

Effort of National Seed Laboratory to Guard Seed Quality in Timor-Leste

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Introduction

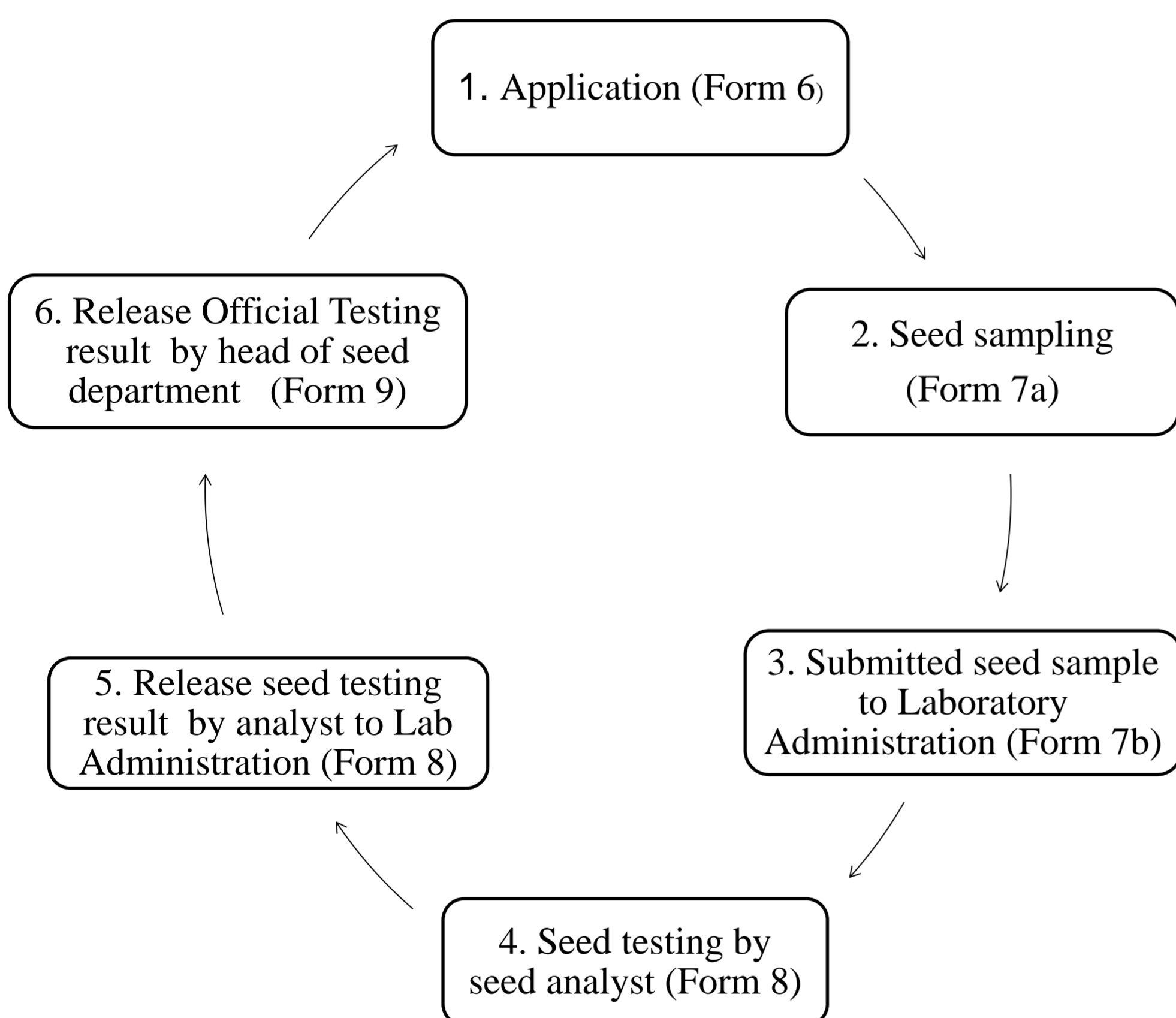
The First National Seed Laboratory of Timor-Leste was established in 2013. It is located inside the MAF compound. The laboratory is furnished with the most important equipment needed to conduct seed testing for seed certification.

