

Annual Report
Pakistan Agricultural Coalition (PAC)
FY 2019-20

Contents

Current and upcoming projects FY20-21:	3
1. Farm machinery service provider model:	3
2. Formation of the Collateral Management Company on Warehouse-receipts-based financing:	3
3. Promoting Investment and Farmer Participation in Pakistan’s eWHR’s Regime.....	3
4. Organized Financial Inclusion for farmers: Crop insurance.....	4
5. Satellite Based Crop Estimation: Red Chilli in District Umerkot, Sindh and Adjoining Areas	4
Review of Activity in FY 2019-20.....	5
Market access for farmers: electronic trading platform	5
Unlocking credit: Agri-collateral management pilot through e-warehouse receipts	5
Promoting Food Security through quality Drying and Storage services:	6

Current and upcoming projects FY20-21:

1. Farm machinery service provider model:

PAC has been working with the Rice Exporters Association of Pakistan (REAP) since December, 2018 to develop and implement a multi-year program for increasing Pakistan's rice exports. PAC is actively coordinating between all stakeholders which includes leading progressive farmers, exporters, and input providers among others and conducted pilot projects in three districts in Sindh during the 2019 and 2020 rice seasons. Key interventions to improve rice yields which were piloted include mechanized nursery laying, transplantation, and harvesting of rice. After evaluation of the pilot results, the 5 sponsors of this program which include Jaffer Group and 4 leading rice exporters (Garibsons, Conwill Pakistan, RBI, and MM Commodities) have commissioned PAC to prepare a business plan for formation of a rice machinery services company.

2. Formation of the Collateral Management Company on Warehouse-receipts-based financing:

The agri-financing regime based on electronic warehouse receipts (eWHRs) is ready to be launched in Pakistan's agriculture sector. Preparations and pilots have brought the regime to full readiness.

The regime will not only bring financial access to farmers but also create strong incentives for crop testing, grading, and standardization, proper storage, reduction in post-harvest losses, and preservation of crop quality for exports. There is sufficient storage capacity in Pakistan's crop value chains to launch this regime. It will create an eco-system that will attract much-needed investment in near-farm storage. PAC has facilitated the creation of Pakistan's first collateral management company, Naymat and is providing support to the eWHR regime by serving on Naymat's board, providing services to its management team, and advising the SECP on development of crucial regulations.

3. Promoting Investment and Farmer Participation in Pakistan's eWHR's Regime

Key to the success of the eWHR regime is widespread investment in near farm storages and agri warehouses which will participate in the regime. All of the facilities which have applied to Naymat for accreditation to date are mills given that the majority of Pakistan's silo capacity lies within them. Many private sector players have expressed an interest in evaluating the business model for stand-alone agri-warehouses which would participate in the eWHR regime. In order to promote investment in agri warehousing and give comfort to those evaluating the business model, PAC convinced USAID to fund a feasibility study for stand-alone agri warehousing businesses which would participate in the eWHR regime. The USAID feasibility study which PAC is participating in is currently in its completion stages with results forthcoming.

Ninety percent of Pakistan's farmers are smallholders who own less than 12.5 acres of land. For small farmers who cannot deposit at least 10 tons of commodity in an accredited warehouse, the economics of participating in the eWHR regime become challenging. Thus, PAC has designed business models for village aggregation centers which will be piloted in the coming fiscal year. In the village aggregation model, near farm entrepreneurs/organizations would provide aggregation services to small farmers and

facilitate their participation in the eWHR regime.

4. Organized Financial Inclusion for farmers: Crop insurance

Crop insurance in Pakistan at the national level has not expanded beyond the State Bank of Pakistan's (SBP) Crop Loan Insurance Program (CLIS) which provides protection only in the case of major catastrophe. In order to provide adequate protection to growers, comprehensive, data driven crop insurance products need to be developed which complement the existing scheme.

After conducting in-depth research and consulting with global experts on crop insurance, PAC identified Pula, a Swiss registered company which has designed and implemented comprehensive crop insurance schemes in 11 African countries. In partnership with Pula, TPL Insurance, and credit providers, PAC has designed a wheat pilot for crop insurance for Rabi season 2020-21.

5. Satellite Based Crop Estimation: Red Chilli in District Umerkot, Sindh and Adjoining Areas

The incomplete, unreliable, untimely and often scattered data about a crop's area, yield and production have been a limiting factor in documenting and, subsequently, improving agricultural productivity. This results in losses at various levels, from farmers suffering as they are forced to sell their crop at prices based on speculation to larger players such as processors, exporters, and traders who do not have access to reliable data about crop size and other crop attributes. This uncertainty about the size of a year's crop and the resulting rise or fall in the market price can be managed with reliable data. PAC engaged Dr. Ahmed Khan of Maryland University to conduct a pilot in district Umerkot and adjoining chilli growing areas to estimate the area on which red chilli was planted in the 2020 Kharif season. Results are forthcoming.

