



Smallholder farmer adaptation to climate change

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Buhle's Mission

- To enable new and emerging farmers to establish themselves in viable farming businesses through effective skills training and support in order to alleviate poverty and promote sustainable economic development and resources use in Africa



Climate Change

- A change in global or regional climate patterns, attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.
- Affected Factors are **Rainfall** and **Temperatures**

Smallholder Farmers and Climate Change

- Production of livestock and crops is dependent of temperatures and rainfall



Factors affecting reduction in agricultural productivity

- Increases in temperatures,
- changes in precipitation patterns,
- changes in extreme weather events,
- Reductions in water availability

Sharon lost her Beetroot crop due to excessive heatwave in her farm



Amanda lost her entire cabbage crop to Hail in November 2020



Effects of CC on Smallholder farmers

- Some stop farming completely because they are not creditworthy to Financial Institutions. Crop insurance is costly for them due to risk attached with smallholder farming.
- Some become highly indebted due to income loss
- Some change farming enterprises from external to indoor farming
- Some reduce their production to smaller sizes

End results of farmers' misery

- Food security affected negatively
- High food prices due to less supply and high demand
- Poverty increases due to loss of income by farmers and farm workers

Risk mitigation of CC by Smallholder farmers

- Plant drought tolerant crops
- Introduce water harvesting and storage for irrigation purposes
- Use water efficient irrigation systems
- Invest in undercover farming methods to protect crops from excessive climatic conditions
- Diversify production
- Attend Capacity Building trainings on Climate change

Affordable Undercover farming at Buhle Farmers' Academy to protect crops from excessive climatic conditions caused by climate change



Conclusion

- Farmers need to adapt to changes caused by climate change or else their businesses will close
- Farmers should get more information on climate change as it affects them directly

Thank you