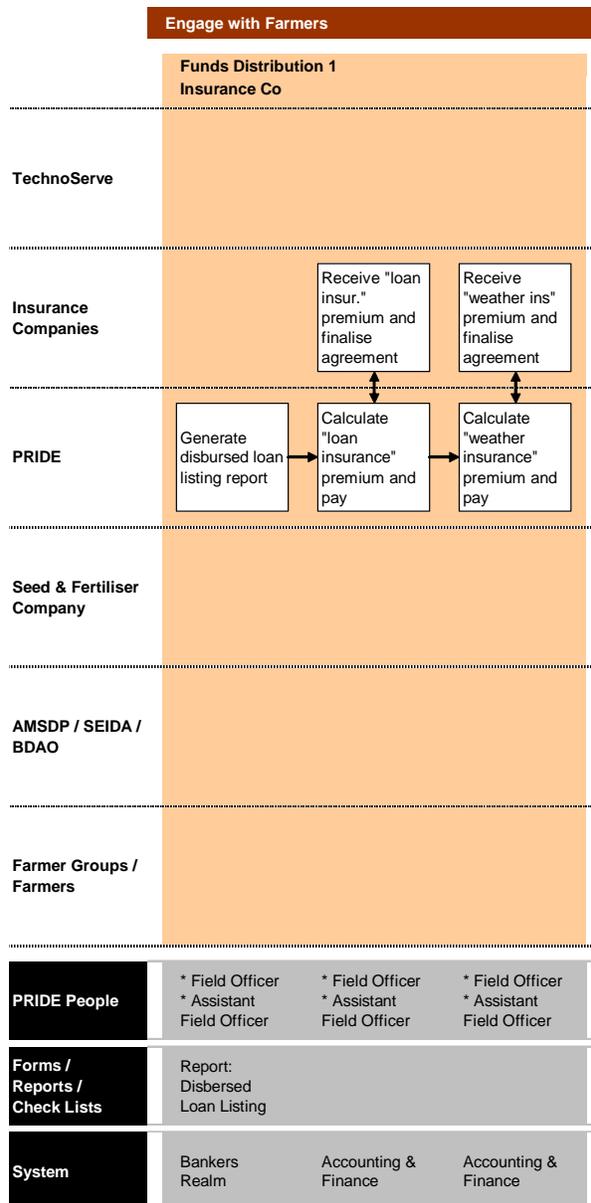
Appraisal, Sanction



Comments

- The Appraisal Checklist is a guide to support the appraisal process by outlining the key activities that must be completed.
- It is hoped that the 'spot' farmer visits will provide PRIDE Tanzania with increased security and discourage farmers from providing false information. Farmer selection will be partly random, but also impacted by time and resource constraints. Furthermore, the number of farmers visited will also be impacted by time and resource constraints
- It has been agreed that the Project Co-ordinator will sanction all loans, given that no Branch Manager has been allocated to the pilot project. To ensure independence, he will not be able to complete registration, application, appraisal and disbursement components of the loan process.

