

# The Significance of Sustainable Agriculture and Climate Change: A Study on Farmers' Perspectives in Sikkim, India

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# **Background**

Sustainable farming is essential in reducing the effects of climate change on agricultural systems. The Indian Himalayan region's state of Sikkim is especially susceptible to the consequences of climate change. It is essential to comprehend the views of farmers in Sikkim in order to devise successful strategies to foster sustainable agriculture and resilience in the face of changing climatic conditions.

## **Methodology**

For this study, a sample of 32 farmers from various parts of Sikkim was conveniently chosen. Structured, open-ended interviews were conducted to gain insight into the farmers' views on climate change, sustainable farming, and related matters. Qualitative data analysis tools and web-based sentiment analysis techniques were employed to analyze the collected data.

## **Implications**

This study emphasizes the positive attitude of farmers towards organic farming as a sustainable agricultural practice. Farmers think that organic farming techniques are advantageous for their health, the quality of their crops, and the environment. Nevertheless, the lack of resources and financial support present obstacles to widespread implementation. The prevalence of vermicomposting and resilient crop selection among farmers demonstrates their capacity to facilitate adaptation to climate change.

#### Recommendations

In order to promote sustainable farming practices in Sikkim, it is essential for the government to provide support and allocate sufficient resources. To encourage the adoption of organic farming practices, crop selection based on resilience, and efficient crop management techniques, farmer education programs and technology dissemination initiatives should be put into place. Additionally, providing farmers with better access to markets can incentivize them to switch to sustainable agriculture.

#### **Conclusion**

This research provides insight into farmers' views on sustainable agriculture and climate change in Sikkim, India. These findings emphasize the necessity of collaborative efforts between farmers, government agencies, and other stakeholders to tackle the issues caused by climate change. By implementing sustainable farming techniques, Sikkim can bolster its resilience, reduce climate risks, and guarantee food security for its farming communities.

Score Range			
Negativ	e Neutral	Positive	
-1.0 to 0.25	-0.25 to +0.25	+0.25 to +1.0	

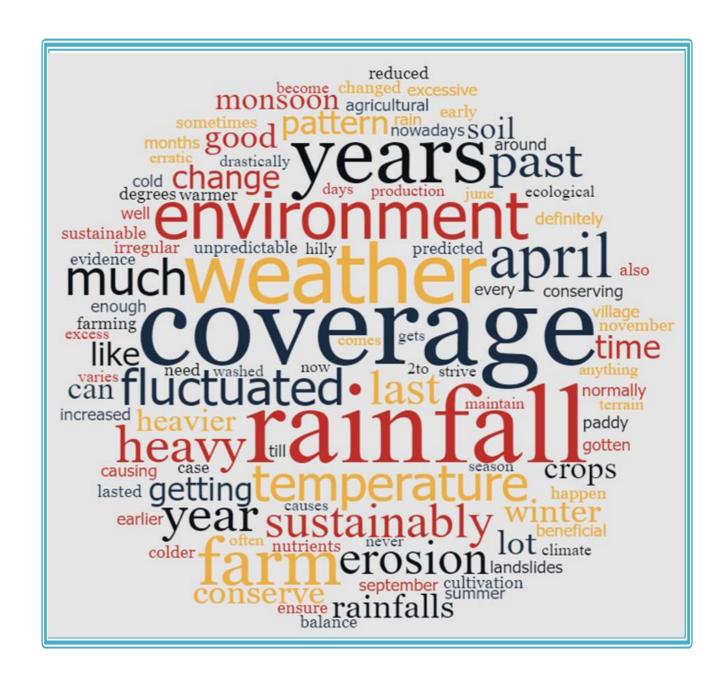
Sentiments Towards Climate Change	negative (-1.00)
Sentiments Towards Sustainable Agriculture	positive (+0.71)

## **Objectives**

The purpose of this study is to investigate the views of farmers in Sikkim on sustainable farming and climate change. By utilizing qualitative research methods, we aim to gain a deeper understanding of the difficulties faced by farmers and the sustainable farming techniques they use.

# **Key Findings**

This study's results provide valuable insight into the views of farmers in Sikkim. Farmers reported feeling the effects of climate change, including higher temperatures in the summer and alterations in rainfall patterns. These alterations have had a major impact on crop yields and necessitated modifications in farming techniques.



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