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MAIZE PILOT INTERIM DELIVERABLES

SEPTEMBER, 2018

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MAIZE PILOT INTERIM DELIVERABLES

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INCLUDED DELIVERABLES SUMMARY

Summary of deliverables included in and along with this report, is provided below. FMD's technical support for the Maize Pilot is carried out by four (4) STTA consultants; an insurance product local consultant, a microfinance product local consultant, a maize pilot lead local consultant, and an expat eWRS expert. Our consultants have worked in coordination with the FMD team and in collaboration with all the identified stakeholders of Maize Pilot.

1. Value Chain Overview
2. Maize Pilot Design
3. Pilot Operational Map
4. Maize Testing Protocol
5. Insurance Cycle
6. Financing Cycle
7. Insurance Product Design
8. Microfinance Product Design
9. Draft Agreements (as separate attachments)

I. MAIZE VALUE CHAIN

The following brief provides an overview of Pakistan's maize value chain and the positioning of a warehouse receipts regime.

Introduction

Maize is one of Pakistan's leading crops with an annual production of 7 million tons. At the average harvest-time price of Rs. 900-per-40kg, this crop is worth \$1.25 billion.

Maize is the third most important cereal after wheat and rice. It accounts for 8.5 percent of the total cereal cropped area, 2.2 percent to the value added in agriculture and 0.4 percent to GDP. The cultivation of corn and its multiple uses for domestic, commercial and industrial purposes plays a critical economic role in Pakistan by generating income and employment in its entire value chain.

Though corn is mostly known as a Rabi (winter) crop it is normally cultivated twice a year in Punjab and once a year in Khyber Pakhtunkhwa (KPK). The first cultivation season is known as spring (winter) season that normally starts in the middle of December in Punjab. The summer season begins in September and lasts till the start of December in both Punjab and KPK. Yields are lower in Punjab due to the high temperatures, but conditions in KPK are optimal at this time of year.

At present around forty percent of corn area is under hybrid cultivation while its share in production is about 70 percent. It should also be noted that the corn crop grown on around 50,000 hectares is used for making silage for livestock.

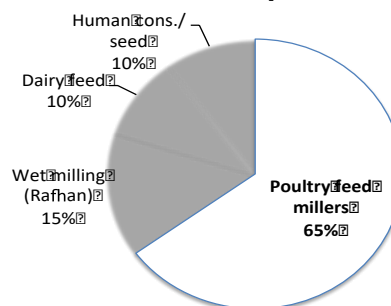
Corn Growing Areas

The bulk (99%) of the total production comes from two major provinces, KPK, accounting for 51 percent of the total area and 30 percent of total production and Punjab contributing 48 percent area, with 69 percent of total corn production. The provinces of Sindh and Baluchistan produce a very small quantity of corn. The production and yield in Punjab is higher than KPK mainly due to the use of hybrid seed and adoption of better agronomic practices. In Punjab the cultivation of corn is concentrated in Sahiwal, Arifwala, Pakpattan, Chiniot, Vehari, Lahore and Kasur areas. As for KPK, corn cultivation is scattered due to low land holdings. Approximately 65 percent of the maize in Pakistan has access to irrigation; the remainder is farmed under rain-fed conditions.

Consumption

Feed millers lead the consumption of maize (see figure 1). In terms of importance to the agricultural economy, the maize crop is comparable to the Basmati rice crop (see figure 2). Pakistan has been largely self-sufficient in maize so far. There are approximately 150 feed mills for poultry feed in the country with

Figure 1. Feed millers dominate maize consumption



an installed capacity of nine million metric tons of feed. Corn plays a growing role in the production of dairy feed concentrates. Wet milling industry use corn to produce starch for the textile industry and also to make various food products.

The Government of Pakistan imposes a thirty percent regulatory duty and ten percent customs duty on the import of corn, shielding producers from imports. The Pakistan Poultry Association has reportedly sought a tariff reduction, but without results thus far. The duty has resulted in no corn imports, in spite of the fact that Pakistan's domestic corn prices are much higher than international prices. The domestic price of corn at present is around \$240 per ton, while according to trade sources the price of imported corn C&F Karachi stands at around \$185 per ton. The feed industry is experimenting with sorghum and distiller dried grains as an alternative to corn, both attract lower tariffs and taxes than can corn.

The growth in corn has been led by the demand in the poultry and dairy feed sectors. Realizing the potential for immense growth, seed companies have led the way towards introducing hybrid corn varieties in Pakistan. The sales of corn hybrid seed vary according to seasons as 60 percent of total sales are realized in spring and 40 percent in autumn. The seed companies provide a comprehensive package to farmers including technology transfer and extension services. The field teams of the private seed companies have been pivotal in establishing corn as one of the rapidly growing grain crops in Pakistan. Corn farmers benefit from fertilizer, water, and power subsidies, a common fillip for most farmers in Pakistan.

Rising demand

The poultry sector is one of the most modern and vibrant segments of Pakistani agriculture. With 8-10 percent growth in the poultry sector, the feed millers realize that their demand will outstrip domestic maize cultivation in the coming few years. Therefore, feed millers are apprehensive that they may have to commence maize imports in the foreseeable future.

The quickest way to avoid imports of maize is to reduce the post-harvest loss of maize which is estimated at a minimum of 10% of total maize production. Ten percent of Pakistan's maize is worth \$125 million every year.

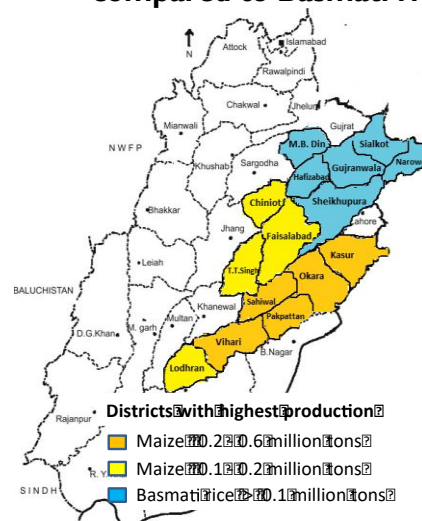
No incentives to reduce losses

The key reasons behind post-harvest losses of maize are the poor handling and improper storage right after harvest. Farmers conduct sun-drying of maize as this is practically free (see figure 3). Storage is also informally done in jute bags. Under the current ground realities, there is no incentive for the farmer to pay for better drying and storage.

The next link in the value chain is the aggregator. The common practice of aggregators is to mix good and bad quality maize to make a profit. This means that even bad quality sells and that the farmer is not rewarded for producing better quality maize.

Finally, aggregators send their good quality maize to millers since millers test for quality before accepting the commodity. Here, any maize that fails the miller's testing is taken back by the aggregator and sent to the wholesale market ('mandi') for sale. Since there is no testing at the wholesale market, the aggregator is able to sell the rejected maize as well. The feed millers, on their part, have invested heavily in silo capacity

Figure 2. Concentration of maize compared to Basmati rice



and testing equipment (see figure 4). So, the quality and quantity of maize is preserved once it enters the feed miller's facilities for processing and onward transmission to the poultry industry.

The bottom-line is that the current value chain does not give incentives to market players to invest in reducing losses from farm to factory. From the factory onwards, the infrastructure exists to preserve quality and quantity.

Creating incentives between farm and factory The warehouse receipts regime is a highly suitable intervention for creating incentives for the market participants to focus on preserving quality and reducing losses. On the one hand, the farmer has an urgent need for cash at the time of harvest since expenditures for the next crop's sowing need to be undertaken. The warehouse receipts regime addresses this need by unlocking credit to the farmer at this stage by making collateral out of the crop that has just been harvested. However, this credit can only be unlocked if the farmer's maize meets the quality standards set by the feed millers.

Here a clear incentive is created for the farmer to invest in better drying and preservation of the maize to ensure adherence to these quality standards. Viewed in this way, the broader goal of financial inclusion of farmers connects into a genuine need of the maize value chain today. The farmer also gets the benefit of selling the maize at a slightly better price a little later in the season and avoiding 'distress sale' at harvest time (when prices are the lowest).

