



# THE ROLE OF PVP IN PROMOTING DEVELOPMENT OF CLIMATE-SMART IN KENYA



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## Introduction

- The Kenyan economy is largely dependent on agriculture for raw materials, food security, employment and general livelihoods.
- Climate change has resulted in increased temperatures, changes in seasonal trends and patterns.
- In recent years, Kenya has witnessed extended dry periods and rainfall outside the normal seasons.
- With the changing climatic conditions, the country has witnessed emergence of new pests and diseases such as maize Lethal Necrosis (MLN), Fall Army Worm (FAW) among others.
- It is therefore very important for breeders to develop varieties that are resilient to harsh agro-ecological conditions.



## Plant Variety Protection in Kenya

- The office to administer the PVP was established in 1997 and has functioned under KEPHIS since 1998
- Kenya acceded to UPOV under the 1978 Convention in **13th May 1999**
- The Seeds and Plant Varieties Act was amended in **2012** to incorporate aspects of the 1991 Act of the UPOV.
- In **May 2016**, Kenya acceded to the 1991 Act of the UPOV Convention.
- Kenya grants PBRs for all plant genera and species

UPOV



## Plant Variety Protection in Kenya

- Establishment of a PVP office and subsequent membership to UPOV, conferred the following advantages:
  - Readily available UPOV test guidelines for most of the Agricultural crops
  - Trained personnel through cooperation with UPOV and UPOV members on development of national test guidelines.
  - Collaboration and co operation between the breeders and the testing authority on variety description.
- KEPHIS engaged in sensitization of breeders to develop new varieties and benefit from the PVP system.
- This led to increased introduction of crop varieties



# Development of Climate Smart Varieties

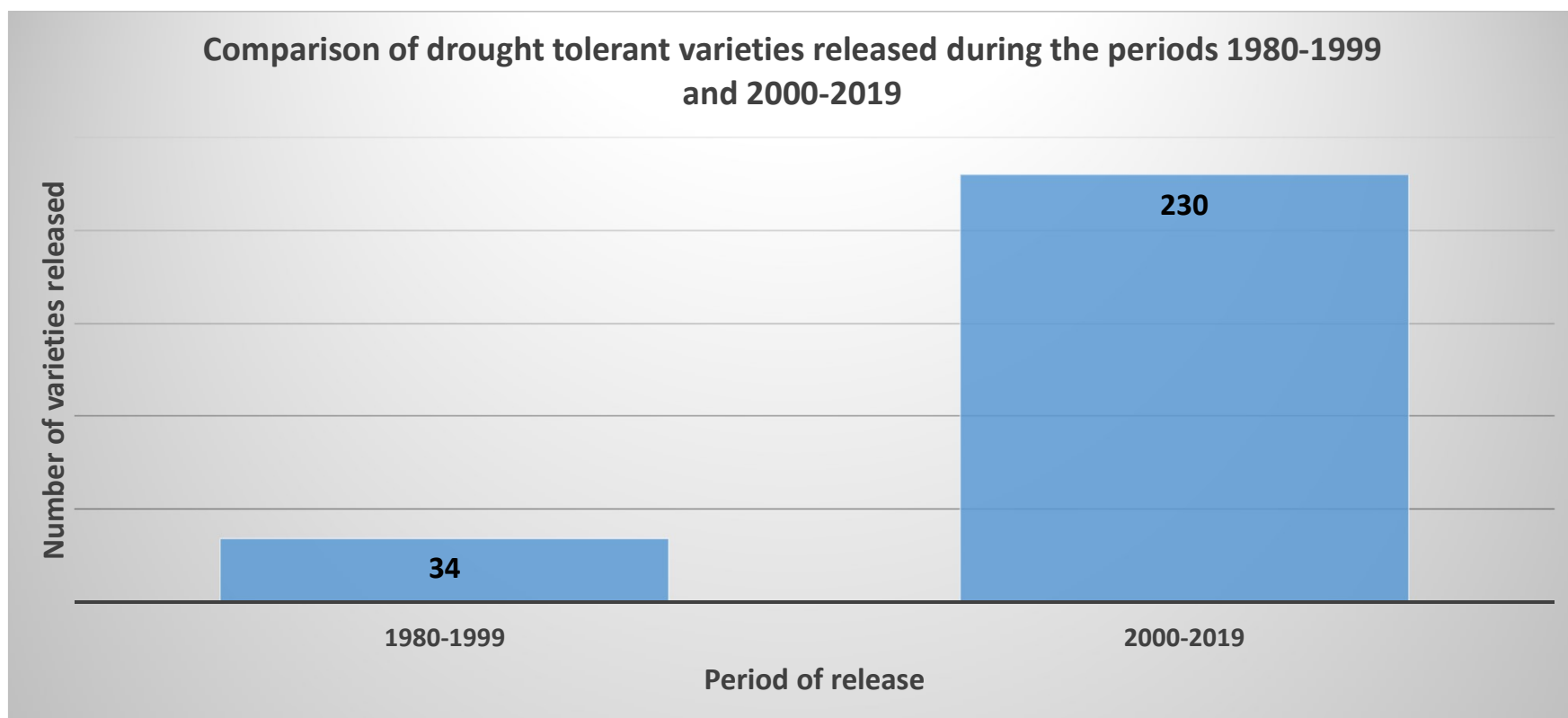
- During the last 10 years, breeders have embarked on development of drought tolerant varieties of maize, sweetpotato, cassava, sorghum, pigeon peas, amaranth, rangeland grasses among others.
- There are also efforts to release pest and disease tolerant varieties to counter emerging pests as a result of climate change.
- Sixteen (16) Maize Lethal Necrosis (MLN) and 3 Fall Army Worm (FAW) tolerant varieties have been released.





