

Background

With the increase in climatic variability and emergence of major transboundary pathogens/pests, smallholder farmers and the seed producers who serve them urgently need access to seed of a broader array of climate-smart and multiple stress-tolerant improved crop varieties. One key source of access to a greater choice of varieties is regional crop variety catalogues. These catalogues lay the foundation for multi-country/regional release of improved varieties.

However, to date, the number of improved crop varieties registered in regional catalogues remains relatively low. A key, but not the only, reason for this is the fact that the same crop variety may have been released under different names in different countries. The existence of multiple official names for a single genetically unique variety hinders the registration of varieties in regional catalogues, which require a single identifying name or number.

The US faced a similar challenge roughly ten years ago: farmers wished to understand whether the different types of maize seed they were purchasing were actually the same variety or unique. To resolve this, the US employed a variety naming system, the usage of which accelerated greatly after breeding institutions began to include naming requirements in their licensing agreements. Stakeholders today report that the system works smoothly, and fulfils the intended purpose. Importantly, the US system allows a licensee to utilize its own brand name for a given variety for marketing purposes, as

long as the official unique number of the variety assigned by the breeding institution is also presented clearly on the commercial seed package.

In sub-Saharan Africa (SSA), COMESA and SADC maintain regional variety catalogues for eastern and southern Africa, respectively. At present, the 49 varieties listed in these regional catalogues are proprietary varieties owned by large multi-national seed companies. Two are Irish potato varieties, and the remaining 47 are maize varieties. There are no sorghum, bean, groundnut, cowpea, pigeon pea, or other crop varieties registered. Furthermore, there appears to be no specific varieties developed and licensed by CG centres to public/private sector institutions or by national research programs registered in this catalogue, although it is likely that some of the varieties registered could have the CG germplasm in the genetic background.

In mid-2017 USAID commissioned Agri Experience Ltd, a Nairobi-based consulting firm focused on seed systems, to conduct a scoping study to evaluate the potential for implementing a variety identification number (VIN) system in SSA. Approximately 40 stakeholder interviews were held in east and southern Africa, across a broad range of institutions¹. A brief summary of the key findings follows. It is important to keep in mind, however, that the scoping study was an initial attempt to scope the issues and determine stakeholder interest in the concept. It was not intended to be a definitive recommendation about adopting a VIN system, so further work remains.

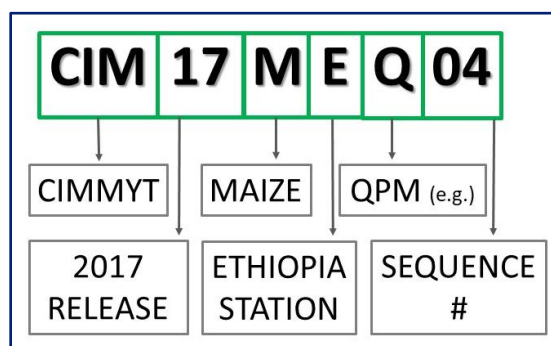
¹ For the VIN scoping study, the focus was on east and southern Africa due to time and travel limitations, but

West Africa can easily be included in future deliberations if desired.

What is a VIN system?

A VIN system is a system in which a breeding institution assigns a specific universal varietal identification number, or name, to a pre-commercial or commercial product. This VIN is then formally associated with the variety, once released – everywhere and forever. The VIN must be presented on commercial packaging of seed of the variety, although seed producing companies are also allowed to utilize their own brand names for varieties for marketing purposes, in line with local regulatory requirements and licensing terms.

An illustrative example² of the VIN system, is presented below:



Key conclusions from scoping study

In general, there was broad, and often very strong, support for adopting a VIN system in east and southern Africa. Stakeholders identified numerous examples where both time and resources had been wasted due to lack of clear identification of varieties across national borders. There was general consensus that the current system of having multiple official “release names” for a single

variety (i.e., unique genetic background) is confusing.

Interviewees also identified trade facilitation, increased penetration of broadly adapted varieties, faster access to a wider range of genetic choices for climate-smart crop varieties, and revenue opportunities for national programs breeding varieties of value outside their home countries, as potential major benefits.

However, there was also broad consensus that additional work needs to be done, particularly with respect to:

1. deeper exploration with national programs about the impacts, both positive and negative, on their current operating approaches;
2. whether or not a VIN approach can be implemented retroactively for varieties that are already officially released under multiple names in different countries;
3. regulatory agency acceptance of additional varieties for certification purposes;
4. guidelines for making a VIN system operational; and
5. developing a clearer understanding about how the releases in the “qualifying countries” (the initial national releases which qualify a variety for registration in a regional catalogue) should be handled, including how benefits accrue to the companies or institutions that pay for these initial releases.

² Since the scoping study began, the International Maize and Wheat Improvement Center (CIMMYT), which participated extensively in the study, has begun to implement a VIN approach for all new product licenses to public/private sector partners globally in order to

simplify regional catalogue registration and commercialization of CIMMYT-derived improved varieties. This example is derived from CIMMYT’s approach.

Many interviewees who supported the concept cautioned that stakeholders should not make adoption and implementation more complicated than it needed to be, stating that the concept is fairly straightforward and can have positive impact if implemented simply, and soon.

A complete list of interviewee feedback is included in the full report, and is furthermore segregated by category of interviewee (breeding institution, regulator, regional body, seed company, etc.)

Estimate of near term impact on catalogues

During the interview process, four CG centres provided initial, preliminary, estimates of the number of varieties that they might ideally like to see piloted in regional catalogues. The genetic potential represented by these varieties may be powerful, particularly in the face of climate change. If a pilot phase is successful, it is anticipated that additional varieties would be registered.

Potential registrations of improved varieties in regional catalogues (with VIN numbers) based on germplasm from:

CIMMYT: At least 10-15 (for maize only; wheat varieties would be additional)

CIAT: 10

ICRISAT: 20-30 (total for multiple crops)

CIP: 5-10

Next steps

The scoping report has been distributed to all interviewees for review and consideration, and a number of follow-up meetings with CG centres have been held. In addition, a presentation on the concept was made at the SADC Seed Secretariat meeting on November 15th, 2017, in Johannesburg, South

Africa and was followed by an extensive and lively discussion.

The next steps are envisioned to include:

- more detailed exploration of the concept with selected national research programs, particularly those who may wish to have varieties registered in the regional catalogues;
- more detailed exploration of the concept with key national regulatory entities;
- work with stakeholders to develop specific implementation guidelines for consideration; and
- separate meetings with the regional bodies, including relevant west African bodies, to explore adoption of the system.

Full scoping study

The full scoping study is available by writing to Agri Experience, Ltd., using the email address below, and requesting a copy of the VIN Scoping Study.

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