On the other end of the value chain, feed millers have their own unique needs at the time of harvest. Their preference is to secure all the quality maize they can get at the low prices prevailing at harvest time. But their own financial protocols constrain how much exposure to inventory risk they can take at a given time. Often, some of the silo capacity of feed millers remains empty at the end of the harvest season. The warehouse receipts regime offers the millers a way to increase security of supply. This is because the regime allows the miller to secure more commodity within the factory silos without purchasing it just yet. The maize remains in the ownership of the farmer but sits in the miller's facility. An incentive structure is created in this way by the warehouse receipts regime.

Figure 3. Sun-drying of maize Okara, Pakistan



Figure 4. Silos at Islamabad Feed Mills (Okara, Pakistan)

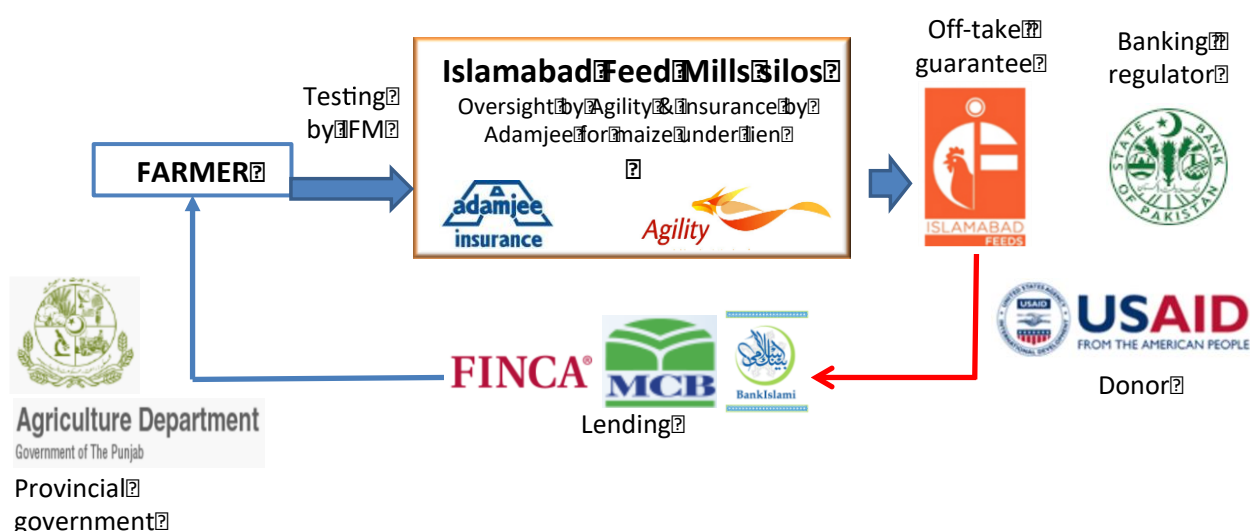


2. MAIZE PILOT DESIGN

The Maize Pilot was designed by the lead international expert, Mr. Andre van der Vyver in collaboration with the Maize Pilot consultants in Pakistan—Mr. Kazim Saeed, the local expert; Ms. Zarmeen Hassan, the financing expert; and Mr. Syed Hamid Raza, the insurance expert—in collaboration with stakeholders and counterparts, particularly including the Pakistan Agricultural Coalition, Agility, Islamabad Feed Mills, Adjamee, and financing partners. The design was submitted in June and has now been confirmed with the full project team as the basis of which they are operating and submitting their respective deliverables.

Pilot Design

Design and Stakeholder Engagement: Maize pilot 2018 at Okara



Pilot design

The above schematic summarizes the pilot design showing all stakeholders involved: Islamabad Feeds is the warehouse operator and conducts testing, handling, and storage of the farmer's maize as a specialist of this field. Islamabad Feeds issues the Goods Received Note (GRN) for each lot that passes the stipulated tests and enters the silos designated for this project. Agility Pakistan oversees the warehouse operator's adherence to the agreed processes and issues a warehouse receipt (VR) against the Goods Received Note. Agility Pakistan plays the role of the collateral manager and serves as the 'eyes and ears' of the lenders and the borrowers. Islamabad Feeds also pays the insurance premium to the insurer, Adamjee Insurance. Adamjee Insurance provides this insurance with the banks as co-loss payees to satisfy the banks' request to be paid their portion of insurance directly rather than through the warehouse operator as an intermediary. The banks lend to the farmer an amount equivalent to 70 percent of the value of the farmer's maize in the silo. Finally, Islamabad Feeds also offers an off-take guarantee to the banks confirming that Islamabad Feeds will purchase a farmer's commodity in the unlikely situation that the farmer is unable to sell it.

MCB Bank: MCB Bank in principle has agreed to participate in the project and will sign the two main project documents namely (I) a tripartite agreement between them, IFM and Agility

governing the issue and responsibility of the safe storage and offtake of the product, and (2) the internal procedures to be followed once MCB Bank receives the WR. In such a case they will start facilitating the first loan application using WR no 001 as collateral.

It should be added that MCB Bank is confident that they have sufficient farmer clients and has reserve a designated silo (no 21) for their clients only (capacity 2100 tons). They also undertook to spearhead the marketing in respect of their clients and are not solely dependent on Pakistan Agriculture Coalition (PAC), who facilitates the project.

MCB Bank's workflow document is comprehensive, carefully considered and formulated but appears lengthy (31 steps).

It is the first time MCB Bank is participating in a pilot of this nature and by their own admission it is the first time that they will be offering such service to individual farmer clients. The first farmer client delivering maize is an MCB Bank client.

It is worth mentioning that MCB Bank insisted on a letter from SBP granting them permission to participate in the agri-collateral pilot – which they received from State Bank of Pakistan..

Bank Islami: Bank Islami has participated in the paddy pilot in fall 2017, although small, but are familiar with the processes. Farmer 2 delivering product is a Bank Islami farmer. WR no 004 was issued in his name. Bank Islami has already processed the application and disbursed in the week of 18 June. In the case of Bank Islami, loans will be facilitated on the shariah finance concept.

FINCA: FINCA is a microfinance bank active in the agriculture sector. They accept the bona fide process of issuing a WR (particularly with MCB Bank and BIPL being satisfied), however, they have their own ideas to efficiently implement a quick turnaround process of loan applications for smallholder farmers. Details to be discussed and agreed. They are high-tech driven and mobile enabled communication for smallholder farmers is important for them.

Akhuwat: Negotiations were conducted with this Islamic microfinance bank but their final decision was to postpone participation to a later pilot.

Insurance

Adamjee Insurance: They are Pakistan's leading insurer and are active in insurance linked to agri-warehousing. Two types of insurance, normal commercial insurance and takaful (Islamic insurance) (see Annexure 2) have been developed by them for this pilot.

Facilitation and coordination of pilot

Pakistan Agricultural Coalition (PAC): PAC is a non-profit established by 25 of Pakistan's leading business groups active in agricultural value chains. Its mandate is to develop new business models such as the warehouse receipts eco-system which can encourage agricultural growth. PAC has spearheaded the development of the agri-collateral financing model for Pakistan and has led all the pilots over the past two years. An agri-collateral financing system requires the participation of various different industry stakeholders. Stakeholders do not necessarily have the technical knowledge on the workings or mechanisms required by counterparty stakeholders to manage their businesses successful, neither is this required. For example, it is not required for a financier to understand the relevance of moisture levels, however, it is important to know that the bank's collateral is "safe". For

this reason counterparty stakeholders perform professional services and provide guarantees. PAC has been the entity which has worked intensively with the many stakeholders of this pilot to produce a seamless workflow and robust risk mitigation structure acceptable to all parties.

Theoretically, the issuing of guarantees by the warehouse operator (IFM), the collateral manager (Agility) and the insurer should be enough. However, from a practical point-of-view, in most countries, counterparties often require insight into the process of product verification and storage practices that lead to the issuing of the guarantees. PAC has played a role that has instilled confidence among partners in this multi-stakeholder project.

Provincial Government

Government of Punjab Agriculture Department was engaged by Pakistan Agricultural Coalition (PAC). PAC was able to secure their involvement in building awareness among farmers about this pilot. PAC trained extension officers of the Agriculture Department on the warehouse receipts system so that they can spread awareness among farmers. The Government of Punjab also developed and published a detailed brochure with PAC support which was widely distributed.

