

MALAWI EGS recommendations

A total of 4 key recommendations to address deficiencies and/or opportunities in the EGS area of Malawi's seed system have been developed by the assessment team and vetted with stakeholders. The recommendations are roughly, but not strictly, listed in order of importance or recommended sequencing.

Recommendation # 1: Improve the capacity of the Department of Agricultural Research Services (DARS) to produce and store early generation seed of all classes for seed
Description
According to the 2020 Annual Report of the Seed Services Unit (SSU), seed companies produced 97% of the maize basic seed that was inspected and certified in 2019. In contrast, the Department for Agricultural Research Services (DARS) did not produce any basic seed for maize that year. Further, the number of maize breeders at DARS had reduced from 4 in 2017 to 2 in 2020. There is an urgent need to strengthen DARS' breeding program as they are the main public institution with active breeders with the technical capacity to produce and maintain basic seed for seed companies. DARS should (i) strengthen human resource capacities for germplasm maintenance, (ii) purchase irrigation equipment to improve its production capacity, (iii) refurbish existing seed storage facilities or establish new seed storage facilities.
Key determinants of costs
Associated costs: (i) hiring an independent assessor to determine the specific infrastructure needs for DARS. Thereafter, the costs may include establishing irrigation facilities, refurbishing existing seed storage facilities and/or establishment of new facilities; (ii) hiring more breeders and seed technologists
Additional comments, if needed
The recommendation to hire more breeders may also fall under the Breeding, Variety Release and Maintenance thematic area

Recommendation # 2: Strengthen the quality assurance system for early generation seed by the Seed Services Unit (SSU)
Description
There are multiple sources of early generation seed in Malawi. According to the SSU Annual report, in 2018/19, a total of nine seed companies and multiple individuals produced basic and/or pre-basic seed for the key crops – maize, bean, and groundnut. Public sources included DARS, CGIAR centers (ICRISAT, IITA, Harvest Plus and CIAT) and NGO projects like the Sustainable Agricultural Production Program (SAPP), Chitedze. The government registers all these entities and then inspects and certifies their production. However, there is need for enhanced quality assurance. Inadequate quality EGS would have a negative effect on the final quality of certified seed. SSU needs to diligently ensure that seed production strictly follows the standards in the Seed Regulations of 2018.
Key determinants of costs
No additional costs as this is part of SSU's daily operations.
Additional comments, if needed
This recommendation may also fall under the Quality Assurance thematic area

Recommendation # 3: Develop framework to forecast national demand for early generation seed
Description
Seed companies source basic seed from several sources, including DARS, CGIAR centers, and other private seed companies and individual seed producers. However, seed companies occasionally face a shortage of quality basic seed. To address this challenge, the seed companies and the different EGS producers should develop a framework to determine the annual national requirement for the different classes of early generation seed.

Key determinants of costs
The associated costs related to meeting costs between the EGS producers and seed companies

Recommendation # 4: Develop system through which seed companies can commercialize varieties from DARS through licensing agreements
Description
The Department for Agricultural Services (DARS) is the main developer and owner of varieties developed in Malawi. Article 29 of the Plant Breeder's Rights Act of 2018 allows for owners of varieties to enter into exclusive or non-exclusive licensing agreements with different parties. DARS and seed companies should jointly develop a system through which seed companies can access newly released crop varieties from DARS through licensing agreements and thereafter commercialize them. This would entail a discussion of the terms of these agreements and thereafter their implementation. These discussions should be under the legal framework provided under the PBR Act.
Key determinants of costs
The costs would include: (i) staff time for DARS and the umbrella association of seed companies, the Seed Trade association of Malawi (STAM) to meet, discuss and agree on the general terms of these agreements; (ii) hiring legal experts to draft the licensing agreements
Additional comments, if needed
<ol style="list-style-type: none"> 1. This recommendation may also apply to the CGIAR centers such as CIMMYT and ICRISAT whose varieties are commercialized in Malawi. However, the CGIAR centers have their own arrangements for licensing of their varieties to seed companies. 2. DARS may not need to hire any legal experts if they already have lawyers among their staff