

ECAPAPA POLICY BRIEF SERIES
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Variety Evaluation, Release and Registration, August 2003

Background

The harmonization of seed policies and regulation in the ASARECA¹ member countries is the first step toward creating a seed market that is large enough to attract investment by local and international investors who will provide the quantity, quality and variety of improved seed to meet the region's growing demands.

Since September 1999, ASARECA² with backing from USAID has supported a pilot project through ECAPAPA³ in the East African Community (EAC) countries of Kenya, Tanzania and Uganda on five specific areas, namely

- phytosanitary regulations
- seed certification
- plant variety protection
- laws and regulations governing the seed trade
- variety evaluation, release and registration.

Each of these areas is the subject of a policy brief

The State of Seed Variety Evaluation, Release and Registration in 1999

The project found procedures for evaluation and release of new varieties to be different among the EAC countries, and lengthy for the breeder. Breeders entered materials for evaluation at different stages of the variety development cycle, e.g., at advanced yield trials in Tanzania, and national performance trials in Kenya. The variety testing procedures for release differed in each of the countries. On-farm trials were mandatory in Uganda, required in Tanzania and optional in Kenya for variety release. Private seed companies and breeders did not participate in national evaluation trials in Uganda, were being considered in Kenya, but were already included in Tanzania. The process was lengthy, with the three seasons required for lease of varieties following their entry into variety performance trials, which meant three years in the case of Kenya and Tanzania. There was no regional list for varieties, while the national lists were often not up to date. This meant that apart from being different in each country, the lengthy procedures discouraged private seed variety development, confined testing to similar ecological locations within national rather than regional boundaries, making the transfer of technology to farmers in the EAC region much slower than desired.

¹ Burundi, D.R. Congo, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan, Tanzania, Uganda.

² ASARECA is the Association for Strengthening Agricultural Research in Eastern and Central Africa based at Entebbe in Uganda.

³ ECAPAPA is the Eastern and Central Africa Programme for Agriculture Policy Analysis and is a programme of ASARECA.

Activities of the ASARECA/ECAPAPA Pilot Project

The pilot project adopted a long consultative process beginning with the appointment of national resource persons between August and September 1999 to review the laws, regulations and standards in each country that was followed by national consultative workshops with stakeholders in October and November 1999. These were followed by national workshops that presented proposals for regional harmonization to top-level public and private sector seed industry players in February to March 2000. The process culminated in the first regional workshop in April 2000 in Entebbe on the harmonization of proposals for phytosanitary regulations, seed certification and variety evaluation and registration; followed by the second one in June 2000 in Arusha on proposals for import-export procedures and coordination in implementing and monitoring regional agreements.

Results of the Project

The outcomes of these workshops were agreements that can be categorized as *a) legal*, and *b) procedural*. The *legal agreements* are those requiring changes in national legislation in consultation with the committee on agriculture and food security at the EAC. In the case of variety evaluation, release, and registration, no legal changes were anticipated. The *procedural agreements* are those not requiring any change in legislation and can therefore be implemented immediately by the Ministries of Agriculture and National Certifying Authorities (NCAs). Virtually all of the changes required to improve variety evaluation, release, and registration fell under this category.

The results so far include the following: The testing procedures were to be harmonized by establishing common standards⁴ for each crop strain, including DUS⁵ tests for variety release and protection. This will facilitate reciprocal recognition within the region of variety testing data. The performance trials to be regionally known as variety performance trials (VPTs) will accept materials from local and introduced varieties intended for release for at least one main season, if sufficient data from previous stages is available. This should allow seed companies to do multi-location testing to advanced yield trials stage in relevant ecological zones throughout East Africa before entering them into VPTs and on-farm trials concurrently. This will attract more seed companies because of the expanded regional market, the reduced time for testing (one instead of three years), and possibilities of simultaneous release in all three countries of the EAC. Eventually all crops will be subjected to harmonized variety testing procedures, beginning with those earmarked for compulsory certification⁶.

Other achievements of the project include the agreement to include private sector in seed evaluation and release subject to supervision of the variety performance trials and accreditation of institutions (e.g. universities), seed companies, seed trade associations, or individuals by the national certifying authorities. The three countries also agreed to

⁴ These are experimental design, number of replicates, plot size, use of fertilizer, fungicides and pesticides, minimum data to be collected, and scoring procedures.

⁵ This is the distinctness, uniformity, and stability test.

⁶ These are maize, dry bean, snap bean, rice, wheat, sorghum, sunflower, potato, carrot, cowpea, cassava, and pigeon pea.

establish national and regional seed variety catalogues⁷, with the national certification authority maintaining the national one, and the regional catalogue being maintained by the EAC under its committee on agriculture and food security. Eligibility for listing in the catalogue will depend on the variety being tested, accepted, released and commercially produced in at least one of the member countries.

Next Steps

The most important outcomes of this project on variety evaluation, release, and registration has been to reduce the final testing and acceptance stage from three years to one, and making it possible for multi-locational testing within the region. Other important outcomes that will greatly enhance technology transfer within the region, once implemented, include the national and regional seed catalogues; the authorization of competent non-state entities to undertake seed evaluation and release; and the standardization and therefore reciprocity of variety testing procedures in the EAC region. These actions should attract seed companies to the region because of the standardized, reciprocal and shortened testing period as well as access to regional rather than national seed markets. The experience of EAC countries will be used to extend the pilot phase⁸ of this project to other ASARECA member countries. There are plans to initiate the same consultative process in Burundi, D.R. Congo, Eritrea, Ethiopia, Madagascar, Rwanda, and Sudan.

⁷ The catalogue has the following information: crop species, variety name, variety code, breeder and origin, year of release, adaptation (e.g. altitude, rainfall, agro-ecological zone), duration to maturity, recommended seed rate, expected yield, disease resistance, pest resistance or tolerance, seed availability and source, and end use.

⁸ Further information can be obtained from ECAPAPA Coordinating Unit, P.O. Box 765, Entebbe, Uganda. Tel 256 41 321751/2, 321780; Fax 256 41 321777 or email: ecapapa@imul.com