Central bank

State Bank of Pakistan was engaged by Pakistan Agricultural Coalition (PAC) for its broad oversight of the pilot and encouragement of banks to participate. The State Bank made a critical contribution by issuing a letter stating that the warehouse receipt issued by Agility can be used as collateral for lending. The State Bank also hosted an awareness event for a large number of agri-credit officers from all banks at Okara on July 10 to highlight the pilot's design and processes.

1.1 Intake

Documentation

Throughout the arrival and delivery process important documentation is generated. On arrival, the driver is provided with a "Test lab and unloading slip" uniquely identifying the tractor and trailer (or truck) and other key criteria such as product, number of bags, initial moisture testing and designate silo.

Initial moisture testing

Designate silo facility

پاکستان ایگریکلچرل کالیشن C/O اسلام ٹرسٹ (پرائیویٹ) لمیٹڈ
 ان لوڈنگ سلب
 تاریخ: 7-6-18
 مال اور تعداد پوری
 ٹرک نمبر: KS-3820
 پارٹی نام: محمد رفیع الرحمن
 لیبرزک: M = 11.7, 11.7, 11.4
 آن لوڈنگ سائٹ: 5821
 نوٹ: Silo/ MCB

Number of bags

Vehicle number plate

Key criteria again appear on subsequent documentation – linking the vehicle and product from one process to the next while adding more criteria, in this case the gross and net weight.

WEIGHMENT SLIP - RAW MATERIAL ARRIVAL

Date: 7 Jun 2018 (Inward) Time: 01:12 PM

Card No.: 1100010842 Vehicle No: KS3820 MCB

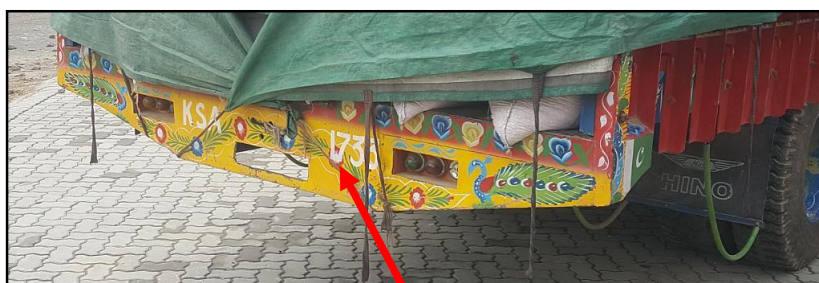
Party: 21-00-03 - Dummy Purchase Code

Agency: Unloading Person:

Remarks: Freight: 0.00

Actual Party: 00-00-000-0000 Rejected Bags: 0

| Weighment | User | Validation Weight | Date/Time | Weight |
|---------------------------|-------|-------------------------|---------------------|----------|
| First | SCALE | 26180 Kg | 07/06/2018 11:06:59 | 26180 Kg |
| Second | SCALE | 6220 Kg | 07/06/2018 13:12:32 | 6220 Kg |
| Safi Weight: 19,902 Kg | | Party Weight: 0 Kg | Net Weight: 19,960 | |
| Product: 0-10-100-01 Maiz | | Average Weight: 68.6276 | Total Bags: 290 | 58 |



1st load designated for financing by Bank Islami, 9 June 2018

ismillah Goods Transport Company

بسم اللہ گنز ٹرانسپورٹ کمپنی

0300-6964572
0333-6962685

تاریخ: 8/6/18

نام ڈرائیور: محمد رفیع 1733

لینڈنگ کانسٹ: 2000000000

کوڈ: BIDL

Visual number plate verification is an important part of the process.

Maximum moisture 12.0% - in line with international standards.

[illegible]

Referring again to the Weighment Slip, the bottom part contains the weight adjustments related to bag weight (200g), moisture deduction (from 12.0% to 9.0%) and trash (0.5%). These are standard deduction (and less than what you would find on the local mandi). What is more, should the farmer not sell to IFM in the end and remove his product, if the moisture reduction is less than 3.0%, he would be credited with the difference. In addition, he would also be credited with the weight of the bags –this is a very fair deal to the farmer.

| Date/Time | Weight |
|---|----------------------|
| 07/06/2018 11:06:59 | 26180 Kg |
| 07/06/2018 13:12:32 | 6220 Kg |
| 0 Kg | Net Weight: 19,960 |
| ht: 68.6276 | Total Bags: 290 → 58 |
| <div> <div> <p>Bag weigh is first deducted @ 200g/bag</p> <p>Moisture 3% = 597kg</p> <p>Trash 0.5% = 100kg</p> </div> <div> <p>19902</p> <p>19902</p> <p>597</p> <p>19905</p> </div> </div> | |
| <div> <div> <p>0.058</p> <p>+19.205</p> <p>= 19.263</p> </div> </div> | |

The 4th document issued is the GRN. It summarises all the essential information, again linking (matching) previous information. Important is the unique GRN no. in this case no. 001 (MCB Bank's first load for financing).

| | | | |
|--|--|---|--|
| Islamabad Feeds (Pvt) Ltd. | | GOODS RECEIVED NOTE | |
| Goods Received Note no. → 001 | | Date of issue : 7-Jun-18 | |
| Received from : Muhammad Asif S/O Sakhi Muhammad | | Vehicle no. | |
| Address : MCB Bank Deepalpur Store. | | No. of bags : | |
| CNIC No. 3 5 3 0 1 - 2 0 2 2 1 0 3 - 7 | | Gross Weight 26.18 MT | |
| Description of Goods : Pakistan Yellow Maize | | Net Deliverable Weight 19.263 MT | |
| Moisture : 12% max | | Date of receipt into storage: | |
| Broken : 2% max | | Received at : Islamabad Feed Mills, | |
| Damaged/Discoloured : 0.5% max | | Silo no. 21, 9-km Deepalpur Road, Okara | |
| Foreign Matters : 0.5 % max | | Price per maund : Rs. 980.00 | |
| | | Total value : Rs. 471,943.50 | |

The GRN is personally signed off by the mill CEO, Dr Sohail Ahmad, a very positive sign of confidence – top management directly involved.

| | | | |
|----------------------------|--|----------------------------|--|
| Islamabad Feeds (Pvt) Ltd. | | Dr. Sohail Ahmad | |
| | | Mill Manager | |
| | | Islamabad Feeds (Pvt) Ltd. | |
| | | 9-Km Deepalpur Road, Okara | |
| Sign/stamp : | | | |

Lastly, the current procedure requires the GRN to be collected by the farmer and signed. What is important, the essential terms and conditions appear on the bottom part of the GRN – there is no room for misunderstanding. Note, in line with global standards, it is not compulsory for the farmer to sell his product to IFM, he can remove the product at any time on the proviso that he pays back the loan, interest and charges.

| |
|---|
| <p>Terms and conditions: A trash percentage of 0.5% and an estimated moisture loss of 3% during the storage period have been deducted from the net weight delivered. At the time of release of stocks from the silo, the deduction for moisture loss will be based on the actual moisture loss determined at that time.</p> <p>Depositor hereby agrees to secure an NOC from any bank to which the above lot is under lien and to pay collateral management charges @Rs.0.00542 per kg per day for the above-mentioned lot payable to the Bank for onward payment to Agility and Islamabad Feeds (Pvt) Ltd., failing which the lot will not be released to him from the warehouse.</p> <p>If Depositor chooses to sell this commodity to any party other than Islamabad Feeds (Pvt) Ltd., he will pay the additional release charges of Rs. 13 per maund to the Bank for onward payment to Islamabad Feeds (Pvt) Ltd.</p> <p>I, undersigned, agree with the above-mentioned weight calculation, price estimation and terms and conditions.</p> <p>Name of lot owner: _____</p> <p>Date: _____</p> <p>Signature of lot owner: _____</p> |
|---|

Designated storage

Islamabad Feeds has kindly allocated a designated separate storage space for the maize intended as collateral against the loans awarded by MCB Bank and Bank Islami. Each bank has its own silo. Given the stringent quality certification, global best practises allow the maize to be co-mingled. This an additional benefit to create confidence to the financier and the insurer, that the product (collateral) could be directly linked to the financier.



