

Could Community Based Seed Production and Supply Schemes Improve Seed Systems for Under-Utilized Crops

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Keywords: community seed schemes, underutilized crops, formal seed system, informal seed system

Abstract

Maintaining crop production in higher-yielding varieties which give the farmer maximum return is a complex process which requires good seed which carries the genetic, physiological and physical quality aspects. This does not happen by itself in nature. Good seed requires constant application of high technology to prevent loss of quality, and ensure high yields for farmers. A seed industry consists of a broad inter-meshing of different technical aspects, from variety breeding to quality control to production to conditioning to marketing and delivery to farmers. This involves considerable outlay for investment and operating expenses, which requires the application of technology in the form of a business enterprise which operates cost-effectively and with good management. Even then, the seedsman can recover his investment only by either charging high prices for the seed, and/or selling large quantities of seed to many farmer customers. In the case of under-utilized crops, a system to provide improved seed would greatly improve crop yields and farmer use of the crops. However, the low volume, and often combined with difficulties inherent to the crops, severely limits the application of business and technology aspects to improve under-utilized crops. The need is for an improved seed system which can handle and distribute smaller quantities of seed while maintaining seed quality. Many forms of seed enterprise have been tried, but the need for good seed of the under-utilized crops still exists.

Two approaches to meeting this need appear to have merit:

1. In a few cases, large seed companies which can recover operating costs from large volumes of "main or major" crop seed could handle small volumes of under-utilized crop seed as a "loss leader" to provide complete services to farmers.
2. A variation of the low-cost "informal" seed operation which has technical guidance and support from government agencies such as agricultural extension, could provide improved seed of under-utilized crops in local areas.