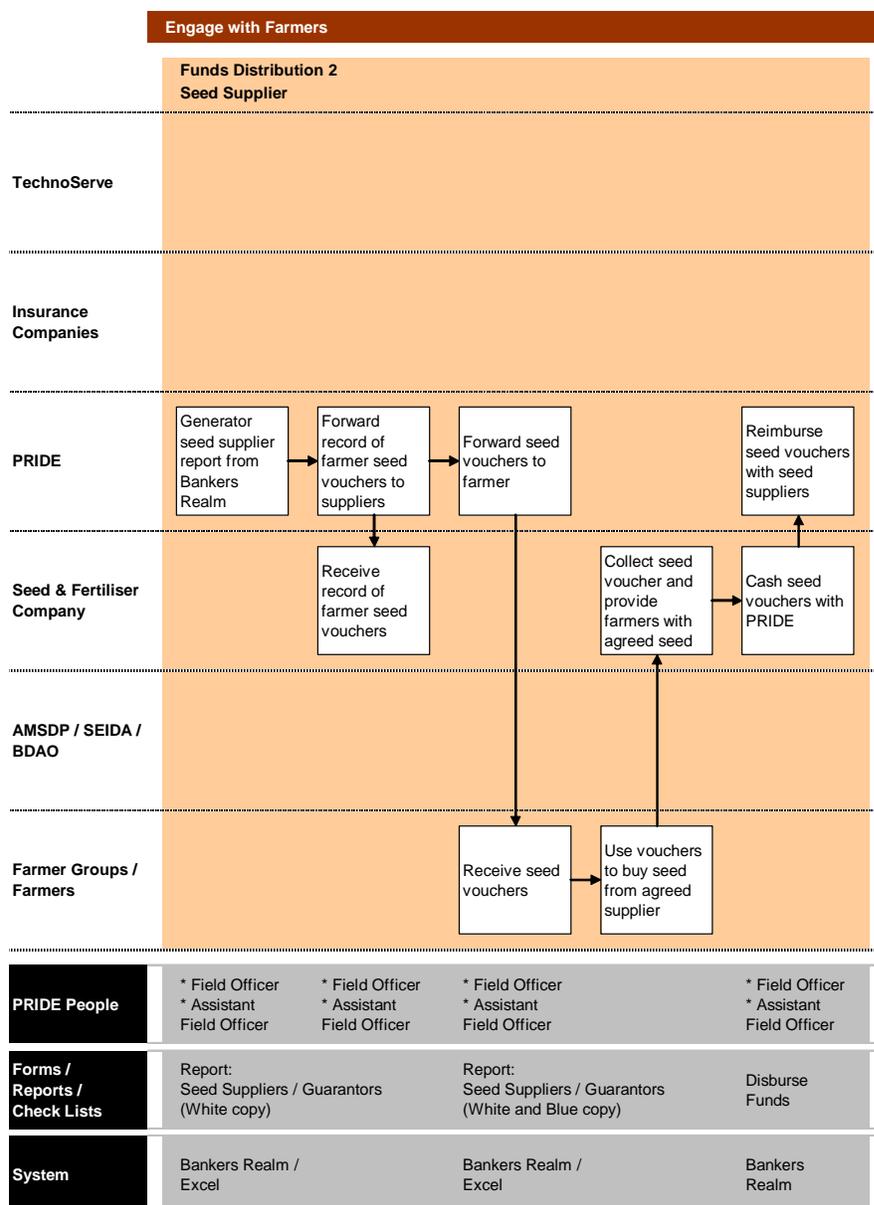
Funds Distribution 1



Comments

- The Disbursed Loan Listing Report will detail all loans that have sanctioned. This information can be used to calculate (i.) the loan insurance premium and (ii.) the weather insurance loan premium