Note the exact two silos allocated to the financiers

Agility has also gone one step further, it has sealed the bottom discharge shoot of each silo ('locked down') meaning no maize could accidentally or deliberately be discharge without the seals forcefully removed.



A load destined for financing by MCB Bank.



F.I.t.r. Dr Ahmed (IFM), Imtiaz Dogar (PAC) and Sohail Sindhu (Agility)

Weighbridge security camera system


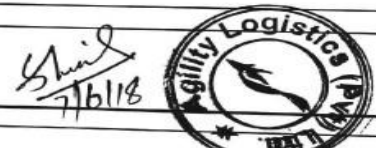
CCTV cameras are installed that are monitoring in- and out-weighing.



Right: Taken from the CCTV camera

Agility Warehouse Receipt

After IFM has issued the GRN, thereby accepting responsibility for product quantity and quality, Agility now issues the Warehouse Receipt. Having a designated manager on-site, Agility assumes dual responsibility. It speaks for itself that each stakeholder in the process independently verifies the product documentation since each in its own right is responsible. Again, compared to global standards, this is more than what is usually required. In most cases certification by a warehouse operator (IFM) will be sufficient for financiers and the insurer.

| | | | |
|--|--|--|--|
| Agility Logistics (Pvt) Ltd. | |  <i>Global Integrated Logistics</i> | |
| e-WAREHOUSE RECEIPT | | | |
| "Under Pledge with MCB Bank Ltd." | | e-Warehouse Receipt no. MCB-AG001 | |
| Received from : Muhammad Asif s/o Sakhi Muhammad Address : MCB Bank Deplapur Store | | Date of issue : 7-Jun-18 | |
| IFM GRN no. 001 | | Dated 7-Jun-18 | |
| CNIC No. 3 5 3 0 1 - 2 0 2 2 1 0 3 - 7 | | Vehicle no. KS 3820 | |
| GROSS WEIGHT 26.18 MT | | No. of bags : 290 | |
| Description of Goods : Pakistan Yellow Maize Moisture : 12% max Broken : 2% max Damaged/Discoloured : 0.5% max Foreign Matters : 0.5 % max | | Net Deliverable Weight 19.263 MT | |
| | | Date of receipt into storage: 7-Jun-18 | |
| | | Received at : Islamabad Feed (Pvt) Ltd., Silo no. 21-MCB, 9-km Depalpur Road, Okara | |
| | | Price per maund : Rs. 980.00 | |
| | | Total value : Rs. 471,943.50 | |
| Agility Logistics Pakistan (Pvt) Ltd. | | | |
| Sign/stamp : | |  | |
| Terms and conditions: A trash percentage of 0.5% and an estimated moisture loss of 3% during storage. | | | |

Note – data correspond with previous documentation.

1.2 Warehouse Receipt to Loan Disbursement

The farmer, which is a client of the respective financier, will collect and sign-off on the GRN and Warehouse Receipt, take the documentation to his local branch manager which has already been informed on the agri collateral financing process and will award him the loan. The warehouse receipt will be pledged to the financier and not released until full payment of the loan, interest and other charges.

Financiers

Four potential financiers have been lined-up to participate in the project. They are MCB Bank, Bank Islami, FINCA and Akhuwat. The latter two are micro finance banks. Progress made differs significantly between the financiers and therefore the report will deal with them separately. Not only does the progress differs but the internal required documentation workflow is also different. This in itself makes it challenging since the objective of a VR program is to keep workflow as generic as possible to achieve maximum efficiency. It also increases marketability (one outgoing message) and save costs - less individual stakeholder customisation of the software system.

It also appears that finance will be done on a daily adjusted product price as well as a daily adjusted KIBOR rate publish by the SBP. This complicates matters and requires customisation of the software. Outlined customizations will be reviewed with the selected software vendor and will be pursued in consultation with stakeholders, as allowed within the allotted budget.

The following Operational Map details documentation and responsibilities of each stakeholder in the above described system.

3. OPERATIONAL MAP

| Activity |
|--|
| <p>PRE-PILOT ACTIVITY</p> <ol style="list-style-type: none"> 1. Bank will shortlist (clean eCIB) farmers/borrowers. PAC will also share a list of interested farmers with Bank. 2. If farmer/borrower is not an existing customer, he/she will open account with Bank local branch Document: Bank's account opening form Responsibility: Bank |
| <p>PRE-PILOT ACTIVITY</p> <ol style="list-style-type: none"> 3. Agility will inspect the designated silo facility of IFM, in order to confirm suitability of the same for collateral management operations and share Silo Inspection Report with Bank with copy to PAC. Document : Silo Inspection Report Responsibility: Agility 4. IFM, Agility and Bank will sign collateral management agreement Document: Collateral Management Agreement Responsibility : IFM, Agility & Bank 5. IFM will obtain insurance (conventional and Takaful) of the maize stocks to be stored in the silos. Document: Stock declaration with details of maize stocks (quantity/value of maize) Responsibility : IFM 6. Adamjee Insurance will provide quotation based on the declaration provided by IFM Document : Quotation Responsibility : Adamjee Insurance 7. IFM will confirm Adamjee to procure the insurance and pay policy premium Document : Premium payment to Adamjee through cheque / pay order) Responsibility : IFM 8. Upon receipt of payment, Adamjee will issue insurance policy and relevant documents to IFM Document : Insurance Policy, Policy Schedule, Premium payment receipt Responsibility : Adamjee Insurance |
| <p>IN-PILOT ACTIVITIES FROM HERE ONWARDS</p> <p>Receipt of Goods</p> <ol style="list-style-type: none"> 9. IFM will register the vehicle of the farmer/borrower upon arrival at the storage facility 10. IFM will perform random sampling from the accessible bags of the loaded vehicle to obtain a sample of the goods. The drawn sample will be marked with relevant details i.e. sampling date, borrower's name/ID, estimated quantity and will be submitted at IFM's in-house lab for testing purposes. IFM lab will issue a test report to Agility with copy to PAC in a form and format agreed between IFM and Agility Document: Test Report Responsibility: IFM |

| |
|---|
| <p>11. Goods will be weighed by IFM on the weighbridge and gross and net weight will be ascertained by IFM before unloading into the designated silo.</p> <p>12. IFM will also carry out random sampling during unloading and upon noticing any major variation in the quality parameters on visual basis will reject the balance Goods.</p> <p>13. Upon completion of unloading, IFM will issue a Goods Received Note (GRN) to Agility with copy to PAC and the farmer/borrower which will include borrower's information, maize grade, vehicle number, and quantity details.</p> <p>Document: Goods Received Note (GRN) Responsibility: IFM</p> |
| <p>14. On the basis of GRN issued by IFM, Agility will issue a Warehouse Receipt to Bank and Farmer/Borrower and will also send the scanned copy of the Warehouse Receipt to PAC and Bank indicated by Farmer/Borrower via email.</p> <p>Document: Warehouse Receipt Responsibility: Agility</p> |

In the event of an insurance claim

| Activity |
|---|
| <p>15. IFM will notify Adamjee about the insurance event resulting in a loss or damage under the policy as soon as possible with relevant details i.e. policy and/or certificate of insurance number, location of loss, type of damage and contact numbers of person concerned and fill the claim file.</p> <p>Document : Notification to Adamjee on prescribed format as per policy document/Claim form Responsibility : IFM</p> |
| <p>16. Adamjee Insurance will, depending on the magnitude of loss, appoint either an officer of the company or a SECP certified loss adjuster to inspect and adjust the loss in line with the terms, exclusions and conditions of the specific policy. The surveyor after assessing the loss will settle the claim as per the agreement and may request IFM to sign an acceptance where after the survey report along with all requisite documents will be issued by the loss adjusters advising the payable amount.</p> <p>Document : Surveyor's report Responsibility : Adamjee</p> |
| <p>17. Adamjee will make the payment of claim through a cross cheque in the names as per their respective shares (bank/IFM) as per the policy document.</p> <p>Document : Payment cheque Responsibility : Adamjee</p> |

