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Policy Brief No. 1

Warehouse Receipt Financing: Tackling the Financial Needs of Smallholder Farmers in Pakistan

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ABOUT THIS BRIEF

MEDA's **INNOVATE** project is a three-year initiative assessing the potential of non-traditional finance to stimulate agricultural innovation adoption among smallholder farmers in South Asia, South America and East Africa.

As an INNOVATE partner, Pakistan Microfinance Network (PMN) conducted research on WRF in Pakistan as related to Smallholder Farmers (SHF). This brief is based on the case study completed by PMN in December 2019: [Warehouse Receipt Financing: Tackling the Financial Needs of Smallholder Farmers in Pakistan](#).

It specifically looks at the needs of SHF to adopt WRF and the partnerships and technical assistance required to engage them. This information is particularly important for Collateral Management Companies (CMCs), FSPs and government agencies, such as the Central Bank and Ministry of Agriculture, as they develop the WRF model in Pakistan.

REVIEWING THE WAREHOUSE RECEIPT MODEL FOR SMALLHOLDER FARMERS

Within Pakistan, Warehouse Receipt Financing (WRF) -- which offers farmers warehousing infrastructure to store crops, as well as financing for the post-harvest phase -- is a relatively new concept and has a limited scope both geographically and with respect to its targeted customer base -- smallholder farmers (SHF). WRF began in Pakistan in 2014, and as of 2019 it has received limited support from the government and been offered only to a small number of large farmers in the state of Punjab. Furthermore, a lack of investment in warehouse infrastructure has resulted in a dearth of storage facilities accessible to smallholders.

Due to small land sizes, low production, lack of market linkages and overall low selling power, SHF are constrained by the traditional market system. They receive low prices set by middlemen, known locally as *Aarthis*, at the garden gate. These buyers also offer loans, often at a 180% markup; yet these loans are used by SHF due to their provision of an end-to-end pipeline for products.¹

For the adoption of a WRF model by SHF in Pakistan, its framework needs to be developed. Specifically, warehouses must be set up; financial service providers (FSPs) require incentives to develop or adapt appropriate loan products; and key partnerships between government and other appropriate stakeholders need to be formed.

From 2018-2019, Pakistan Microfinance Network (PMN) conducted research in 10 districts in Punjab province to understand the demand and supply of WRF for SHF. Specifically, the research looked at SHF growing wheat, rice, cotton and maize. During production of these crops SHF often have some surplus production, yet have limited options to bring it to market.

1. PMN, [Warehouse Receipt Financing: Tackling the Financial Needs of Smallholder Farmers in Pakistan](#), 2019.

KEY FINDINGS²

One of the most important findings of PMN's research is the low level of demand for WRF by SHF owning one to five acres. This is not surprising, due to an absence of established warehouses, a lack of financing offerings³ and lack of access to the technical assistance (TA) that SHF need to engage in this new model. Additional key findings from the research include:

- **Limited Awareness of WRF by SHF:** A majority of SHF are unaware of WRF and its model.
- **Absence of Nearby Warehouses:** Fifty percent (50%) of SHF stated an absence of warehouse facilities near their farms. There is also limited data on the locations of existing warehouses and those that are government-run will not accept the low crop volumes of SHF.
- **Lack of Use of WRF:** Of those SHF interviewed for the study, 97% have never used WRF, an unsurprising result considering the above two findings. Key informant interviews revealed that 28% are unaware of warehouses, 22% do not have any within a five-kilometer radius and 17% sell their crops immediately after harvest.
- **High Costs of WRF:** High transportation costs, grading and standardization, crop insurance and loan interest are key barriers to SHF utilizing WRF. *Many SHF believe these costs outweigh any potential WRF benefits;*
- **Role of Aarhi within the Agriculture System:** SHF rely on aarhis to purchase their crops at the garden gate and receive lifecycle financing.
- **Low Production Levels:** SHF stated having low yields and limited volumes, especially given household needs. Furthermore, the amounts are not viable for long-term storage while incurring WRF costs.
- **Nonexistent Access to Trainings:** A majority (78%) of respondents do not know where to receive agriculture trainings.

- **Inadequate Knowledge of Agricultural Technologies:** SHF possess low familiarity with new technologies, limited understanding of where to source quality inputs, and an inability to access formal financing to fund such adoption. Thirty-seven percent (37%) of female SHF stated they do not use innovative agricultural technologies.
- **Limited Use of Formal Financing:** Only 21% of respondents utilize formal financing. Others do not due to challenging collateral requirements, high interest rates, and inappropriate product design.
- **Low Engagement of Women SHF:** Women SHF are limited to very specific roles in agriculture, with little to no involvement in post-harvest production. They have inadequate technical knowledge, exacerbated by low literacy levels and a lack of access to trainings.

Gender Considerations

- **Increase** women's involvement in post-harvest production;
- **Provide** easily available training to women close to home/within village;
- **Design** appropriate loan products for women and their agricultural needs;
- **Support** market linkages that are accessible to women.

