

ASSESSMENT OF FARMERS' ACCESS TO FORMAL AND INFORMAL MAIZE SEED INPUT CHAINS IN SEMI-ARID KENYA

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Abstract

Formal seed maize market chains have increasingly become important in supplying improved seed maize to farmers and thus aiding in combating hunger and food insecurity. Smallholder farmers in arid and semi-arid areas parts of Kenya can increase maize yields through the widespread use of improved hybrid maize varieties. Farmer access to improved germplasm, however, is limited. This is attributed to poor seed distribution and marketing in the rural areas. To increase farmers' access to improved seed, researchers and development practitioners first need to understand how the seed maize market channels are structured, how they operate, the bottlenecks to them operating more effectively and the reasons why farmers decide to access seed via formal or informal channels. These issues are not clearly understood in the semi-arid areas of Kenya. Against this background, this paper analyses the structure of maize seed input chains in Machakos District and assesses factors that influence farmer participation in formal and informal seed chains. Qualitative assessment on the structure of the seed input chains - based on a market mapping approach - was followed by quantitative analysis of a simple random sample of 150 households. The study shows that extension contacts, access to credit, farmer group membership and experience with improved maize varieties favor farmers' access to formal seed maize channels are the most important factors. However, distance to output market, distance to extension service and transaction costs negatively influenced participation in the formal seed maize channel. Addressing these constraints will enhance smallholder farmers' access to improved maize varieties but will require greater public and private sector interventions especially in the case of provision of extension services. Agricultural extension should not only play a role in disseminating information and seed technologies but also stimulate the emergence of agricultural innovation systems.

Key words: Maize seed, farmer access, semi-arid areas, Kenya, innovation systems