Collateral Release Process

| Activity |
|---|
| <p>18. Farmer/Borrower will settle loan (principal + markup + collateral management charge) – it is important that farmer/borrower is allowed to settle a portion of the loan at a time</p> <p>19. Agility will advise the Farmer/Borrower's collateral management charge for the collateral to be released to Bank with copy to PAC by email.</p> <p>Document: "Collateral Management Charge Advice" (for part or full collateral)</p> <p>Responsibility: Agility</p> |
| <p>20. Bank will deposit the collateral management charge in Agility account and confirm same by email.</p> <p>Document: email confirmation from Bank to Agility</p> <p>Responsibility: Bank</p> <p>21. Bank will issue Release Order to Agility</p> <p>Document: "Release Order" (for part or full collateral depending on payment) from Bank to Agility</p> <p>Responsibility: Bank</p> <p>22. "Release Order" from Agility to IFM</p> <p>Document: "Release Order" (for part or full collateral depending on payment) from Agility to IFM</p> |
| <p>23. IFM will complete the withdrawal process and inform Agility.</p> <p>24. Agility will inform Bank via email with copy to PAC when withdrawal has been completed.</p> <p>Document: Updated stock report by Agility to Bank.</p> <p>This will close the transaction</p> |

4. MAIZE GRADE TESTING PROTOCOL

Maize testing protocols:

The quality of maize is of critical importance throughout the maize value chain. Islamabad Feeds requires maize of a fixed quality that complies with its needs for manufacturing specific feed products that meet the poultry industry's demand. The farmers must deliver grain that complies with the required specifications and are remunerated for the maize they deliver in accordance with its quality. Islamabad Feed Mills determines the quality of the grain to establish whether it complies with the required standards and then store it in the silos securely until it can be released back to the farmers or sent for processing, in case of farmers decide to sell the maize to Islamabad Feeds. Following are the specifications/test parameters on which Islamabad Feeds procures from the farmers/traders:

Moisture content

Moisture content is one of the main grading factors in maize, as it is a critical factor in storage. It is an indication of the water per unit mass of grain and is expressed on a percentage basis. Moisture content does not affect maize quality directly, but influences quality, as grain spoils at a moisture content higher than that recommended for storage. The maximum moisture at which maize is stored by Islamabad Feeds is 12%.



Broken grains

Maize and broken pieces of maize which pass through a metal sieve with round holes whose diameter is 4.5 mm are graded as broken grains. Any whole maize that goes through the sieve should be considered broken. The maximum limit for Broken grains accepted by Islamabad Feeds is 2%.



Foreign matter

Foreign matter is material other than maize, for instance sand, stones, plastic particles, metals and glass that contaminates maize. In the grain industry, the presence of foreign matter exceeding the permissible foreign matter measure leads to lower grades, lower prices or the rejection of the grain. This is determined by physically removing foreign matter by hand from a sample. Each grade of grain is subject to a limit for foreign matter. The maximum permissible foreign matter in maize is 0.5% for grade I established by Islamabad Feeds for procurement purposes.



Damaged/discoloured grains

Damaged grains are those grains that are visually detected to be damaged and they have a negative effect on the value of the grain. Grains can be damaged by insects, heat, budding, frost, diseases and poor grain fill. This is determined by physically removing damaged grains by hand from a sample. The number of

damaged grains for each grade is limited. Wheat, for example, may contain a maximum of 2% damaged grains of the total weight.



List of partners

| S. no. | Name of partner | Role |
|--------|---|--|
| 1. | Islamabad Feeds (Pvt) Ltd. | Warehouse Operator & Guaranteed Off-taker |
| 2. | Agility Logistics (Pvt) Ltd. | Collateral Manager |
| 3. | MCB Bank Ltd. | Financier – Conventional Bank |
| 4. | Bank Islami | Islamic Bank |
| 5. | FINCA Microfinance Bank | Microfinance Bank |
| 6. | Adamjee Insurance Company | Insurer |
| 7. | State Bank of Pakistan & Securities & Exchange Commission of Pakistan | Regulators |
| 8. | Agriculture Department, Government of Punjab | Provincial Government |
| 9. | Designer and Facilitator | Pakistan Agricultural Coalition |
| 10. | Technical Assistance | USAID' Financial Market Development Activity |

Key responsibilities of stakeholders are as follows:

Islamabad Feeds (Pvt) Ltd.

IFL assumed the role of the Warehouse Operator providing, *inter alia*, warehousing and ancillary services as follows;

- IFM agrees to provide suitable sampling/testing, weighing, insurance, warehousing and infrastructural facilities for storage of the Commodities (pledged or to be pledged to the Bank by the Borrowers) at the Designated Warehouses in accordance with best industry practices.
- IFM shall at all times and from time to time allocate and make available adequate and segregated areas in the Designated Warehouse to be used solely for storage of the Commodities.
- IFM shall be responsible to maintain the required storage conditions necessary for safe custody and storage of the Commodities pledged to the Bank.

- IFM shall at all times and from time to time, inclusive of over and above the normal working hours, permit the Collateral Manager and the Bank to inspect the Commodity and inspect the Designated Warehouse at their sole discretion.
- IFM shall at all times and from time to time ensure that the Commodities stored at the Designated Warehouses shall be kept duly insured, for the entire duration of the financing provided to relevant Borrower depositing its Commodities at the Designated Warehouse, against all such risks as may be required by the Bank and as more fully detailed in clause VII of Part 2 of Annexure A by an insurance company acceptable to the bank. Under the pilot IFM will arrange insurance (for Fire, Burglary, Riots & Strikes & Malicious Damage & Atmospheric Disturbance) from Adamjee .
- Though claims for insurance will be lodged by IFM, the bank being the beneficiary in each case, will receive all such claims directly from the insurance company (Adamjee in this case) without any involvement of IFM.

Agility Logistics (Pvt) Ltd.

Agility is a Collateral Manager providing, *inter alia*, collateral management services as described in Annex A Part I;

- Agility hereby acknowledges that the Warehouse Receipts shall accurately represent the Commodities of the Borrowers stored in a Designated Warehouse based on Goods Received Note issued by IFM and in the event of any discrepancy between the Commodities of the Borrowers stored in a Designated Warehouse and the corresponding Warehouse Receipts, Agility shall pursue IFM for urgent removal of discrepancy.
- Agility acknowledges and will ensure through monitoring of IFM Silos that the Commodities stored in the Designated Warehouse(s), once pledged to the Bank, shall at all times remain under the Bank's pledge / charge as security for finance facilities provided by the Bank to Borrowers.
- Upon the deposit of the Commodity by any Borrower of the Bank at a Designated Warehouse, Agility shall mark a pledge over such Commodities in its records in favour of the Bank and shall only release the pledged Commodity from its Designated Warehouse(s) upon receipt of a release notice from the Bank. Agility further acknowledges that till such time the Bank's pledge over the Commodities stored in the Designated Warehouse(s) is effective, it shall not acknowledge any charge and/or encumbrance of any person over such pledged Commodities other than that of the Bank.
- Agility further agrees not to deal in or lending/financing against the Commodities in any manner without written instructions from the Bank.

- Agility shall not enter into any agreement, arrangement and/or understanding with the Borrower with regards to the Commodities of such Borrower stored in the Designated Warehouse and pledged in favour of the Bank.

MCB Bank Ltd.

For purposes of clarity, it is agreed between the Parties that the Bank's participation in the Project and provision of financing to Borrowers shall be at the Bank's sole and absolute discretion on such terms and conditions as it deems fit and subject to the Bank's internal policies, approvals and procedures and execution of all legal documentation and formalities required by the Bank from the Borrowers

- Develop/structure an arrangement product for the Warehouse Receipt Financing Project to enable sellers to borrow against Maize collateral
- Ensure that Borrowers can make partial repayments of their loans with partial release of Commodity
- Develop process flow of borrowing and settlement life cycle
- Conduct a marketing campaign among maize farmers in the areas surrounding IFM's Okara site to secure their participation the pilot
- Conduct KYC of the potential borrower.
- Lend to Borrowers against the Warehouse Receipt issued by Agility.
- For each prospective repayment by a Borrower, request Agility by email for the applicable Collateral Management Charge and receive this charge from the Borrower in addition to the repayment.
- Pay the portions of the Collateral Management Charge to Agility and IFM as per Annexure B at the end of the Warehouse Receipt Financing Project.
- share details of interested applicants/borrowers (Name, CNIC) with IFM through Email whereby such email contacts of the relevant /authorized parties have already been shared.

