



## Licensing of Public Plant Varieties: The Case of KALRO

**December 2022**

This check-back report is part of a series of research and policy publications co-authored by the Syngenta Foundation for Sustainable Agriculture (SFSA) and New Markets Lab (NML) on regional seed policy harmonization in Africa. The series is part of the SFSA's Seeds2B initiative and Partnership for Seed Technology Transfer in Africa (PASTTA) and is designed to assess the process for implementing seed regulatory systems that can better deliver improved seed varieties to farmers. This work is made possible by the generous support of the American people through the United States Agency for International Development (USAID) and the U.S. Feed the Future initiative. The contents are the responsibility of the NML and SFSA under the Seeds2B initiative and do not necessarily reflect the views of USAID or the United States Government.



**USAID**  
FROM THE AMERICAN PEOPLE

**syngenta** foundation  
for sustainable  
agriculture



## Executive Summary

This check-back report on licensing of public varieties by the Kenya Agriculture and Livestock Organization (KALRO) builds upon a case study developed by the New Markets Lab (NML) in collaboration with the Syngenta Foundation for Sustainable Agriculture (SFSA) on KALRO's model plant varieties licensing agreement in 2020, under SFSA's Seeds2B initiative and the Partnership for Seed Technology Transfer in Africa (PASTTA). KALRO has been licensing its varieties to seed companies since 2001 as a way to commercialize and get its quality varieties to farmers in line with its mandate, as well as to collect royalties, which could be funneled back into research. This check-back report has been developed to assess KALRO's success in its licensing activities and the effectiveness of its recently-approved institutional intellectual property (IP) policy and to identify gaps and recommendations to streamline the licensing process. The check-back report has been developed through stakeholder consultations with KALRO and some of the seed companies with which licenses have been issued.

The table below summarizes the findings from the check-back, including challenges with licensing and proposed recommendations for KALRO to address them.

**Table 1: Summary of Findings**

<b>Challenges with Licensing</b>	<b>Proposed Recommendations</b>
<ul style="list-style-type: none"><li>• <b>Absence of a streamlined institutional framework</b> to implement the IP Policy and conduct licensing.</li></ul>	<p><b>Create IP Management Committee (IPMC) and IP Office</b>, as established under the IP Policy, to conduct and implement activities related to licensing of KALRO technologies.</p> <p>Equip the IPMC and IP Office with the relevant staff and resources to enable them perform their duties effectively, creating more distinction between other duties of the legal office and other parts of KALRO.</p>
<ul style="list-style-type: none"><li>• <b>Knowledge gaps</b> among KALRO staff, including:<ul style="list-style-type: none"><li>• Registration for plant breeders' rights (PBR)/plant variety protection (PVP), which would provide a stronger foundation for licensing and attract higher</li></ul></li></ul>	<p>Increase <b>capacity building</b> efforts through workshops on IP and regional variety registration, and dissemination of relevant materials including licensing guides developed by NML and SFSA.</p>

<p>royalties. KALRO staff, however, had limited knowledge on PBR/PVP registration processes.</p> <ul style="list-style-type: none"> <li>• <b>Regional variety registration</b> would enable wider market variety licensing. KALRO legal office was, however, unaware of relevant registration processes and relevance.</li> <li>• <b>Understaffing and limited capacity</b> to effectively license to a wider market outside of Kenya, manage implementation of the licenses, and follow up on payment or royalties.</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Disputes and ambiguity over ownership of KALRO varieties</b>, especially for technologies whose genetic material is obtained from the Consultative Group of International Agricultural Research (CGIAR) Centers.</li> <li>• As a government policy, KALRO is not allowed to promote technologies it does not own, meaning that these cannot be popularized for licensing.</li> </ul>	<p>Implement IP Policy provisions on <b>joint ownership of IP</b> where resources or efforts used to develop technologies have been shared. Joint ownership could be made clear under relevant MoUs with CGIAR centers.</p>
<ul style="list-style-type: none"> <li>• <b>Limited coordination</b>, including among the different KALRO Centers and the units directly responsible for licensing within KALRO.</li> <li>• <b>Absence of database</b> of varieties for licensing makes tracking of varieties for licensing difficult.</li> <li>• For some older varieties, <b>parent material is missing</b>, and such varieties cannot be licensed.</li> </ul>	<p>KALRO should <b>compile a Variety Licensing Database</b> to track licensed varieties and activities related to their use, including a variety's traits, the agro-ecological zones suitable to the variety, which varieties have been licensed, who the licensees are, which ones are protected under PVP, which parent material is still available, and other related information.</p>