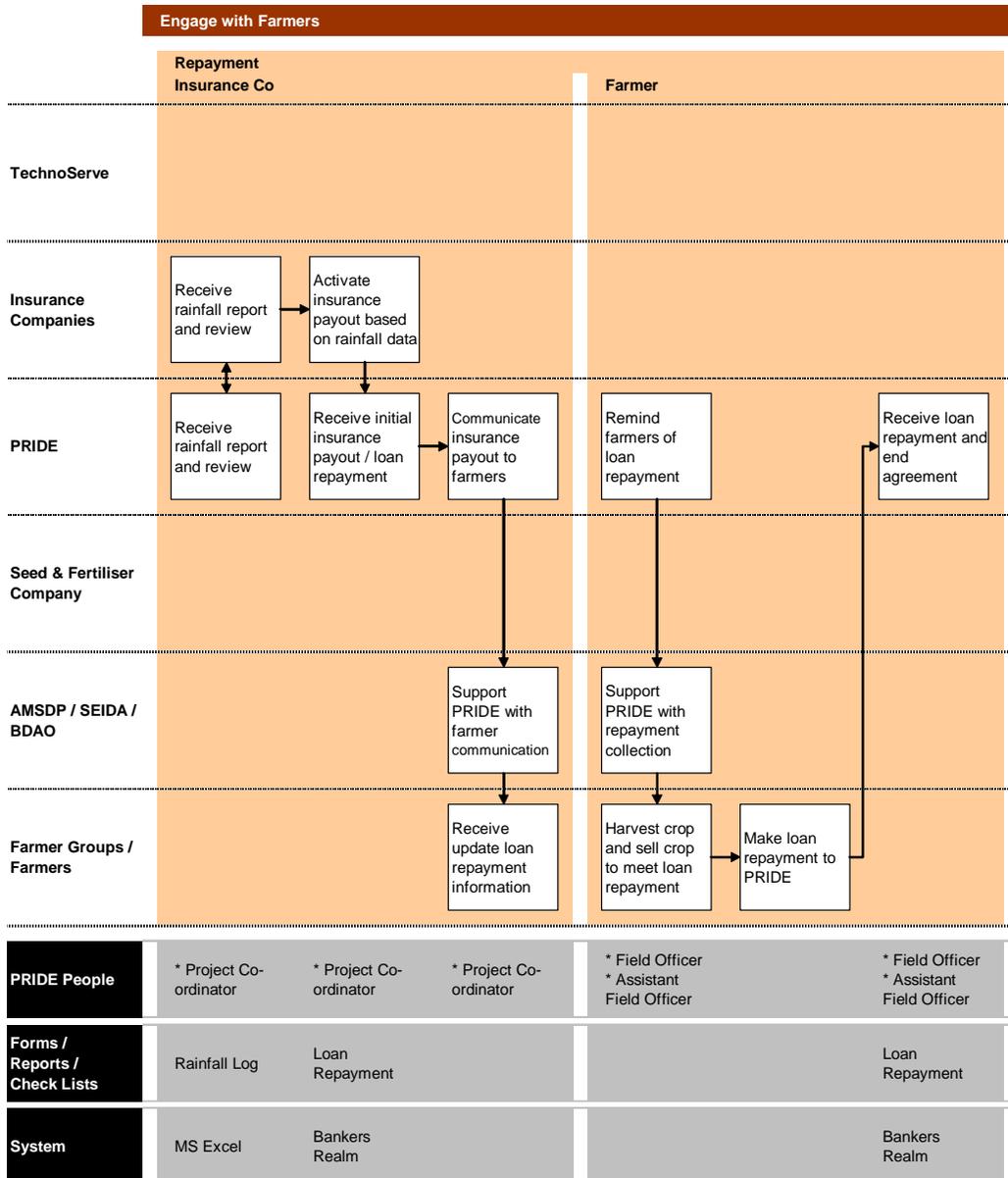
Funds Distribution 2



Comments

- The Seed Supplier Report will be generated by exporting the Guarantor Report from Bankers Realm into Excel and converting the loaned amount to a quantity of seed. This will be a manual conversion process, however at all times the master loan data will remain in Bankers Realm.
- The seed suppliers will receive a 'white' extract of the Seed Supplier Report that details by seed type the amount of seed the different farmers will be coming to collect.
- The farmers will receive a 'white' and 'blue' extract of the Seed Supplier Report which details the amount and type of seed they will collect from the agreed supplier. Upon seed distribution the 'white' and 'blue' extracts are signed by both the farmer and seed supplier. The farmer keeps the 'white' copy and the 'blue' is given to the seed supplier to claim payment for seeds from PRIDE Tanzania.

Repayment



Comments

- On a regular basis PRIDE Tanzania will receive a Babati and Mbulu rainfall report. PRIDE Tanzania will be able to use this information to identify when the weather insurance should be activated.
- The weather insurance company will be responsible for activating the insurance when rainfall is not sufficient at the appropriate trigger points.
- Upon receipt of weather insurance payout, PRIDE Tanzania will need to inform the farmers and modify their loan repayments accordingly.
- Post harvest the farmers will need to promptly repay PRIDE Tanzania any outstanding funds.

