

# Senegal



## Warehouse Receipt System<sup>1</sup>:

Making progress in market, finance and post-harvest risks management

### Policy Brief

#### Key messages

1. Agricultural sector in Senegal is prone to flooding, droughts, endemics and market volatility risks. Farmers have suffered from market risks due to limited knowledge on market trend and lack of storage facilities.
2. Warehouse receipt system (WRS) can provide access to services that improve farmers' commodity storage, access to finance, input quality and better output price.
3. Three forms of WRS are experimented in Senegal: the community inventory, third party and hybrid systems.
4. The limited regulation to protect actors in cases of default, and non-negotiability of receipt complicate the delivery of services in the WRS.
5. Achieving better outcomes from WRS in Senegal would require the enactment of WR regulation, increase capacity financial institutions and collateral managers, as well as foundational supports from donors.

#### Context

As an agro-exporting country, Senegal seeks to modernise agricultural sector through a range of financing and commodity marketing programmes. Since the 1990s, efforts to achieve this objective have not yielded expected results, to some extent, due to a range of production, market and macro-level risks. Both the **PARM Risk Assessment Study and Country Risk Profile for Senegal 2016<sup>1</sup>** identified flooding, drought, endemics and input/commodity market price risks as the top threats to the agricultural sector. Farmers have become vulnerable to commodity market price risks due to inadequate storage facilities, poor bargaining power and difficulties in accessing finance. Major commodities like cow peas, rice, millet, maize and groundnuts are affected by yield and post-harvest losses and market risks. When managed professionally, the WRS has extensive potential to provide farmers with services that ease access to finance, storage facilities, secure input quality and better commodity price.

#### Types of WRS in Senegal

Warehouse receipt system (WRS) entitles a farmer to deposit storable commodities such as cereals and pulses in exchange for a document known as warehouse receipt (WR). The receipt is issued by a professional warehouse operator to provide proof of ownership over stated quantity and quality of commodity to secure access to finance from associated institutions.

Warehouse financing is based on principles of contract law as there is no specific legislation or regulatory body to control activities. Provisions for receipting goods are contained in the *Code des Obligations Civiles et Commerciales* (COCC), which requires warehouse

deposits from the general public to be documented for evidence. But there is no stipulation for negotiability of issued receipts. The security over goods is governed by the OHADA Act – a law that provide for goods to be pledged and registered with the *Registre du Commerce et du Crédit Mobilier* (RCCM). Even though the RCCM registry is not well-developed, it is associated with a high registration. The types of WRS experimented in Senegal are: the community inventory credit, third party model and hybrid model. Differences between these three WRS are presented in **Table 1**.

#### Community inventory credit

With support from NGOs, farmer groups store produce in double-locked warehouses where representatives of the group hold one key to the lock and the MFIs supporting the activity hold the other. This activity has existed in Senegal since the 1990s. The Credit Mutuel du Senegal (CMS) first promoted it mainly on grains, oilseeds, legumes, and in some cases, dehydrated horticultural products like paprika and hibiscus. Throughout the project, CMS acted as both financier and warehouse operator. Even though the CMS had considerable success to secure credit for farmers, some outcomes of the WRS were below expectations. The stocks were improperly managed, coupled high levels of insecurity and default on loans.

In 2011 and 2012, the EU funded community inventory pilot projects in Kaolack region to experiment new WRS possibilities on maize and millet. Stakeholders involved in the pilots are: the GRET, ENDA, PAMIF, ADAK and U-IMCEC. Commodities were stored up to 8 months after harvest. The line of credit granted was 60% to 80% of the stock value. Interest rates are averaged at 12% per annum, with repayments in monthly instalments. Even though the stocks handled were small (about 30 tons for three villages), the scheme increased income of participating farmers by 24%. The project could not be sustained after the end of donor funds as the MFIs were not willing to operate without logistic support from development organisations.

<sup>1</sup> PARM has published a Risk Assessment study on Senegal in 2016 focused on the Livestock and Fisheries sectors, complementary to the risk assessment study of the World Bank (2013). PARM has also published a Country Risk profile of its website.

### Third party warehouse receipt system

Under this system, a third party signs a tripartite agreements with producers and financial institutions, in order to manage stock and control receipts. In Senegal, third party WRS started in 2011 with the USAID/PCE<sup>2</sup> funded initiative that aimed to improve maize value chain. The project linked farmers to animal feed millers in Dakar, through agreement between Saloum Corn Producers Federation (FEPROMAS), a state-owned agricultural bank (CNCAS<sup>3</sup>) and Ballore Group. FEPROMAS consisted of 10 producer groups, 882 individual farmers from 12 rural communities. Even though the member farmers secured loans up to 100% of stored commodities' value, the model did not work as planned. There were limited tripartite contracts, collateral pledges were often not formalised, and a drop in international price for maize reduced the clients' interests.