Review of Activity in FY 2019-20

Market access for farmers: electronic trading platform

Pakistan's current wholesale markets inadequately serve those who are interested in high-quality produce grown to specifications. The quality of the product is not preserved as the traditional markets lack the appropriate infrastructure and expertise. Non-transparent pricing is the norm because of the concentration of market power among certain intermediaries. The market mechanism does not reward quality, which results in the farmer having no incentive to invest in modern and efficient agricultural practices.

Based on the above assessment, PAC decided to bring together different contributors to the agricultural value-chain in order to build an e-Trading Platform where high-quality standardized agricultural products are traded. The e-Trading Platform for red chilies was officially launched in October 2015, where PAC was able to secure the involvement of three specialized partners in this market model: Agility Logistics, SGS Pakistan, and Pakistan Mercantile Exchange (PMEX). The services, which constitute this model—world class testing by SGS, warehousing by Agility, Trading Platform by PMEX, and facilitation/extension services by PAC—are covered by a transaction charge.

Even with this transaction charge, the sellers make a higher profit at the e-Trading Platform compared to traditional mandi prices as they are getting better price, quick payment, and no unfair deductions. Red chilies worth \$ 10 million have been traded between 2015 and 2019 seasons.

In order to expand electronic trading of commodities to other crops, the collateral management regime being launched in Pakistan in 2020 will allow for non-perishable commodities which *are* deposited in accredited warehouses to be sold over the Pakistan Mercantile Exchange. This year, the regime will facilitate electronic trading of properly graded maize and rice with plans to expand to other crops in the years ahead.

Unlocking credit: Agri-collateral management pilot through e-warehouse receipts

Farmers' access to formal sector credit is highly constrained and they are mostly stuck with lenders from the informal sector who charges exorbitant interest rates. A key reason for constrained agri-lending is the use of farmers' land as collateral by banks.

PAC has successfully piloted a business model for lending against crop (not land) as collateral for wheat farmers/sellers with the participation of Agility, SGS, PMEX, HBL for wheat crop in district Sheikhpura, Punjab, where HBL lent Rs. 4.8 million against 232 tons of wheat as collateral. PAC has also replicated the same model for Basmati Paddy farmers in district Sheikhpura in November 2017 with Bank Islami, which also helped develop an Islamic banking model for the program. During the summer 2018 maize harvest, PAC conducted a comprehensive final pilot with MCB Bank as the conventional bank, Bank Islami as the Islamic bank, FINCA as the microfinance bank, Adamjee Insurance as the insurer, Islamabad Feeds as the warehouse operator and Agility Pakistan as the collateral manager.

The eco-system for electronic warehouse receipts-based agri-lending through the collateral management company (CMC) has been firmed up by these pilots. SECP, in collaboration with State Bank of Pakistan (SBP

A number of leading business groups have invested equity in Naymat Collateral Management Company Ltd. (Naymat) and PAC conducted an in-depth exercise to hire a seasoned banker as its CEO. To date, Naymat has hired its management team, and has received a license from the SECP to be Pakistan's first collateral management company. Inspections and accreditation processes by Naymat have begun and soon Pakistan's agri industry will welcome its first accredited warehouses.

Promoting Food Security through quality Drying and Storage services:

Pakistan produces some 44 million tons of non-perishable agri commodities worth PKR 1.8 trillion each year (Wheat, maize, oilseeds in winter; paddy, rice, cotton and sugar in summer). Of this, an estimated 15-20% is lost due to poor post-harvest handling and lack of drying and storage. Currently, a limited capacity of quality storage is available but only inside the mill facilities. Therefore, most market participants are not able to preserve the quality of commodity after harvest.

Quality storage facilities (with drying where applicable) can offer a way for most market participants to preserve the quality of commodity after harvest. Such facilities are not coming up because of weak incentives for their full utilization. The upcoming warehouse receipts regime (with participation of leading banks) will ensure utilization of such facilities. The prospect of bank borrowing (against the stored commodity as collateral) incentivizes market participants to use these facilities, thereby making them commercially viable.

PAC conducted two pilots with Engro, one for maize in Okara and Depalpur regions and other for paddy in Muridke on operating commercially viable quality storage facilities (with drying where applicable) where commodity owners can deposit their agri-produce (wheat, maize, paddy etc.) after harvest to preserve the quality of commodity while also acquiring bank-financing (using the stored commodity as collateral). Commodity prices normally appreciate a few months after harvest, at which time, commodity-owners can sell their stored commodities at higher prices, which is generally sufficient to pay the fees for the above-mentioned services and any bank mark-up. The cost of providing these services plus a margin can be recovered through fees charged to depositors. The pilots with Engro will help design program scale-up.