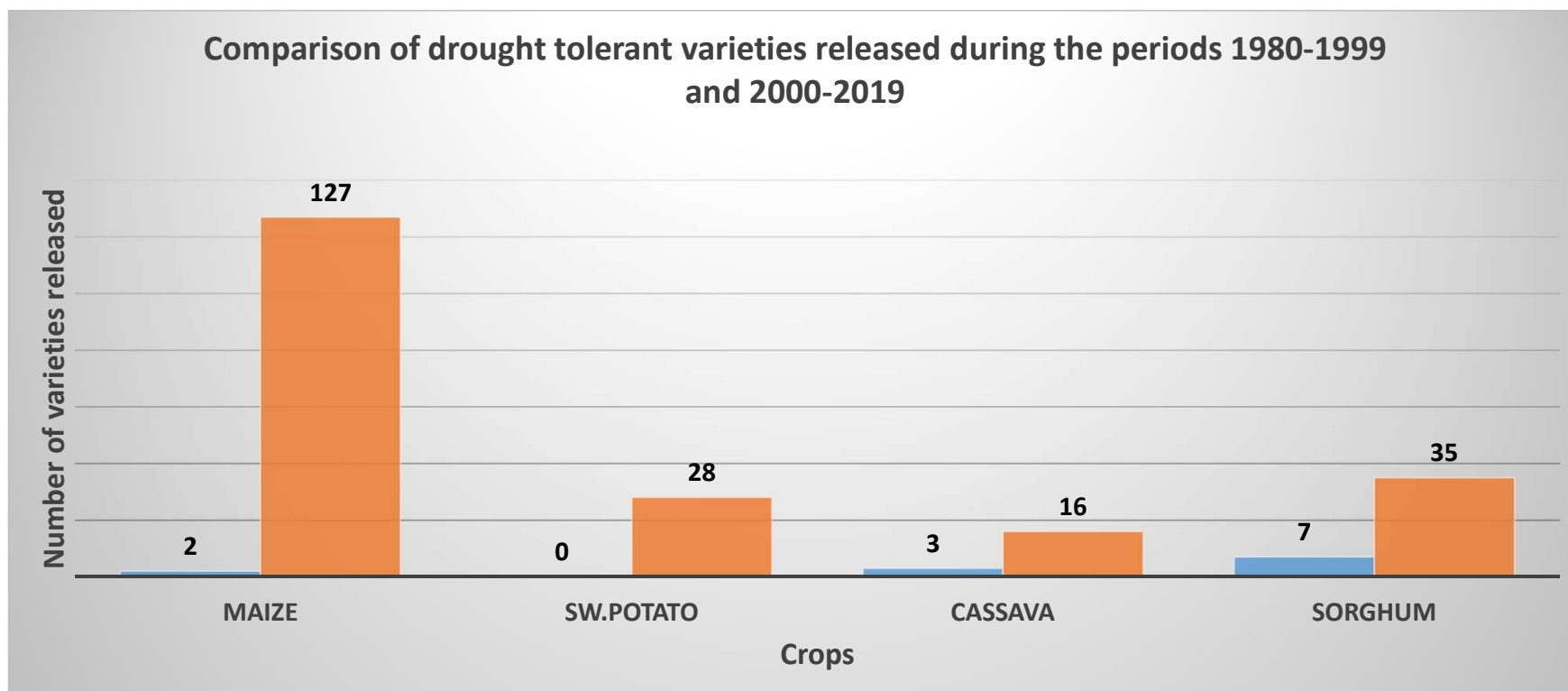


# Development of Climate Smart Varieties





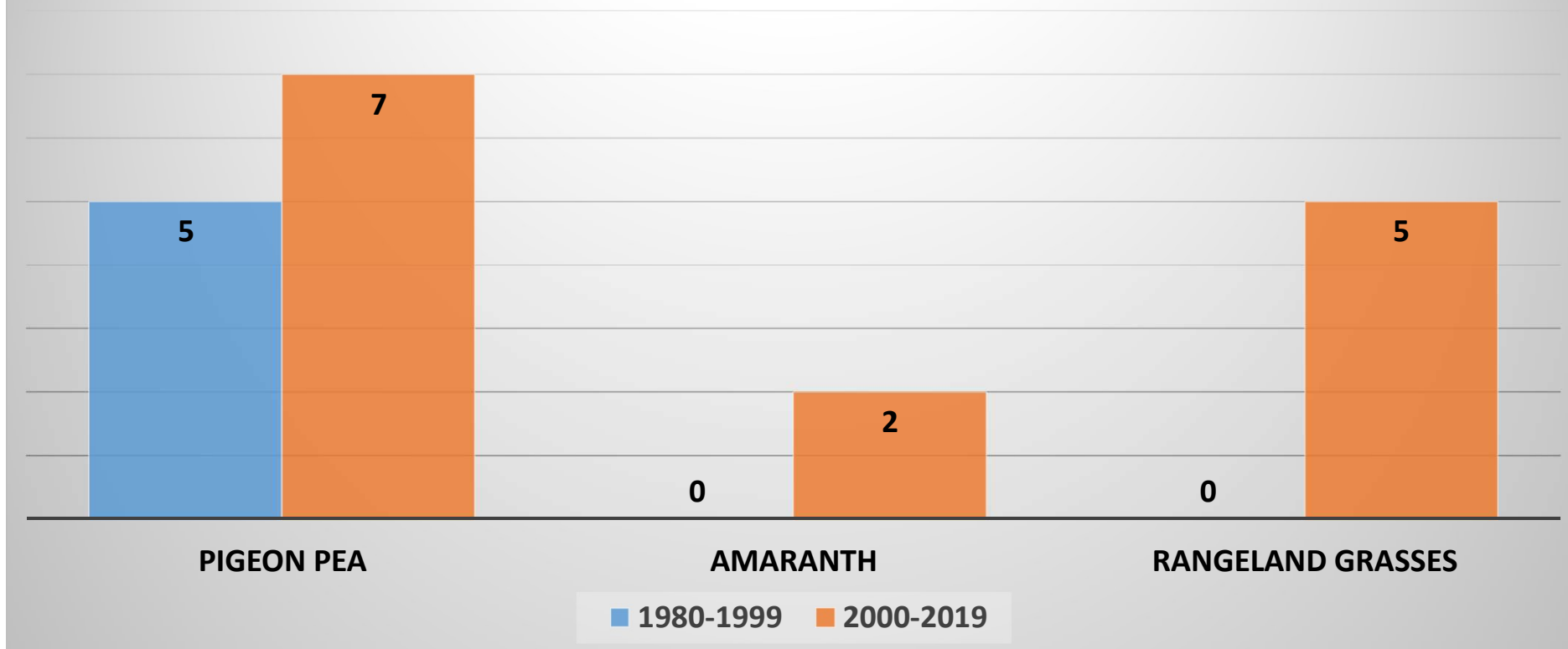
## Development of Climate Smart Varieties





## Development of Climate Smart Varieties

Comparison drought tolerant varieties released during the periods 1980-1999 and 2000-2019