RELEVANCE TO INNOVATE LEARNING THEMES: SMALLHOLDER PRODUCTS AND SERVICES

The PMN case study highlights some of the key requirements by SHF to engage in a WRF model, as well as the areas in which SHF require additional support. This information is useful for a variety of stakeholders operating in the agriculture and smallholder farming sector in Pakistan.

2. PMN, [Warehouse Receipt Financing: Tackling the Financial Needs of Smallholder Farmers in Pakistan](#), 2019.

3. Pakistan's Central Bank recently expanded laws allowing FSPs to accept WRF as collateral as of December 2019.

Smallholder Products and Services: Needs of SHF to Adopt WRF

Given that SHF have almost no exposure to WRF and there is a lack of existing warehouses, adoption by SHF cannot be currently tracked. Given its early stage, to further involve SHF in WRF, their specific needs must be identified and a strategy to meet these needs is required. This necessitates partnerships among key stakeholders: collateral management companies (CMCs),⁴ FSPs, business development services (BDS), TA providers, as well as relevant government agencies, such as the Central Bank and the Ministry of Agriculture. Without such partnerships, the model will not develop and be available to this target audience.

RECOMMENDATIONS

For SHF to utilize WRF, a network of warehouses needs to be built to enable access. Furthermore, FSPs need to design, pilot and launch loan products appropriate for SHF or adapt current ones, whereby warehouse receipts are employed as collateral. For this to occur, both partnerships and the following activities are recommended: designing suitable trainings, providing appropriate technical assistance and creating or adapting WRF credit products.

Recommended Activities to Engage SHF in WRF

Agri-Extension Services

- **Increase Technical Assistance Offerings:** SHF have minimal to no knowledge of WRF and zero experience with this concept. They require trainings on the following: the WRF model, including related financing; improving crop production and quality; increasing yields; adopting new technologies; sourcing quality inputs; mitigating climate risks; and creating market linkages.
- **Identify appropriate Training Providers:** Government extension trainings need to expand offerings to SHF with one to five acres. Furthermore, partnerships with BDS providers should be formed as needed.

⁴ Collateral Management Companies (CMCs) are the companies that establish and run warehouses in Pakistan.

WRF Credit Design

- **Design Appropriate Loan Products:** New loan products should be developed by financial service providers that meet the farmer's needs at the time of crop storage and accept warehouse receipts as collateral. Loan parameters need to be relevant to the WRF framework, for example:
 - *Loan Use:* Allow SHF to use loans for inputs, transport costs and other needs related to preparing for the next crop rotation and storing crops in warehouses;
 - *Crop Insurance:* Underwrite risk in case of production or market failure;
 - *Gender Considerations:* Given the higher barriers for women SHF in agriculture, products should be inclusive of their unique needs with regard to accessibility, knowledge/literacy, mobility, etc.
- **Target Geographic Areas near Warehouses:** Initially, SHF within closer range to a warehouse should be targeted. After establishment of a WRF model, outreach plans should include SHF that are located farther away from the warehouses.
- **Identify Client Target Market:** Determine SHF client eligibility and criteria related to land holding size, crop type, production levels, crop quality, location, access to a warehouse, ability to attend technical trainings, etc.

Marketing Assistance

- **Investigate Marketing Needs of SHF:** Warehouses need to understand the needs of SHFs to meet the standards of the warehouse and other market options;
- **Provide Production Training:** SHF need to produce crops that are sufficiently high in quality to be accepted by warehouses and to meet the standards of commodity tests/evaluations. Appropriate trainings need to be provided to SHFs to enable them to meet these standards. This can be done via partnerships among CMCs, government extension agents and other relevant BDS partners.



Key Training Recommendations

- **Length:** 1-5 Days
- **Location:** Near homes/farms preferred or nearby villages
- **Timing:** At time of Sowing
- **Cost:** Free

Recommended Partnerships to Engage SHF in WRF

Key Partnerships

Topic / Item	Organizations	Description
Crop Insurance	<ul style="list-style-type: none"> • Financial Service Providers (FSPs); • Collateral Management Companies (CMCs); • Insurance Companies 	SHFs require insurance to cover related risks to crop production in areas where floods and other natural disasters are affecting crops.
Advocacy Campaigns	<ul style="list-style-type: none"> • FSPs; • CMCs/Warehouses; • Local Support Organizations (LSOs); • Government Extension Agents 	Inform SHFs about the exploitative roles of informal creditors, and benefits of warehousing crops.
Crop Grading / Quality Control	<ul style="list-style-type: none"> • CMCs/Warehouses; • Grading Agencies 	An independent grading structure for crops needs to be developed for SHF based on targeted market.
Technical Assistance / Training	<ul style="list-style-type: none"> • CMCs/Warehouses; • LSOs; • Extension Agents 	Training and TA needs to be provided to SHF to enable them to engage in WRF.

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