## I. Background on KALRO Licensing Instruments and Approach

In December 2019, KALRO passed its IP Policy<sup>1</sup> to regulate the acquisition, management, and commercialization of IP for its technologies, including guiding its licensing activities. The policy calls for obtaining IP rights for the organization's technologies, mobilization of resources for the management of IP, and enhancement of the transfer and commercialization of the organization's technologies, innovations, and inventions for revenue generation. An IP Management Committee and Office are meant to be established under the IP Policy to manage and implement institutional IP provisions. Implementation of the IP policy is guided the KALRO Strategic Plans, with the most recent one covering 2022-2026. Considering that the IP Policy is yet to be implemented in practice, it is part of KALRO's strategic plan for 2022-2026 to build staff capacity on IP issues and establish the IP Management Committee and office. KALRO mentioned during stakeholder consultations that these activities require finances that have not yet been raised.

Currently, KALRO issues both standard exclusive and nonexclusive licenses, with more inclination towards nonexclusive ones for various reasons. KALRO's mandate is to conduct research and breeding in the interest of Kenyan farmers, and nonexclusive licenses would inhibit monopolization over one variety by a single licensee, enabling wider farmer access to the licensed variety. KALRO also mentioned that there have been cases of seed companies seeking exclusive licenses only to keep the licensed variety off the market so that they can promote their competing variety. For these reasons, the KALRO IP Policy requires that all licenses by KALRO be preferably issued on a nonexclusive and nontransferable basis, with exclusive licenses granted under very limited circumstances and where there is a strong justification.<sup>2</sup>

KALRO has licensed its varieties to a total of 87 seed companies. Licenses with 32 seed companies are currently active, with some of the licenses giving rights to multiple varieties under a single license. Most of these licenses are on a nonexclusive basis. For instance, only nine exclusive licenses have been issued since KALRO begun licensing in 2001, with only one issued since 2019 when the IP Policy was approved by the KALRO Board of Directors. Stakeholder consultations revealed various challenges with the licensing process, as discussed in detail below.

---

<sup>1</sup> Kenya Agriculture and Livestock Organization (KALRO) Intellectual Property (IP) Policy of 2019 (hereinafter referred to as KALRO IP Policy).

<sup>2</sup> Clause 9 of the KALRO IP Policy.

## II. Current Challenges with Administering Licensing Agreements

The KALRO IP Policy, which regulates institutional licensing, is yet to be fully implemented. The Policy establishes the IPMC as the institutional framework for KALRO IP management and the IP office as a unit within the Legal Directorate and the secretariat of the IPMC.

The IPMC's role will include:

- Obtaining IP protection for an invention;
- Facilitating the availability of an invention;
- Transferring and granting licenses for any IP;
- Conducting exemptions, amendments and variations of the IP Policy or IP agreements; and
- Resolving any disputes arising from the implementation of the IP Policy.

It is meant to be composed of the director generals of crops and livestock, finance, social economics and applied statistics, natural resource management, and any other member who may be selected by the Committee. Notably, the legal department is not a permanent member of the IPMC, yet it is the one that currently drafts and negotiates the licensing agreements.

