Multi-stakeholder framework for intervention in VPC seed systems: Potato and sweetpotato applications

Background
Vegetatively propagated crops face similar challenges in terms of availability, and accessibility of planting material, with the quality that is required by small-scale farmers. In the case of potatoes, investments for improving seed systems started about four decades ago, but most farmers in developing countries still use poor quality seed. In the case of sweetpotato, investments started more recently but the situation is similar. In most cases the experiences of seed-related projects have not been documented properly. Most of the documentation focuses on the technical and agronomic aspects of seed production, and rarely look at other factors in an integral way. One reason is the lack of a conceptual framework for analysis of seed systems with a multi-stakeholder and integrated (practical problem) perspective. This paper proposes a framework aiming at supporting analysis and decision-making by farmers, public or private organizations and other stakeholders interested in improving VPC seed systems, using potato and sweetpotato cases for illustration.

The framework (1) for analyzing and intervening in VPC seed systems
The framework has two basic axes. One has an actor orientation, and starts by identifying all stakeholders involved in production, dissemination, trade and use; The second axis of the framework concentrates on the features needed for successful seed system functioning (see Tables 1 and 2).

Application of the framework for potato and sweetpotato
Using literature review and available documents, Tables 1 and 2 illustrate the use of the framework for two cases: A native potato seed system in the Andes, B sweetpotato seed systems in the private sector participation in Uganda. The text in black represent the current situation of roles, and the text in orange represent potential new roles

Table 1: Case of native potato seed systems in the Peruvian high Andes (2)

Table 2: Case of private sweetpotato seed production in Uganda (3)

Discussion and conclusions
The results presented in this preliminary analysis, using literature as source of information, illustrate how the framework could be used to describe the current situation of a given seed systems (text in black in Tables 1 and 2), and identify entry points to strengthen the role of some stakeholders to improve the functioning of the seed system as a whole (text in orange in Tables 1 and 2). In the potato case, it is clear that the system is farmer-based, with very limited role of formal or commercial stakeholders. Therefore, interventions should be directed to improve on-farm seed production, where the quality declared seed approach could contribute significantly. In the sweetpotato case, it illustrates an emergent effort of private sector, in which a farmer association (which resulted from a previous farmer field school - FPS project) evolved to become a private sweetpotato seed producer, with the support of research and agricultural organizations to define standards and ensure quality of the planting material. Although, it remains to be seen how the case evolves because most of the demand for quality seed comes from the NGO sectors, which could be artificial. In summary, the framework proved useful to identify stakeholders, their roles and potential contribution to improving the seed system. The description could be richer if done through participatory workshops and the tables completed by stakeholders themselves. The RTB is developing a proposal to be able to use and validate the framework with a range of real cases of RTB seed system interventions, which will generate lessons with potential to be shared widely.

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Citations