Calendar

Registration, Application, Appraisal, Sanction, Disbursement

	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Week 1	6-Nov-06 Planning	7-Nov-06	8-Nov-06	9-Nov-06	10-Nov-06	11-Nov-06	12-Nov-06
Week 2	13-Nov-06 Needs Assessment	14-Nov-06	15-Nov-06	16-Nov-06	17-Nov-06	18-Nov-06	19-Nov-06
Week 3	20-Nov-06 Business Processes and System	21-Nov-06	22-Nov-06	23-Nov-06	24-Nov-06	25-Nov-06	26-Nov-06
Week 4	27-Nov-06 Final Prep - Process & System Review (95%)	28-Nov-06 Final Prep - Process & System Review (100%)	29-Nov-06 Final Prep - Stakeholder Conf Call - PRIDE sign agreements	30-Nov-06 Final Prep - Prep Workshop Material	1-Dec-06 Final Prep - Prep Workshop Material	2-Dec-06	3-Dec-06
Week 5	4-Dec-06 Mbulu - Training	5-Dec-06 Mbulu - Training	6-Dec-06 Mbulu - Application - Appraisal - Sanction	7-Dec-06 Mbulu - Application - Appraisal - Sanction	8-Dec-06 Mbulu - Admin - Sanction - Seed Voucher Disbursement	9-Dec-06 Mbulu - Seed Collection - Seed Payment	10-Dec-06
Week 6	11-Dec-06 Mbulu - Seed Collection - Seed Payment	12-Dec-06 Mbulu - Extra Time Babati - Training	13-Dec-06 Babati - Training	14-Dec-06 Babati - Training	15-Dec-06 Babati - Application - Appraisal - Sanction	16-Dec-06 Babati - Application - Appraisal - Sanction	17-Dec-06
Week 7	18-Dec-06 Babati - Application - Appraisal - Sanction	19-Dec-06 Babati - Admin - Sanction - Seed Voucher Disbursement	20-Dec-06 Babati - Seed Collection - Seed Payment	21-Dec-06 Babati - Seed Collection - Seed Payment	22-Dec-06 Babati - Seed Collection - Seed Payment	23-Dec-06 Babati - Extra Time	24-Dec-06
Week 8	25-Dec-06	26-Dec-06	27-Dec-06 Admin - Finalise paper work - Insurance premium payment	28-Dec-06 Admin - Finalise paper work - Insurance premium payment	29-Dec-06 Admin - Finalise paper work - Insurance premium payment	30-Dec-06	31-Dec-06
Week 9	1-Jan-07	2-Jan-07	3-Jan-07 Final Report - Consolidate Pride Learnings	4-Jan-07 Final Report - Consolidate Pride Learnings	5-Jan-07 Final Report - Consolidate Pride Learnings	6-Jan-07	7-Jan-07
Week 10	8-Jan-07 Final Report - Contribute and support write-up	9-Jan-07 Final Report - Contribute and support write-up	10-Jan-07 Final Report - Contribute and support write-up	11-Jan-07 Final Report - Contribute and support write-up	12-Jan-07 Final Report - Contribute and support write-up	13-Jan-07	14-Jan-07

Comments

- The pilot program is working to a tight time frame that requires all registration, application, appraisal, sanction and disbursement activities are completed before public holidays on the 25th and 26th of December. This timeframe has largely been dictated by the farmers' planting schedules which takes place mid / late December (Mbulu) and early January (Babati).
- It is important to note that the above calendar does not capture repayment, which will occur in September 2007.

D. Appendices

Appendix 1. – Application Forms

- » Form 1 – Sub-Group Registration Form
- » Form 2 – Individual Registration & Loan Application