The IPMC Secretariat and IP office would:

- (i) Provide KALRO with expert advice and support on IP Management;
- (ii) Carry out IP audits;
- (iii) File and prosecute applications for grant and/or registration of IP with the relevant agencies;
- (iv) Facilitate payment of IP registration and maintenance fees;
- (v) Review and manage IP agreements;
- (vi) Enforce KALRO's IP rights;
- (vii) Keep an inventory of all IP assets that belong to KALRO; and
- (viii) Keep in safe custody all original copies of IP certificates and all other legal documents pertaining to IP.

Both the IPMC and IP office are yet to be established. The legal department, where the IPMC Secretariat is to be situated, only has two officers at the moment, and one is an intern. In other countries like Uganda, where the National Agriculture Research Organization (NARO) has an IP Policy, their IPMC and IP office have facilitated IP management for NARO and negotiated 13 licenses since December 2021 when the institution began

granting licensing agreements. Since the IPMC in KALRO is yet to be established, various provisions in the IP Policy await implementation.

Stakeholder consultations revealed that one of the main challenges with KALRO's licensing practices is limited capacity and knowledge gaps. Some breeders are still unaware of key principles of licensing and provisions of the IP Policy. The KALRO legal unit is reportedly under-staffed and under-capacitated to effectively handle and monitor licensing matters, on top of all other institutional legal issues. The legal unit, for instance, has one lawyer, assisted by an intern, who handles over 600 contracts. Due to limited capacity, the legal unit did not know how to handle applications for grant of licenses from outside of the country, since the institution does not have an agreed-upon approach. While registration of KALRO varieties in regional catalogues would give KALRO a wider licensing geographic area and royalty base, the legal unit was unaware of such regional variety registration or that KALRO is listed as a co-maintainer of five maize hybrid varieties on the COMESA Variety Catalogue. Licensees also sometimes underreport, delay, or refuse to pay royalties, and, while there is an enforcement team within KALRO's finance unit tasked with going to the field to follow up and collect royalties that are overdue, this team is also limited in terms of capacity and resources. Capacity development on IP, including through securing adequate resources, is one of KALRO's obligations under its IP Policy and Strategic Plan of 2022-2026, but the institution is admittedly yet to achieve this objective.

Research and varietal development at the different KALRO Centers is not centrally coordinated. Consultations revealed that KALRO headquarters in most cases does not know what varieties breeders in the different Centers have developed and are developing. KALRO also lacks a compiled catalogue or database of all of its varieties, which makes it difficult for seed companies to know of existing varieties or seek licensing agreements for them. Consultations also revealed that absence of a compiled catalogue makes it harder for KALRO and its breeders to know which varieties have already been licensed. While the IP Policy provides that 25 percent of the royalties should go to the inventor, the breeder would not be able to claim this when unaware that a qualifying variety had been licensed.

PVP/PBR would provide a stronger foundation for licensing, but, due to limited knowledge on PVP/PBR registration processes, limited coordination among the KALRO Centers, and absence of a KALRO catalogue for varieties, consultations revealed general uncertainty regarding which KALRO varieties had PVP. The legal unit mentioned, for instance, that in the absence of centralized coordination of KALRO's IP issues, it is quite possible that some breeders have sought PVP for KALRO varieties on their own. Under the KALRO IP Policy, the IPMC would be responsible for obtaining IP for all KALRO inventions.

Within KALRO, the legal and finance units, which are currently directly responsible for coordinating licensing (until the IPMC is created) are not well synchronized in operation. The legal unit drafts, negotiates, and issues licensing agreements to seed companies, while the finance unit coordinates royalty payments, including receiving payments and sending an implementation team to collect royalties when overdue. Consultations revealed that, in most cases, the legal unit is not informed regarding which seed companies have made payments and which still owe royalties, which complicates following up. For instance, one of the consulted seed companies with a licensing agreement with KALRO noted that while it pays royalties annually and on time, it last received a notification of recognition of payments over four years ago. The legal unit mentioned is unaware of which companies have made the payments, as that is usually overseen by the finance unit, which has equal capacity challenges.

