

drdar

Department:
Rural Development & Agrarian Reform
PROVINCE OF THE EASTERN CAPE

**Perception and Adoption of Biodynamic Farming as a
Conservation Method by Matatiele Smallholder Farmers
in Eastern Cape, Alfred Nzo District.
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Introduction

- Biodynamics is a holistic form of agriculture, also known as advanced organic farming
- Biodynamic farmers incorporate earthy and cosmic rhythms in their activities, they perceive the farm as a self sustaining organism, and they prepare and apply for potentized medicines onto their soil and plants, which are known as biodynamic preparations.
- Benefits includes improved soil fertility and structure, water conservation, sustainable ecosystem, reduced production costs through regenerated inputs.

Principles of Biodynamic farming



Crop Rotation For Better Soil



Promoting Animal Husbandry



Composting To Rejuvenate Land



Using The Forces Of Nature



FLOWER DAY



FRUIT DAY



LEAF DAY



ROOT DAY



Introduction cont.....

-Brief overview of Matatiele region

Integrated farming is the prevalent practice in Matatiele,. Additionally, Matatiele is renowned for its production of organic red meat and wool.

-Importance of smallholder farmers in the area,

Smallholder farming is anticipated to have a significant impact on the rejuvenation of the rural economy in South Africa.

Small-scale farmers rely heavily on their local biophysical factors, such as soil type and climatic conditions.

small-scale farming operates as a low-input system.

Research Problem

- South Africa is confronted with various development constraints, including food insecurity, resource degradation, social marginalization, and climate change.
- Vast increasing of population with food demand and extensive use of synthetic fertilizers, PGR, and PPCs.
- Degradation of soil and natural resources through exploitation by convectional farming practices
- Need for sustainable farming practices as climate smart agriculture strategy.
- Potential of biodynamic farming as a solution.

Research Objectives

- Assess current knowledge of biodynamic farming among Matatiele smallholder farmers
- Evaluate farmers' perceptions of biodynamic farming as a conservation method
- Identify factors influencing the adoption of biodynamic farming practices

Literature Review

Challenges to biodynamic farming adoption

- Yields concerns versus exponentially increasing population
- Lack of support (research, education, advisory services) in diversified, integrated holistic farming system.
- Costs incurred with certification of the practice
- Premium prices of biodynamic products and consumer insights.
- Over dependence on land
- Lack of scientific evidence of lunar phases and plant growth stimulation

Methodology

- cross-sectional survey questionnaire, with close ended questions (attitudes, perceptions, demographics, beliefs)
- Stratified random sampling
- Sample of 100 small holder farmers (Yamane formular was used from a population of 200)
- Spss software to be used for data analysis

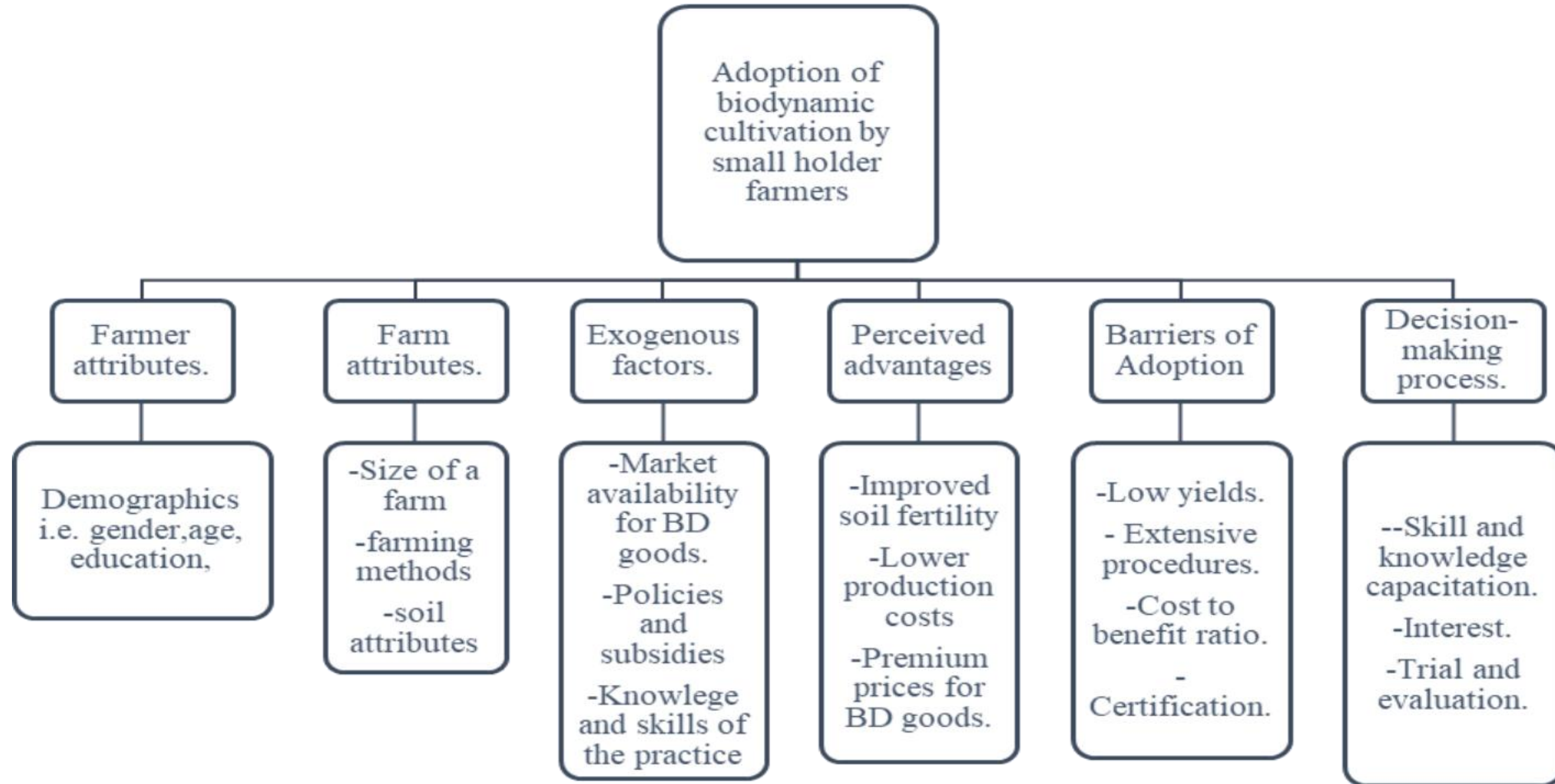
Expected Outcomes

- Increased understanding of farmers' perceptions
- Identification of barriers to adoption
- Recommendations for promoting biodynamic farming
- Potential impact on conservation efforts

Significance of the Study

- Address the knowledge gap among the next generation of farmers about the selection between conservational and conventional farming methods.
- The adoption of this method is crucial in addressing issues such as soil acidification, soil degradation, and achieving the policy goals of food and nutrition security for all citizens.
- It aligns with the climate smart agriculture promotion to combat climate change effect
- Will propose solutions for government organizations, commodity organizations, and market agencies to support and promote these sustainable farming methods.

Conclusion



- Thank you for your attention