Appendix 2. – Appraisal Check List

Appendix 3. – Bankers Real User Guide

Appendix 4. – Bankers Realm System

C. Pride Market Survey

<p>Welcome</p> <ul style="list-style-type: none"> • Thank you for coming here to meet us – we are grateful for your time. • Introductions • We invited you here today to <i>assess the farmer readiness for Weather Insurance secured Loans</i>. 	
<p>Assess current situation</p> <p>1. Are you able to borrow money to buy seed or fertiliser?</p>	<ul style="list-style-type: none"> • Understand why yes or no? • Understand if they would be interested in borrowing money for seed or fertilizer.
<p>Assess weather insurance loan interest</p> <p>2. From PRIDE’s perspective weather is a big risk when lending to farmers. Would you be interested in a loan product that combines finance with weather insurance?</p>	<ul style="list-style-type: none"> • Mention that the weather insurance will come at a price, but will allow the bank to loan money. • Understand why yes or why no?
<p>Assess product structure acceptance</p> <p>3. The amount you could borrow would be determined by your acreage and provide finance for 10kg of maize seed per acreage. Would you be interest in a loan product that enables you to borrow fund based upon your acreage and seed requirements?</p>	<ul style="list-style-type: none"> • Mention this structure is required so PRIDE can be sure the loan is used to buy seed and not for other activities. • Understand why yes or why no?
<p>Assess terms & conditions acceptance</p> <p>4. A condition of the loan would be that you provide 3 other people as cross-guarantors. This is to ensure the farmers meet the loan repayment requirements or else their guarantor will accept responsibility. Would you be able to provide 3 cross-guarantors?</p>	<ul style="list-style-type: none"> • Mention that it is a common form of security used by financial institutions. • Understand why yes or why no?
<p>Assess loan execution process viability</p> <p>→ Farmers will complete a loan application; → PRIDE will conduct a credit check; → PRIDE will pay the insurance premium; → Farmers will collect seed from the supplier; → PRIDE will pay the seed supplier; → After harvest farmers will pay PRIDE back the money loaned to buy seed plus the cost of the insurance and interest</p> <p>5. The loan process will extend from when you buy your seed, through to harvest when you repay PRIDE. Do you think the farmers, PRIDE and seed suppliers will be able to work together to make the loan process work properly?</p>	<ul style="list-style-type: none"> • Understand why yes or why no? • Get them to suggest what they think will be the most difficult parts of the process?
<p>Closure</p> <ul style="list-style-type: none"> • Thank you. Your answers and discussion have been very helpful and informative. We are very grateful for the information you have provided. • Do you have any questions or comments for us? 	

Pride Market Analysis

Findings

1. Current Situation – Coping Mechanism

A good number of farmers prefer hybrid seeds for their farms.

Many farmers cannot afford the price of hybrid seeds.

Some farmers resort to mixing hybrid seeds and local breeds

A few farmers are members of SACCOS from which they get loans for seeds.

- The loan applicant receives the seeds from SACCOS, in kind.
- Loan secured by shares and cross-guarantee.
- Loan repaid with interest – 25%
- But normally their shares are not enough to get loans enough for farm inputs/seeds.
- Also, SACCOS does not have enough money for all loan demands.

A few farmers have had loans from the municipal council.

Farmers in Mbulu have not had loans. They thus do not have experience whatsoever with loans.

2. Interest in weather insurance loan

- Most are interested as long as the interest of farmers is given up-most priority.
- Seed loans is very important – it will assist farmers to afford the high yielding hybrid seeds.
- Weather insurance is very important because draught is not uncommon and the resultant yield is bad.
- Skeptical on reliability of insurance companies to (timely) honor claims – given the experience of the monopolized insurance industry in the past.
- Farmers in one of the areas (Kainam) in Mbulu are not very enthusiastic with the product as they have a different maize cycle from the one identified and proposed by the project (i.e. December to September). Most of the farmers in the Kainam area have their maize cycle from June to February.

3. Product Structure and Features

- Accepted the condition for the loan would be that the farmer provides other 2 - 4 people as cross-guarantors. Also recommended for individual assets (e.g. the farm in question) to compliment guarantee –as collateral. “Lile shamba lenyewe lamaindi linaweza kutumika kama dhamana”
- Divided opinion as to whether loan applications should be approved within registered groups – SACCOS or self selected development groups – or directly to individuals (without recommendations of groups) Advantage of disbursement through registered groups is that loans are more secured; disadvantage is that farmers not in groups will not qualify – which does not seem very fare. No consensus was reached.
- Recommended that village government should have a stake in identifying eligible groups/farmers and recommended for approval: “Serikali ya kijiji ni lazima ihusishwe toka wakati wa maombi ya mkopo paka wakati wa marejesho.”
- Accepted that amount of loan should depend on acreage – at least up to 5 acres.
- Accepted that loans should be disbursed in kind (seeds) through the seed company/agent/supplier to be decided and identified by the farmer.