Some of the varieties developed by KALRO originate from CGIAR Centers, and consultations revealed that there is ambiguity over ownership of those varieties, including KALRO's power to license them to seed companies. Consultations also revealed that it is government policy for public agencies not to support the promotion or popularization of technologies they do not own. This means that KALRO cannot popularize varieties obtained from CGIAR Centers without explicit rights of ownership transferred to KALRO. It would be harder for seed companies to know of such varieties and seek licenses for them.

### **III. Recommendations**

KALRO has had some notable successes in licensing in the region, and it has one of the longest track records for licensing among the National Agricultural Research Organizations (NARS). However, challenges continue to exist. This report recommends the following, most of which would be the direct responsibility of KALRO, in order to improve licensing. Implementation of the recommendations will heavily depend upon improved coordination among KALRO Centers and the support of private sector and development partners.

#### **1. Increase Capacity Building Efforts**

Capacity and knowledge gaps have been a challenge to KALRO's effective licensing efforts. To address this gap, capacity building workshops could be conducted involving KALRO staff and seed companies to cover licensing practices, particularly considering KALRO's new IP Policy. These could address key licensing components, including options for a wider licensing base, including marketing in other countries. The National Agricultural Research Organization (NARO) in Uganda has, for instance, experimented

with broader licensing, with licenses to Nalweyo Seed Company Limited to commercialize maize varieties at the regional level within COMESA.

Capacity building could also include securing adequate resources for the relevant units responsible for licensing within KALRO. For instance, increasing human resources for the legal and finance departments will be critical. This could be done with the support of private sector actors and development partners.

## **2. Compile a KALRO Variety Licensing Database**

KALRO could be supported to compile a catalogue/database containing all of its varieties and their licensing status. This could help KALRO track its varieties and activities related to their use. It could include the variety's traits, the agro-ecological zones suitable to the variety, which varieties have been licensed, who the licensees are, which ones are protected under PVP, those whose parent material is still available, and other related information. The catalogue would help the private sector know which varieties are available for licensing and would help KALRO manage its varieties and other assets. The catalogue/licensing database should be made publicly available and updated every cropping system.

## **3. Streamline the Institutional Framework for Licensing**

Under the IP Policy, the IPMC and its secretariat, the IP Office, are responsible for coordinating IP issues, including claiming PVP for KALRO varieties and issuing licenses. These roles have been under the legal unit, which has been overwhelmed with other institutional duties. The specialized IP office should alleviate such pressures and streamline the licensing process, particularly with additional staff and resources. KALRO could seek targeted funding needed to create the IPMC and IP office, make these functions distinct from the other functions of the legal office, and support them with adequate financial and human resources necessary for them to perform their functions. KALRO could also prioritize support and partnerships aimed at training the relevant IPMC and IP Office personnel in key PVP and licensing good practices, including through cooperation with relevant institutions in developing economies and exchange of good practices. An ongoing exchange between KALRO and NARO, each of which has built experience in different areas and on different timelines, could also be beneficial.



## **IV. Conclusion**

Overall, KALRO has been licensing its varieties for two decades. While KALRO is in some sense a role model for other national programs, with some notable successes, there have also been numerous challenges, including limited capacity and knowledge gaps, limited capacity to follow up on delayed payments, limited coordination among centres and responsible units, absence of an institutional structure for IP management (IPMC and IP office), and absence of a complete KALRO Catalogue, among others.

KALRO's licensing of its intellectual assets has the potential to disseminate its innovations to wider markets, even at the regional level, but initiatives will have to be taken at the institutional level to address existing gaps. These will include building institutional capacity through addressing knowledge gaps, securing necessary resources, and addressing capacity gaps in units with low capacity, including the legal and finance departments. It will also include operationalizing the IP Policy, including through establishment of the IPMC and IP office and equipping them with the necessary human and financial resources to conduct their roles. Finally, a catalogue containing all KALRO varieties would be beneficial for both KALRO to track its varieties and for private companies to know which varieties are available for licensing and commercialization.