Benedict Xolisa Mhletywa

Department of Agriculture and Rural Development Eastern Cape. P/Bag X 447 Qumbu 5180. N2 Qumbu Main Street. Tel: 047 553 0080. Fax: 047 553 0429. Cell: 083 502 4464. E-mail: <u>mhletywab@yahoo.com</u>

ACKNOWLEDGEMENT

I would like to express my sincere thanks to the Scientists, Colleagues, Managers in the Department of Agriculture and Rural Development Eastern Cape to make this success and the entire South African Society for Agricultural Extension for the opportunity they have granted.

1. INTRODUCTION

The overall context of this document is based on the production practice of Conservation Agriculture, processes and stages. As the Department of Agriculture and Rural Development is trying to improve its services and to increase food production to meet food security needs, conservation agriculture has been introduced to bridge this challenge. Through this exercise, most of emerging ways are to be introduced in a particular society and need to be well organized and delivered to the people.

2. PURPOSE OF THE DOCUMENT

Today there are many approaches to introduce new strategy, but as identified in this document are the most common topics to be considered when one intend to convey message. The entire earth planet faced with negative environmental effects which are needed to be considered as they are deeply degrading its value. Human beings who live in this planet depend solely in the conductivity of this planet for well being. The prevailing world economic crisis and global warming led to the economical and conservational means of living mainly for the following purposes:

- 2.1. Financially: more income less costs.
- 2.2. Easier work, time and labour savings.
- 2.3. To engage everybody in the value chain
- 2.4. To minimize soil erosion and improve soil structure.
- 2.5. To combat climate change less fuel from tractors.

3. METHODOLOGY

All management practices should be carried out to ensure successful crop production, including cultural practices.

Data collected through research consultation of books, journals, agricultural magazines, internet, interviews, observation and experiences.

4. STAGES AND PROCESSES OF CONSERVATION AGRICULTURE

4.1. Social facilitation

Field preparation Soil fertility and plant nutrition Pre-spray and Planting Topdressing and pest management Weed management Harvesting and seed selection Storage and Marketing

5. BENEFITS OF CA

- 5.1. Continuous minimum soil disturbance
- 5.2. Permanent organic soil cover
- 5.3. Diversified crop rotation including plant association
- 5.4. Green manure cover crops
- 5.5. Integrated pest and weed management
- 5.6. Financially: more income less costs
- 5.7. Easier work, time and labour savings

6. CONCLUSION

By introducing conservation tillage, a minimum tillage and surface mulch practice that was developed in response to the severe wind erosion caused by mould board tillage of grasslands.

Availability of suitable equipment is a major constraint to successful CA, but advances in design and manufacture of seed drills by local manufacturers are enabling farmers to experiment and accept this technology in many parts of the world. Agriculture in the next decades will have to produce more food, sustainably, from less land through more efficient natural resources and with minimal impact on the environment and in order to meet growing population demands. This will be a significant challenge for agricultural scientists, extension officers and farmers.

Most countries depend on the natural resources which they need to be utilized effectively especially land. As natural as they are those resources have to be well managed and conserved for future generation.

REFERENCES

Agricultural magazine: Farmers Weekly and Go Farming South Africa.

Baker, C.J., Saxton, K.E. Ritchie, W.R. 2002. No tillage seedling: Science and practice. First Edition. Oxford UK: CAB International.

P.R. Hobbs, 2006. C A: What is it why is it important for future sustainable food production? Cornel University. USA.