### Hybrid warehouse receipt system

The model took place in River Senegal Belt as an attempt to increase local rice production and supply for local industries. It has both community-based and third party modelled features. Basically, an industrialist (local rice miller) works with rice producer organisations that deliver paddy in union warehouses where commodities are stocked and monitored. Banks give out production credit and are later reimbursed by the industrialist. The model brought together many actors to boost rice value chain and enhance supply to industries. Between 2011 and 2013, marketed rice increased from 2,830 tons to 29,510 tons. Farmers had contractual agreements with higher prices but reimbursement was delayed and rice quality was not consistent. Besides, smallholder farmers suffered from high stock management charges and competition from low priced imported rice.

**Table 1: Difference between the three types of WRS in Senegal**

Community-based WRS	Third party WRS	Hybrid WRS
Agreement between MFIs and farmers.	Operated by a collateral manager	Initiated by industrialists.
Targeted individual farmers	Smaller and larger groups of farmers	Producer organisations
Mainly in the central parts of Senegal	Across the central parts of Senegal	Around the River Senegal
Focused on grains, oilseeds, legumes, maize and millet	Only for maize.	Mainly for local rice

## Contributions to Agricultural Risk Management

**Access to finance:** The collateral component of WRS allows farmers to use receipts and access loans from participating financial institutions. The industrialist/third party managed warehouse receipts enabled rice farmers in the Senegal River valley to access loans and engage in year round production. About 6,800 rice farmers were involved and repayment rate was 80% to 95%. With this positive outcome, farmers build good credit history for future loans services.

**Manage input supply:** Access to reliable and quality input remains a key problem in the agricultural sector of many African countries including Senegal. The market for input like seed and fertilizers are poorly developed, dominated by informal channels. With the USAID/PCE supported warehouse receipting for maize and millet, smallholder farmers in the Kaolack and Niore had easy and well-coordinated access to inputs and equipment from FEPROMAS.

**Reduce commodity market price risks:** WRS storage facilities allow farmers to keep their commodities for months after harvest and sell later when produce are out of season. In the process, farmers may sell later when produce are out of season, benefitting higher prices,

increase incomes and well-being. The inter-seasonal arbitrage also smoothen price hikes for out of season food commodities, reduce affordability and access constraints on consumers. For instance, beneficiaries of the piloted community-based receipting scheme for maize and millet in central Senegal achieved a net profit margin of 24%. Also members of FEPROMAS received prices that are 20% above market rates.

**Avoid post-harvest losses:** The traditional handling of commodities produced after harvest causes pest and disease attacks both on-farm and off-farm. With the WRS, storage facilities are well-managed and stocks are occasionally monitored. In the Diagle area of Senegal for instance, WRS provided storage solutions to farmers who were seasonally hit by post-harvest losses. They could store more than 700 kg of commodities in community-based warehouses. The commodities are protected against damp weather, pests and diseases that reduce product quality. Farmers are assured against fire, theft and some major catastrophes, thus a good source of insurance.

## Policy Recommendations

**Enact a specific law to regulate WRS activities.** Government should pass legislation to clarify the structural requirements for warehouses, the operators and managers, and more especially, the responsibilities of partners under third-party holder arrangements. It should also make provisions for the negotiability of warehouse receipts to enhance the flexibility of marketing pledged goods.

**Establish a framework for public-private partnership.** Government should partner with private investors to allow rehabilitation and establishment of warehouses. Partnerships should connect interested financial service providers who would allow the use of warehouse receipts as collateral to access finance. The programs should seek leverage effect from producer organizations in large production basins, and for those with good credit history (either formal or informal) to enhance solvency.

**Strengthen product standardization.** The Senegalese Association of Standardization should support participatory development of standards qualities for all agricultural products. They should internalise production standards in producer groups to enhance quality control at production inventory level.

**Educate and train financial institutions staff** on WRS financing services. Financial institutions should familiarise their staff on WRS packages to enhance better management strategies. The staff should be encouraged to participate in training activities when organised by government or development partners. Increase knowledge will prevent risk of misjudging quality of products stored.

**Develop foundations for ownership** over sponsored community and public storage systems. Donors should channel their supports into ongoing efforts rather than creating new initiatives. Support should take the form of grant to help cover some of the costs of initiation and capacity building to build ownership for sustainability of already existing schemes.

<sup>1</sup> Policy brief developed by **Balikisu Osman** for the Platform for Agricultural Risk Management (PARM). The information is based on "Study on Appropriate Warehousing and Collateral Management Systems in in Sub-Saharan Africa" conducted by J. Coulter, Consulting Ltd and Sullivan & Worcester, UK LLP. The subject countries are Burkina Faso, Niger, Senegal, Ghana, Cote d'Ivoire, Madagascar, Cameroon, Mozambique, and Uganda. The full reports were coo-published by the Agence Française de Développement (AFD), Technical Centre for Agricultural and Rural Cooperation (CTA) and International Fund for Agricultural Development (IFAD) / PARM.

<sup>2</sup> PCE - Projet Croissance économique (de l'USAID)

<sup>3</sup> CNCAS - Caisse Nationale de Crédit Agricole du Sénégal