



Tropentag, September 16-18, 2015, Berlin, Germany

“Management of land use systems for enhanced food security:
conflicts, controversies and resolutions”

Development of a Community-Based Dissemination Scheme for Improved Cowpea Varieties

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Abstract

Cowpea, a legume originating from Africa has superior heat and drought tolerance and a high nutritional value. It is an important crop for food security, livelihood improvement and cash income of farmers in semi-arid sub-Saharan Africa. However, the local varieties used by small-scale farmers have low yields, and a weak seed sector and extension services contribute to a slow dissemination of suitable varieties and modern cultivation techniques. The new scheme, “Accelerated dissemination system of improved cowpea Varieties via Empowered Communities in Burkina Faso” called “AVEC-BF”, was developed to overcome these difficulties. The scheme consists of three components: (1) Establishment of community seed producers (CSP) providing certified cowpea seed. (2) Conducting farmer participatory varietal selection (FPVS) to capture farmer’s requirements. (3) Organising farmers’ schools (FS) to introduce improved management practices. By linking these major components within the same village, suitable cowpea varieties selected by farmers and produced by community seed producers will be disseminated among farmers with improved cultivation skills. FPVS activities were conducted with 910 farmers (286 women) in target villages of Burkina Faso in 2010 and 2011. A total of 17 farmer groups received training to establish community-based seed production systems. Approximately 100 ha were newly cultivated for improved cowpea seed production by CSPs, resulting in 46.8 t of certified seeds over 3 years. A total of 1,177 farmers joined FSs focused on improving cowpea cultivation techniques and increasing knowledge of the new varieties. As a result, a total of 2,949 farmers and groups purchased improved cowpea seeds that were recommended by farmers themselves, tripling of the number of people reached by the project. In addition, the expansion of sustained cowpea production promoted improvement of income for farmers and the reclamation of abandoned land in semi-arid region was detected by economic assessment.

Keywords: Cowpea; dissemination scheme; seed production; small-scale farmer