Routine seed testing such as seed moisture content, physical seed purity, and seed germination test can be done in the laboratory. Basic ISTA rules with some modifications are implemented by trained seed analysts to assess seed quality of released varieties in Timor-Leste.

Certified seed and commercial seed of maize-Sele, maize-Noi Mutin, rice-Nakroma, and peanut-Utamua are the most commonly tested seeds in the laboratory. If there is a request, the seed lab also conducts seed testing of imported seed.

Tetrazolium test, seed dormancy breaking by using KNO₃ or heat can also be conducted in the laboratory.

Seed Testing Procedures



Seed Sampling



The National Seed Lab



Seed Testing in Laboratory



Tetrazolium Test



Observation of TZ test pattern under microscope



Sand test method for peanut germination test

Results

Seed testing 2010 - 2015

Official seed testing has been done since 2010. The number of tested seed lots increased significantly in 2015. A total of 204 seed lots have been tested in 2015.

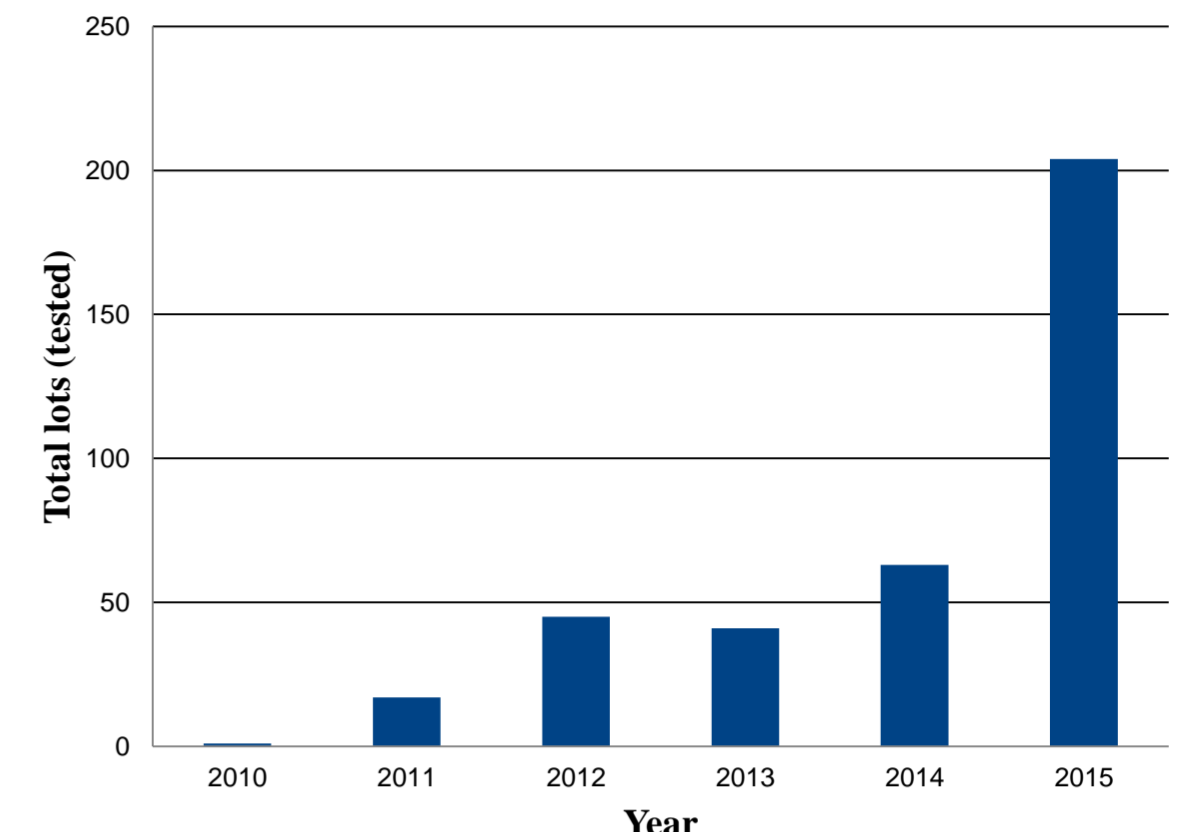
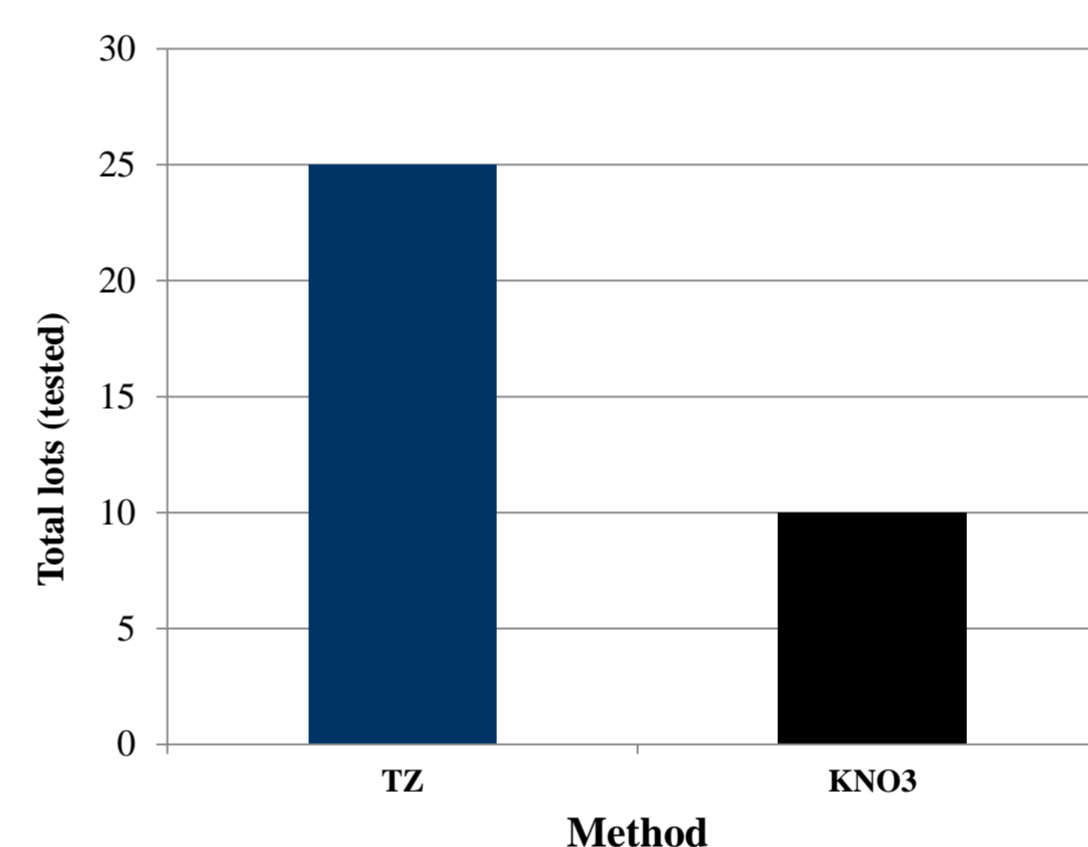


Figure 1. Number of tested seed lots in the National Seed Laboratory over the period 2010-2015.