5. INSURANCE CYCLE

- Warehouse operator to approach the insurance company to obtain the appropriate insurance of the stocks as per the participating banks' requirements.
- Insurance company to provide quotation to the warehouse operator mentioning the participating banks and other stakeholders as the co-loss payees.
- Warehouse operator to accept the terms and conditions of the quotation.
- After warehouse operator negotiates insurance terms/payments and agrees with insurance company, insurance company to conduct the survey of the site and issue its survey report.
- Warehouse operator to pay the premium
- Policy documents i.e. Cover Note, Insurance Certificate, Insurance policy and Premium Payment Receipt to be issued to the warehouse operator.
- In case of any event of loss
- Warehouse operator to immediately notify the insurance company about the loss inline with policy terms and conditions.
- Insurance company to conduct the survey as per its standard operating procedures and settle the claim as per the findings of survey report and insurance policy's terms and conditions to the all insured parties on pro rata basis.
- Close out the transaction with the required reconciliation between warehouse operator and insurance company.

6. FINANCING CYCLE

- Interested farmers to approach bank's designated local branch with valid CNICs
- Bank to conduct eCIB and shortlisted (clean eCIB) farmers/borrowers' list to be shared with warehouse operator and collateral manager.
- If farmer/borrower is not an existing customer, account to be opened with the bank's local branch.
- Farmer/borrower to sign financing agreement and other required documents.
- Farmer/borrower to deposit his produce at the designated warehouse to get quality and quantity of his produce ascertained.
- Once quality is approved, obtain copy of the Goods receipt Note and Warehouse Receipt from the Collateral Manager.
- Visit the designated branch with the copy of Warehouse Receipt
- Bank to verify the Warehouse Receipt with the electronic copy of the Warehouse Receipt received from the Collateral Manager.
- After verification disburse the loan amount into farmers account as per stipulated time period.
- At the time of sale, repay the loan amount together with collateral management charges into bank's designated branch.
- Bank to issue release order to the Collateral Manager and confirm receipt of collateral management charge from the borrower/farmer.
- Collateral Manager to release the stock to designated receiver.
- After release, Collateral Manager to update the stock report and circulate to all concerned.

- This ends the transaction.

7. INSURANCE PRODUCT DESIGN

This section covers the development of maize collateral management pilot design (with models and product design) for the insurance component.

Introduction of Maize Pilot and Stakeholders

The maize collateral management pilot being led by Pakistan Agricultural Coalition simulates the envisaged collateral management regime as closely as possible: Islamabad Feed Mills is the warehouse operator, Agility Pakistan is the collateral manager, and each of the three types of banks operating in Pakistan are participating (MCB is a conventional bank, BankIslami is an Islamic bank, and FINCA Bank is a microfinance bank). This is the best occasion to produce tailored insurance products which are acceptable to banks, the warehouse operator, and the collateral manager.

Insurance policy components (Conventional)

When choosing a policy, it is important to understand how insurance works. Three important components of insurance policies are the **premium, policy limit, and deductible**. A firm understanding of these concepts goes a long way in helping choose the policy that best suits the required needs.

A **policy's premium** is its price, typically expressed as a monthly cost. The premium is determined by the insurer based on the business's risk profile, which may include creditworthiness. However, different insurers may charge different premiums for similar policies; so, finding the price that is right for the required work needs some legwork.

The premium calculation for the pilot is as follows:

| Premium Computation | | |
|---|--------|---------------|
| Premium details | Rate % | Amount (PKR) |
| Fire Stock | - | 75,600 |
| Administrative Service Contract (ASC) | 5.00 | 3,780 |
| SUB TOTAL | | 79,380 |
| Federal insurance Fee | 1.00 | 794 |
| Sales Tax on Services / Federal Excise Duty | 16.00 | 12,701 |
| Stamp Duty | | 20 |
| Advance Tax | | 0 |
| NET PREMIUM | | 92,895 |

The premium amount of Rs. 92,895/- will be payable upfront before the pilot starts.
Note: As per SECP, no policy may be issued without a premium payment.

The policy limit is the maximum amount an insurer will pay under a policy for a covered loss. Maximums may be set per period (e.g., annual or policy term), per loss or injury, or over the life of the policy, also known as the lifetime maximum. Typically, higher limits carry higher premiums.

| | |
|--|---|
| MCB Bank Ltd. Stock of maize 2,100 mt Sum Insured : Rs. 47,250,000 | FINCA Microfinance Bank Stock of maize : 300 mt Sum Insured : Rs. 6,750,000 |
| Total Sum Insured : Rs. 54,000,000 | |

The deductible is a specific amount the policy-holder must pay out-of-pocket before the insurer pays a claim. Deductibles serve as deterrents to large volumes of small and insignificant claims. Deductibles can apply per-policy or per-claim depending on the insurer and the type of policy.

The proposed deductible agreed upon for the pilot is “Each and Every loss 5% of the sum insured or Rs. 20,000/- whichever is less”.

Type of cover means type of protection provided by the policy. In Pakistan, banking sector generally requires and accepts Fire and Allied Peril Insurance against pledged stocks which provides compensation to the insured person or firm in the event of damage to the property insured (i.e. buildings, stock, machinery and other contents) caused by Fire, Lightning, Riot and Strike, Malicious Damage, Explosion, Atmospheric Disturbance (Flood, inundation, etc.), Earthquake, Fire & Shock, Aircraft Damage, Impact Damage & Burglary.

Peril means a potential cause of loss or damage to the property. Perils can be insured or uninsured, both are usually named on the insurance policy. It is therefore important that loss adjustment procedures enable distinction to be made between damage caused by insured and uninsured perils.

The main perils covered in stock insurance for the maize pilot is “Fire and Allied perils Insurance” which include Fire & Lighting, Riot & Strike Damage, Malicious Damage, Earthquake (Fire & Shock), Explosion, Atmospheric Disturbance, Aircraft Damage, Impact Damage & Burglary.

Each component of the perils is described as under:

- Fire & Lighting: covers a policyholder against fire loss or damage from many sources. Sources include fires brought about by electricity, such as faulty wiring and explosion of gas, as well as those caused by lightning and natural disasters.
- Riot & Strike Damage : Riot and damage insurance coverage for damage to property resulting from riot and strike damage. Riot and strike damage is defined by most state laws as a violent disturbance involving three or more persons from the point of same intention.
- Malicious Damage is damage caused on purpose to the property of another person.
- Earthquake (Fire & Shock) Earthquake Fire covers the insured property against direct loss or damage caused by fire following an earthquake, while Earthquake Shock covers against loss or damage (other than fire) occasioned by or through or in consequence of earthquake
- Explosion refers to insurance coverage that covers property loss resulting from rapid nuclear or chemical reactions that produce heat, light, noise and a shock wave, or otherwise commonly known as an explosion
- Aircraft Damage : Loss, Destruction or damage caused by Aircraft, other aerial or space devices and articles dropped there from excluding those caused by pressure waves.
- Impact damage
- Burglary : Theft following forcible and violent entry to the premises.

Sum Insured: The maximum liability of the insurer under an insurance contract. For the maize pilot the sum insured is equivalent to the total value of maize stock to be stored in the silos. Details as follows:

| | |
|--|---|
| MCB Bank Ltd. Stock of maize 2,100 mt Sum Insured : Rs. 47,250,000 | FINCA Microfinance Bank Stock of maize : 300 mt Sum Insured : Rs. 6,750,000 |
| Total Sum Insured : Rs. 54,000,000 | |

Period of Insurance : The period of protection for which the policy is issued. Any losses taking place outside this period are not indemnified. The proposed period of insurance for the maize pilot agreed to be from 20/06/2018 to 19/12/2018.

Clauses Applicable: Terrorism Exclusion Clause (Fire) Cyber Exclusion Clause.

Geographical Limit : The geographic region or location in which benefits of an insurance policy may apply and be applied for the purposes of filing a valid claim – For the maize pilot it's Pakistan

Jurisdiction: over a territory relates to the geographic area over which a court has the authority to decide cases. The insurance is subject to Pakistan law, practice and jurisdiction.