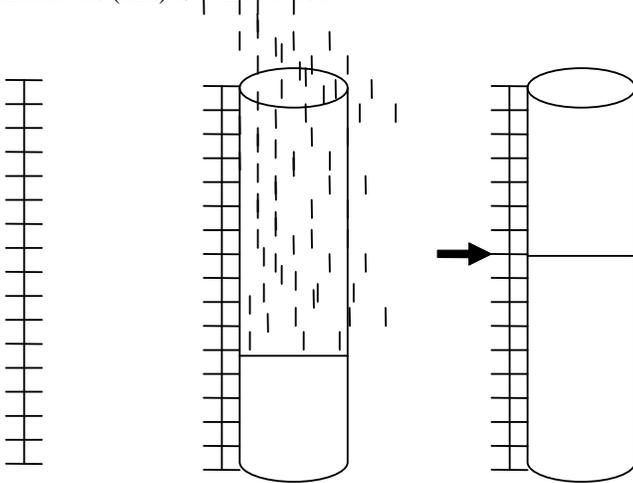
- Under the assumption that a typical farmer would not be able to pay for insurance premium before the harvest, accepted that Pride Tanzania should pay premium on behalf of the farmer. Premium to be paid together with loan after harvest.
- Requested that premium loaned by Pride not be charged interest.
- Need to decide the types of documents to be kept by farmer and PRIDE Tanzania to substantiate receipt of seeds from the supplier. Will the receipt be kept by PRIDE Tanzania or the farmer.
- Recommended that farmer should have two contracts – one with PRIDE Tanzania (for the loan) and another one with the insurance company (for the insurance scheme).
- Requested that the timing of loan repayment should not be at the peak harvest period when prices are low.
- Accepted that the farmer will bare risk/liability for loss of yield due to other hazards besides draught (i.e. floods, pests, diseases, etc)
- Requested that the implementation of the project should start as early as possible – before the end of year 2006.
- Expressed concern on the importance of issuing loans for other agricultural inputs and activities to compliment this for seeds. Otherwise farmer may fail to pay seed loan as a result of failing to adequately meet these other complimentary agriculture obligations.

4. Others

- Need brochures to educate further on the product.
- PRIDE Tanzania is not well known –need for more education.

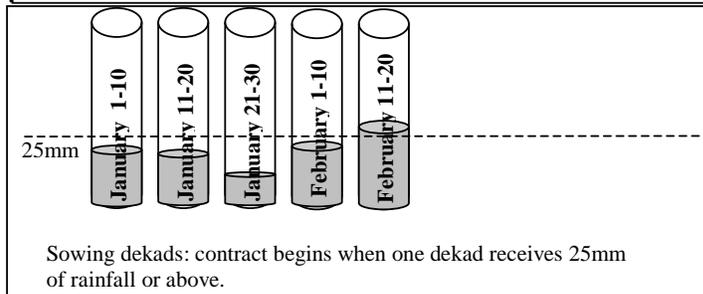
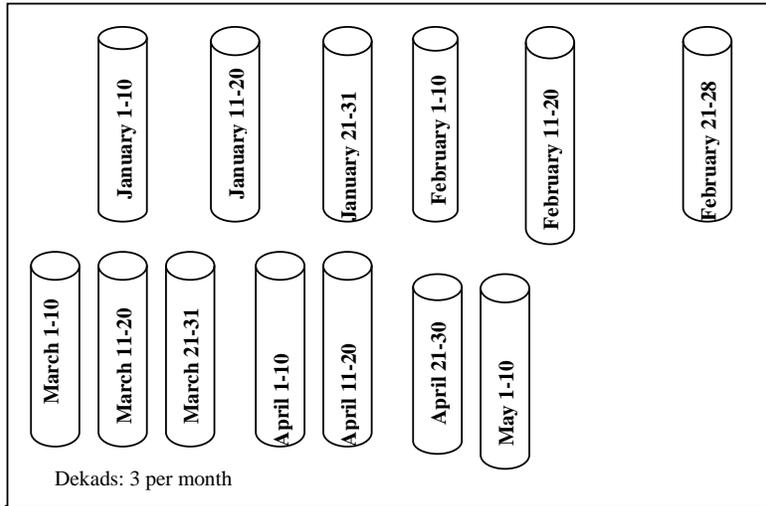
D. Client Information Sheet

BABATI DISTRICT CLIENT INFORMATION SHEET – INFORMATION ABOUT DROUGHT INDEX BASED INSURANCE PROJECT.