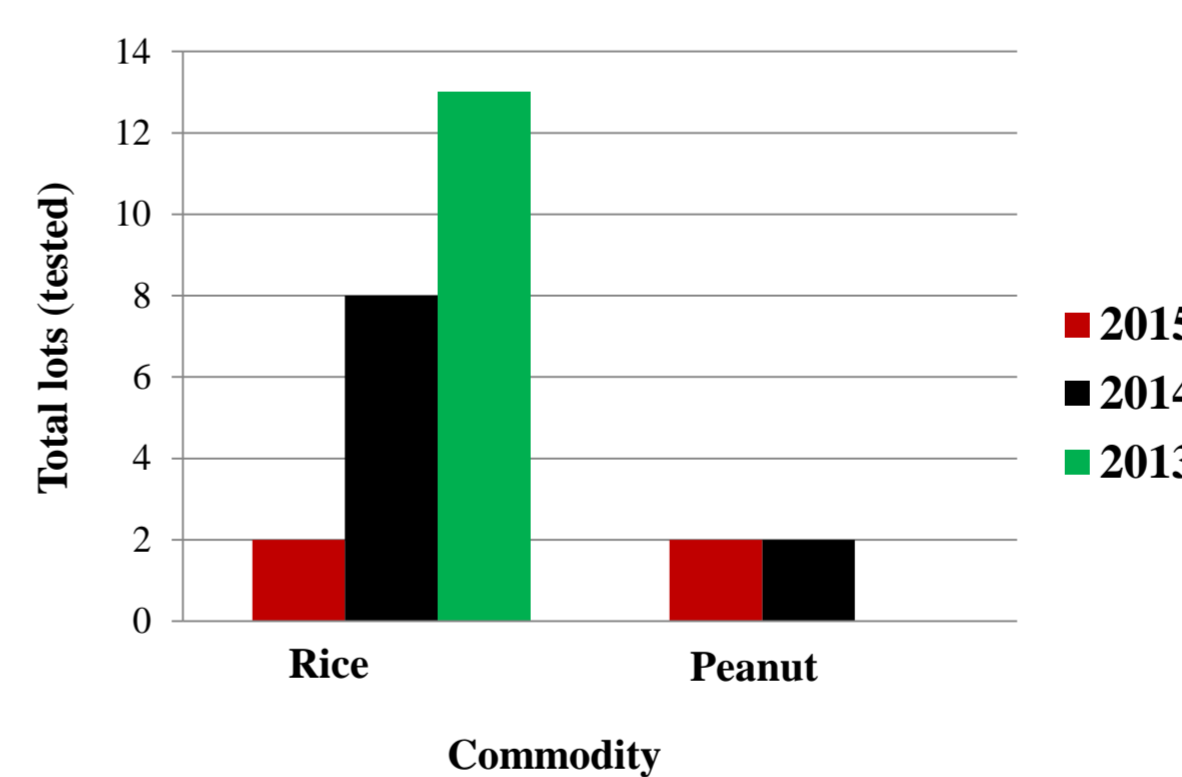
Seed Testing by using chemical



Additional seed testing by using Tetrazolium and/or KNO₃ method is performed by seed analysts if they suspect there is a seed dormancy problem in the seed lots. As an example, in 2013, 25 seed lots had been evaluated by using TZ test and 10 lots by KNO₃ test.

Figure 2. Total seed lots tested by chemical method in 2013

Number of rejected seed lots 2013-2015



The number of rejected rice seed lots in 2015 was smaller than the number of rejected seed lots in 2014 and 2013. There were 13 rejected rice seed lots in 2013, 8 in 2014 and 2 in 2015.

There were two rejections of peanut seed lots in both 2014 and 2015.

Figure 3. Number of rejected seed lots over the period 2013-2015

Conclusion

The National Seed laboratory was established in 2013 and has played an important role in seed quality assurance for the released varieties by providing official seed testing of certified and commercial seed produced in the country.



Timor-Leste's Seed Officers

Acknowledgment