Terms & Conditions : These are the general terms and conditions for the insurance contract that detail the rules that apply to fulfilling the contract and that form an integral part of that contract. Insurer and insured must agree the terms and conditions to form the insurance contract. Terms and Conditions of Adamjee agreed for the maize pilot are as follows:

“Subject to Bank Mortgage Payment Clause

Excluding Terrorism and Fire following terrorism as per clauses attached

On stock of maize of 2,100 mt and 300 mt being stored in silo no.21 & silo no.22 only, the property of the insured and/or held by them in trust and/or in deposit and/or on commission and/or for which they are legally liable in the event of loss and/or damage due to fire &/or lightning, riot & strike damage, atmospheric disturbance, earthquake fire & shock, malicious damage, explosion , aircraft damages, impact damages and burglary only, whilst stored and/or lying in the insured's factory and/or godown premises known as ' Islamabad Feeds (pvt) Limited situated at 9km Deepalpur Road, Okara, Punjab declared for insurance at rs.54,000,000/-

Description:

1. MCB Bank Ltd.

Stock of maize = 2100mt

Sum insured = Rs. 4.7250,000/-

Stored in silo no.21

2. FINCA Microfinance Bank Ltd.

Stock of maize = 300mt

Sum insured = Rs. 6,750,000/-

Stored in silo no. 22

The construction of the said building is 1st class and occupied as warehouse and silos for storage of maize of 2,100 mt & 300 mt only.

The risk of burglary is subject to armed guard round the clock.

Mysterious disappearance and shortage of stock, pilferage are excluded.

Peak value of each location not to exceed PKR 4,000,000,000/- at least a distance of half km to be maintained between two peak locations.

Risk of atmospheric disturbance not applicable in open, open sided, shed, basement and on 2nd class construction.

Explosion resulting from terrorism and other political violence are excluded.

Mysterious disappearance and shortage of stock, pilferage are excluded.

The cover of spontaneous combustion is excluded.

Subject to full security information to be provided by the insured.

Subject to satisfactory risk inspection by AICL risk management team.

Subject to no known or reported loss till date.”

Insurance policy components (Takaful)

Takaful is a type of Islamic insurance, where members contribute money into a pool system in order to guarantee each other against loss or damage. Takaful-branded insurance is based on sharia, Islamic religious law, and explains how it is the responsibility of individuals to cooperate and protect each other.

When choosing a Takaful policy, it is important to understand how Takaful works. Three important components of Takaful policies are the **contribution, policy limit, and deductible**. A firm understanding of these concepts goes a long way in helping choose the policy that best suits the required needs.

Contribution is the monetary contribution paid as lump sum or periodically by a participant to a Takaful Operator for the purpose of obtaining Takaful benefits. The contribution calculation for the pilot is as follows:

| | | | |
|--|---------------------------------|-------------------|---------------------------|
| Contribution: | Fire & Allied Perils | Rs. 56,700 | |
| | | | Basic Contribution |
| | | | Rs. 56,700 |
| | Administrative Surcharge | 5.00% | Rs. 2,835 |
| | | | Gross Contribution |
| | | | Rs.59,535 |
| | Federal Excise Duty | 16.00% | Rs. 9,526 |
| | Federal Takaful Fee | 1.00% | Rs.595 |
| | Stamp Duty | | Rs. 20 |
| Basic Contribution : | Rs. 56,700 | | Net Contribution |
| | | | Rs. 69,676 |
| Note : Calculation of 16% FED and 1% FTF is on Gross Contribution inclusive of 5% Admin Surcharge | | | |

The above calculated Contribution amount of Rs. 69,676/- will be payable upfront before the pilot starts. Note: As per SECP, no policy may be issued without a premium payment.

The policy limit or Sum Covered is the maximum amount a Takaful Operator will pay under a policy for a covered loss. Maximums may be set per period (e.g., annual or policy term), per loss or injury, or over the life of the policy, also known as the lifetime maximum. Typically, higher limits carry higher premiums.

| |
|-----------------------------|
| Sum Covered: PKR 40,500,000 |
| Stock of maize 1,800 mt |

The deductible is a specific amount the policy-holder must pay out-of-pocket before the Takaful Operator pays a claim. Deductibles serve as deterrents to large volumes of small and insignificant claims. Deductibles can apply per-policy or per-claim depending on the Takaful Operator and the type of policy.

The proposed deductible agreed upon for the pilot is “Each and Every loss 5% of the sum insured or Rs. 20,000/- whichever is less”.

Type of cover means type of protection provided by the policy. In Pakistan, banking sector generally requires and accepts Fire and Allied Peril against pledged stocks which provides compensation to the Participant or firm in the event of damage to the property insured (i.e. buildings, stock, machinery and other contents) caused by Fire, Lightning, Riot and Strike, Malicious Damage, Explosion, Atmospheric Disturbance (Flood, inundation, etc.), Earthquake, Fire & Shock, Aircraft Damage, Impact Damage & Burglary.

The main perils covered in Takaful for the maize pilot is “Fire and Allied perils” which include Fire & Lighting, Riot & Strike Damage, Malicious Damage, Earthquake (Fire & Shock), Explosion, Atmospheric Disturbance, Aircraft Damage, Impact Damage & Burglary.

Each component of the perils is described as under:

- Fire & Lighting: covers a policyholder against fire loss or damage from many sources. Sources include fires brought about by electricity, such as faulty wiring and explosion of gas, as well as those caused by lightning and natural disasters.
- Riot & Strike Damage : Riot and damage insurance coverage for damage to property resulting from riot and strike damage. Riot and strike damage is defined by most state laws as a violent disturbance involving three or more persons from the point of same intention.
- Malicious Damage is damage caused on purpose to the property of another person.
- Earthquake (Fire & Shock) Earthquake Fire covers the insured property against direct loss or damage caused by fire following an earthquake, while Earthquake Shock covers against loss or damage (other than fire) occasioned by or through or in consequence of earthquake
- Explosion refers to the coverage that covers property loss resulting from rapid nuclear or chemical reactions that produce heat, light, noise and a shock wave, or otherwise commonly known as an explosion
- Aircraft Damage : Loss, Destruction or damage caused by Aircraft, other aerial or space devices and articles dropped there from excluding those caused by pressure waves.
- Impact damage
- Burglary : Theft following forcible and violent entry to the premises.

Sum Covered is the maximum liability of the Takaful Operator under Takaful contract. For the maize pilot the sum covered is equivalent to the total value of maize stock to be stored in the silos. Details as follows:

| |
|--|
| BankIslami Pakistan Limited ((as mortgagee(s)) a/c Islamabad Feeds (Pvt) Ltd. ((as mortgagors) |
| Total Sum Covered : Rs. 40,500,000 on stock of maize of 1,800 mt stored in Silo 22. |

Period of Takaful : The period of protection for which the policy is issued. Any losses taking place outside this period are not indemnified. The proposed period of Takaful for the maize pilot agreed to be from 20/06/2018 to 19/12/2018 i.e. 6 months.

Clauses Applicable: Terrorism Exclusion Clause (Fire) Cyber Exclusion Clause.

Geographical Limit : The geographic region or location in which benefits of an insurance policy may apply and be applied for the purposes of filing a valid claim – For the maize pilot it's Pakistan

Jurisdiction: over a territory relates to the geographic area over which a court has the authority to decide cases. The insurance is subject to Pakistan law, practice and jurisdiction.

Terms & Conditions : These are the general terms and conditions for the Takaful contract that detail the rules that apply to fulfilling the contract and that form an integral part of that contract. Takaful Operator and Participant must agree the terms and conditions to form the Takaful contract. Terms and Conditions of Adamjee agreed for the maize pilot are as follows:

“On stock of maize of 1,800 mt being stored in silo no. 22 only, the property of the Participant and/or held by them in trust and/or in deposit and/or on commission and/or for which they are legally liable in the event of loss and/or damage due to fire &/or lightning, riot & strike damage, atmospheric disturbance, earthquake fire & shock, malicious damage, explosion , aircraft damages, impact damages and burglary only, whilst stored and/or lying in the Participant's factory and/or godown premises known as ' Islamabad Feeds (Pvt) Limited situated at 9km Deepalpur Road, Okara, Punjab declared for Takaful at rs.45,500,000/-

The construction of the said building to be 1st class and occupied as warehouse and silos for storage of maize of 1,800 mt only.

