INTRODUCTION

- Sorghum remain an important source of livelihood for Batswana
- It’s cultivated on 80 percent of arable land
- The current output and yield level are below their potential.
- Improving efficient resource use and allocation is key in increasing the sorghum productivity.

RESULTS

- Average technical efficiency was 0.94
- Average allocative efficiency was 0.67.
- Education level increased the level of technical efficiency
- Rainfall variability and trade openness had a negative effect on allocative efficiency

METHODOLOGY

⇒ Secondary data from 1998 until 2017 used.
⇒ Stochastic production frontier used for factors influencing technical efficiency
⇒ Stochastic cost frontier used for factors influencing allocative efficiency.

Conclusion

- Sorghum producers were both technical and allocative inefficient.
- Education was the main determinant of technical efficiency
- Rainfall variability and trade openness were the main determinant of allocative