<p><i>What is Drought index based insurance project?</i></p>	<p>This is a project in which selected maize growing areas that are within 26 kilometres of Babati Automated Rainfall Station are given loans by Pride Tanzania to buy and grow improved maize seed.</p> <p>Pride is only willing to offer these loans to farmers provided that there is an insurance arrangement, which would pay off part or, all of the loan in cases of SEVERE drought resulting in farmers being unable to pay back the loan. This insurance is called weather index insurance and details of how it operates are explained below.</p>
<p><i>What is index insurance?</i></p>	<p>Index insurance is an insurance policy that takes effect when a certain condition is met – in this case, drought. Under drought conditions, the index insurance policy covers all or part of the loan amount, reducing the amount that farmers have responsibility for.</p>
<p><i>How is drought defined?</i></p>	<p>Drought is not measured by what happens in a farmer’s field .It is measured according to the amount of rain recorded at Babati Automated Rainfall Station. It is assumed that the rainfall received at the station is the same as that received by the farmer. Though this is usually not true, cases of severe drought will usually affect all farmers within a 26 kilometre radius in a similar manner. It is the effects of these severe droughts that the insurance program aims to protect farmers against.</p>
<p><i>How is rainfall measured?</i></p>	<p>Rainfall is measured at the Babati Automated Rainfall Station in a rain gauge, which collects rainfall over time. The amount of rain is measured in millimeters (mm). See illustration.</p>  <p>Millimeters (mm) measure length</p> <p>The rain gauge collects water for each dekad, up to 60mm.</p> <p>We can see how many millimeters (mm) have fallen in each dekad.</p>
<p><i>Is it possible for a farmer to suffer crop failure and yet not benefit from the insurance?</i></p>	<p>This insurance will not pay off the loan for cases where failure is due to other causes other than drought. As explained earlier, it will also be possible for a farmer to suffer minor drought conditions and yet receive no payout. This could happen when there is good rainfall at the weather station were rainfall is recorded and yet none or very little at the farmer’s field. For this reason, it is recommended that farmers must be as close to the weather station as possible. Farmers more than 25 km away are more likely to experience different rainfall patterns from those at the weather station.</p>

When is an insurance payout due?

1. Every month is divided into three periods called Dekads. The first two dekads are 10 days long with the last period comprising whatever days left in that month. Sowing is expected to occur within the period 1st January 2007 to 20 February 2007. It will be expected to occur in the first of the five dekads to receive total rainfall equal or above 25mm. If recorded rainfall for each of the dekads is below 25mm then sowing would be assumed to have failed and insurers will pay off 50% of the farmer's total loan and interest.



2. Where sowing has been successful (i.e one of the above mentioned dekads received more than 25mm of rain) a payout will also be made in accordance with the following table.

Crop development stage	Length of development stage.	If total rainfall received in the development stage is below this level a payout is made according to the payout schedule.
Germination and crop establishment	40 day period starting on the first day of the first 10 day period with total rainfall above 25mm. (4 dekads)	80mm
Tasseling and cob formation	50 day period (5 dekads)	115mm

<p><i>What are the obligations of the farmers?</i></p>	<ol style="list-style-type: none"> 1. Ensuring that farmers who receive maize seed under this project have at least one acre of land dedicated to growing this seed. 2. Ensuring that farmers actually grow the supplied seed as agreed. 3. Framers must follow good framing practices and plant as close to the contract start date as possible. 4. Each farmer must enter into a loan agreement with Pride Tanzania for financing of the seed. 5. Each farmer must undertake to pay back the loan to Pride Tanzania.
<p><i>What is the total loan amount per farmer?</i></p>	<p>The loan principal is composed of the cost of seed and insurance premium. The cost of seed will vary with the variety selected and the cost of insurance is 11% of the loan amount. If there is no drought, each farmer will be expected to pay back this amount plus interest at 30% per annum.</p>
<p><i>What's ahead?</i></p>	<p>If the project is successful, that is all the farmers who have received loans under this program repay their loans to Pride Tanzania as agreed, it is likely that the project will be expanded next year to include larger loans and possibly additional crops.</p>