The risk of burglary to be subject to armed guard round the clock.

Mysterious disappearance and shortage of stock, pilferage are excluded.

Peak value of each location not to exceed PKR 4,000,000,000/- at least a distance of half km to be maintained between two peak locations. Risk of atmospheric disturbance not applicable in open, open sided, shed, basement and on 2nd class construction. Explosion resulting from terrorism and other political violence are excluded. Mysterious disappearance and shortage of stock, pilferage are excluded. The cover of spontaneous combustion is excluded.

Subject to full security information to be provided by the insured. Subject to satisfactory risk inspection by AICL risk management team. Subject to no known or reported loss till date Subject to Cyber Exclusion clause attached. Excluding Terrorism and Fire following Terrorism as per Clause attached”

8. Microfinance Product Design

Introduction

The pivot of banking business is ‘collateral’ which serves as an explicit guarantee against the possible risk associated with the inter-temporal trade of money. One who does not have this explicit or implicit guarantee is not considered bankable. The small farmers face difficulties in getting credit from financing institutions on these grounds. They, therefore, often lack access to credit to meet their financing needs and are forced to sell their commodities immediately after harvest, often at lower prices. Warehouse receipt financing has been used as a mechanism to address this challenge to farmers and also financial institutions. A warehouse receipt financing system is a mechanism that allows the use of commodities as collateral to secure loans. In a typical warehouse receipt financing approach, a farmer stores commodities at a certified designated warehouse. The commodity is graded and checked for quality and a receipt is issued by the warehouse operator to the farmer, specifying the quantity and quality of the commodity. The farmer can use the receipt as collateral to access loans from financial institutions, while also enjoying the advantage of selling these commodities in the market when prices might be higher. For financial institutions, warehouse receipt financing help reduce credit risk in lending to farmers.

Maize pilot and stakeholders

The maize collateral management pilot being led by Pakistan Agricultural Coalition simulates the envisaged collateral management regime as closely as possible: Islamabad Feed Mills is the warehouse operator, Agility Pakistan is the collateral manager, and each of the three types of banks operating in Pakistan are participating (MCB is a conventional bank, BankIslami is an Islamic bank, and FINCA Bank is a microfinance bank). This is the best occasion to produce tailored microfinance products which are acceptable to banks, the warehouse operator, and the collateral manager.

Financial and operational model of the product

Pakistan Agricultural Coalition in consultation with FINCA Microfinance Bank and other stakeholder developed a microfinancing product “FINCA Kashtkar Karza – Warehouse Receipt Financing” for the small farmers. The product to target small & marginalized farmers involved in cultivation of at least two acres of land (irrespective of ownership status). The product structure and characteristics are as follows:

| Particulars | Description |
|---------------------|--|
| Product description | FINCA Kashtkar Karza-Warehouse Receipt Financing to be a funded, secured, short-term, demand finance facility classified as agriculture production loan to meet the expenses of next crop against collateral of harvested crop of the individuals. The loan to be repayable in lump-sum (principal and markup) at the time of release of collateralized crop |
| Target market | Small & marginalized farmers involved in cultivation of at least two acres of land and willing to offer their harvested crop as collateral at designated warehouses |

| | |
|---------------------------------|--|
| Facility type | <ol style="list-style-type: none"> 1. On Basis of Security: Secured Credit 2. On Basis of Fund: Funded Credit 3. On Basis of Term: Short Term Loan 4. On Basis of Classification: Demand Finance 5. On Basis of Purpose: Production Loan |
| Facility purpose | The facility to be extended for working capital needs to: 1. Purchase agricultural inputs i.e. seed, fertilizers, pesticides, weedicides & etc. 2. Pay farming expenses i.e. lease / rentals, labor, cultivation, harvesting, irrigation & etc. |
| Borrower's eligibility criteria | <p>The borrower to meet the following criteria:</p> <ol style="list-style-type: none"> 1. Resident Pakistani National. 2. Hold Valid CNIC (Computerized National Identity Card). 3. Age between 21 to 62 Years (At the time of approval of loan). 4. Not Part of Any Customer / Loan Exclusion / Negative List. 5. Involved in Crop / Orchard Farming over an area of at least two acres irrespective of ownership status. 6. Satisfactory Credit Worthiness as per FINCA's Standard (Section - Credit Worthiness). 7. The maximum net annual income not to exceed the income level stipulated in Regulation R-5 of SBP's Prudential Regulations for Microfinance Banks (Rs. 500,000 in case of loan limit up to Rs. 150,000 and No limit in case of loan from Rs. 150,000 to Rs. 500,000) |
| Credit Worthiness | <p>The borrower to be considered credit worthy if he/she meets the following conditions:</p> <ol style="list-style-type: none"> 1. 1 to 15 days delayed payments are maximum 30 days in aggregate during last 12 months (as per latest e-CIB &/or PMN Data Check &/or with FINCA). 2. There should no overdue &/or write-off of more than PKR 1,000/- during last 12 months (as per latest e-CIB, PMN Data Check &/or with FINCA). <p>Note:</p> <ol style="list-style-type: none"> a. Latest e-CIB of the borrower to be obtained at the time of approval of the loan. b. In case overdue &/or write-off of more than PKR 1,000/- are appearing in e-CIB &/or PMN Data Check and the customer has paid the amount, an exception can be approved by Regional / Zonal Manager on submission of proof of payment. c. The deviation / exception in above-mentioned criteria may be accorded on case to case basis in accordance with Bank's Deviation / Exception Policy |

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| Lending methodology | Individual Loans |
| Tenure of facility | 1 month to 6 months |
| Amount of facility | Maximum loan amount not to exceed 70% of the value of crop on the Warehouse Receipt. However loan amount to be classified into following categories; For General Loans: Rs.50,000 to Rs.150,000 For Enterprise Loans: Rs.150,001 to Rs.500,000 |
| Maximum exposure | As per Regulation R-6 of SBP's Prudential Regulations for Microfinance Banks (Currently Rs. 150,000/- from all banks and financial institutions, in case of General Loan and Rs.500,000 in case of enterprise loan) |
| Mode of Disbursement | Lump-Sum Amount to be Credited in Borrower's Current Account |
| Loan repayment | The loan is repayable in lump-sum (principal along with up to date markup and all other dues & charges) or in balloon payments upon release of collateral |
| Grace period | 20 Days (After Maturity / Expiry Date). However loan will be settled immediately upon release of collateral |
| Collateral | Crop Production stored at designated Warehouses. The valuation of the collateral to be handled in accordance with the "Process Flow-Warehouse Receipt Financing" of the Bank |
| Markup | At Prevailing pricing of FINCA Kashtkar Karza – Basic & Plus; while discount (8.00%) will be given on repayment of loan on or before maturity by the customer |
| Processing fee | 2% of Loan Amount (As per Schedule of Charges (approved by ALCO)) |
| Collateral management charges | PKR 6.5 per Mound Per Month (calculated on pro-rata basis). CMC will be paid to the Warehouse Operator directly |
| Insurance | Insurance of produce offered as collateral to be secured through Adamjee Insurance |
| Overdue penalty | Rs. 500/- for the delay of 1-4 days. From fifth day onwards late payment charges of Rs. 100 shall be charged on every overdue day (including Rs. 500/-) up to max Rs. 2,500/-. |
| Early settlement & charges | No restriction on early settlement of loan hence Early Settlement Charges not to be applicable |
| Delivery channel | Through selected branches from FINCA Microfinance Bank's branch network |
| Operational radius | Within 50 kilometers radius of the branch |
| Approving authority | As per approved delegation of authority / approving powers matrix + Manager Agri & Livestock (HO) |
| Deviation matrix: | As per exception / deviation approval matrix of FINCA |

Roles and responsibilities (lender/lendee)

Please see Financing Agreement (Annex III) for details. Annex III is provided as a separate document/attachment as part of these submissions.