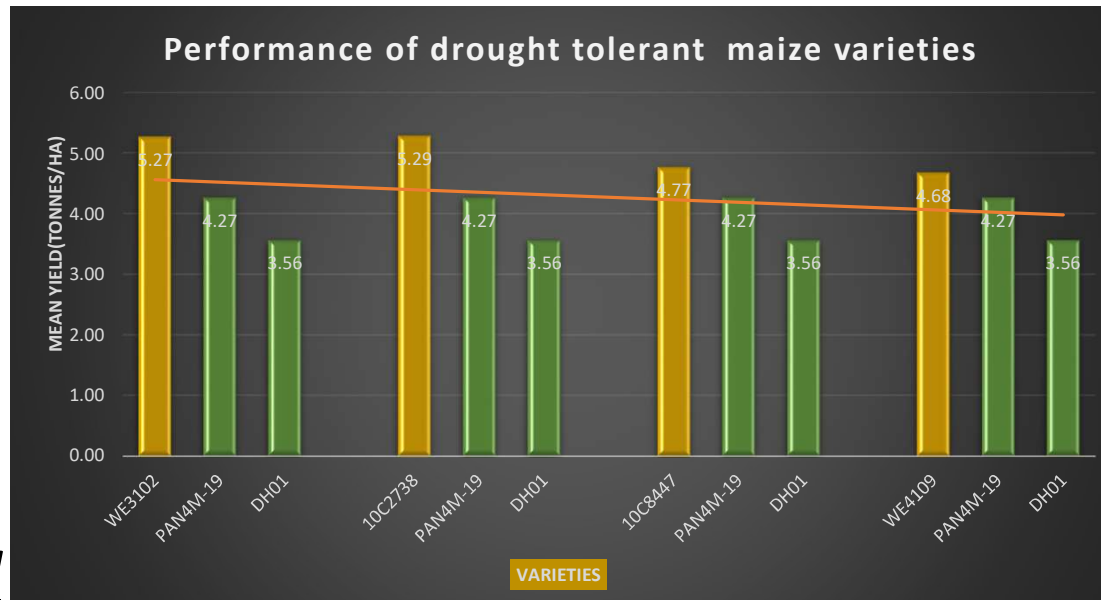








# Development of Climate Smart Varieties

Increased production through breeding of better yielding and drought tolerant varieties



## Legend

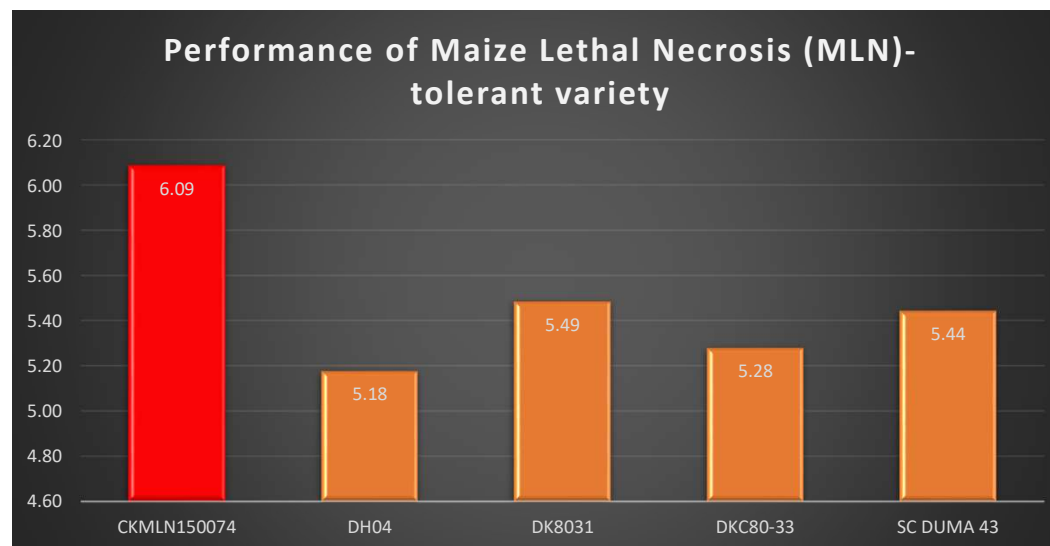
	New drought tolerant varieties
	Check Varieties

Source: KEPHIS VCU Data - 2017



## Development of Disease Tolerant Varieties: Food Security

- Development and release of MLN tolerant varieties thus improved yields



Legend:



Source: KEPHIS VCU Data;2015



## Conclusion

- There is considerable development of climate resilient varieties following introduction of plant variety protection in Kenya.
- This has come as a result of:
  - Breeders having assurance on return of investment following development of new varieties.
  - Enhanced capacity for testing of new varieties through cooperation with UPOV and UPOV members.
  - Collaboration and co operation between the breeders and the testing authority on variety testing.



# Thank you for your kind attention!



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