

ATTITUDE OF FARMERS TOWARDS NATURAL FARMING

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ABSTRACT

Natural farming gives us residue free food, saves environment from pollution and provide better living standards. A study was conducted in six talukas within the districts of Junagadh, Rajkot, and Gir Somnath in Gujarat. The number of villages in each taluka was determined at random based on the availability of adopted and non-adopted natural farming farmers. A total of 288 farmers were chosen as sample size. The ex post facto research design was adopted in the study. The majority of adopted (81.94%) and non-adopted (62.50%) farmers had a medium to high attitude toward natural farming, according to the study's findings. This indicated that more efforts are needed to improve and develop their attitude up to high (positive) level of non-adopted natural farming farmers. Regression analysis highlighted education, size of land holding, extension participation, source of information, innovativeness, decision making and environmental orientation as key predictors, explaining 64.8% of the variation in sensitivity. Step-wise analysis indicated that Environmental orientation alone accounted for 32% of the variation, increasing to 59.92% when combined with extension participation, innovativeness, environmental orientation, education, size of land holding, source of information and decision making had significant contribution in attitude.

Keywords: farmers, attitude, natural farming, profitability

INTRODUCTION

The Green Revolution marked a revolving point in Indian agriculture, bringing remarkable gains in food grain production through high-yielding crop varieties and intensive use of fertilizers and plant protection inputs. However, this approach has gradually contributed to the decline of soil health, contamination of water resources, and reduction in biodiversity and decrease in the sustainability of agricultural systems (Gupta et al., 2021). Consequently, an increasing number of farmers are exploring natural farming practices to overcome these environmental challenges and enhance their income stability and well-being (Suresh et al., 2022; Rana et al., 2022; Desai et al., 2024). Natural farming provides a solution to a number of issues, including food insecurity, farmer anguish, health issues brought on by pesticide and fertilizer residue in food and water, climate change, global warming, and natural disasters (Chand and Singh, 2023; Gamit and Vinaya, 2022; Gamit and Vinaya, 2024). Farmers who practice natural farming do not need to purchase fertilizers or pesticides to ensure the health of their crops. It is essentially a natural farming strategy that use readily available biological products rather than chemically derived products.

In many regions of the world, natural farming has

historically been referred to as agroecology or traditional agriculture (Kumar, 2022). It also protects the soil from degradation. Prime Minister Shri Narendra Modi encouraged farmers to adopt natural farming at the National Conclave on Natural Farming. The Prime Minister said “We have to take our agriculture out of the lab of chemistry and connect it to the lab of nature. When I talk about nature’s laboratory, it is completely science-based”. Nevertheless, there is a dearth of actual data regarding attitudes toward natural agricultural methods. Adoption of natural farming techniques is directly impacted by farmers’ attitudes regarding it. Thus, the current study on farmers’ attitudes toward natural farming in Gujarat, India’s Saurashtra region was conducted.

OBJECTIVE

To know the attitude of adopted and non-adopted farmers towards natural farming

METHODOLOGY

The ex-post facto research design was used for the investigation. A multistage, purposive, random selection procedure was used to choose the study’s sample. Three districts in Gujarat state’s Saurashtra region—Junagadh, Rajkot, and Gir Somnath—were used for the study. From each district, two talukas were purposefully chosen depending on

how many of them engaged in natural farming. Six talukas in all were chosen for the investigation. Regardless of each taluka, a certain number of villages were chosen based on the amount of adopted farmers who practiced natural farming. A village wise list of farmers, who have practicing natural farming was available in *i-khedut* portal as well as from state department of agriculture and project director, ATMA of each district. From each taluka twenty four farmers who had adopted natural farming and twenty four farmers who had non-adopted natural farming, which were chosen by using simple random sampling technique. A total of 288 farmers were chosen as the study's sample size. The information was gathered by conducting in-person interviews with the chosen natural farmers from particular Saurashtra region villages.

In this study, an attempt has been made to develop a scale that can scientifically measure the attitude of farmers to natural farming. The attitude scale developed by Zala & Kalsariya (2021) was used to measure the attitude of farmers towards natural farming. Attitude of farmers are categorized into five categories using arbitrary method of classification. Statistical tests like frequency counts, percentage, mean, standard deviation, multiple regression analysis, step wise regression analysis and t-test were used for analysis and explanation of data.

RESULTS AND DISCUSSION

Farmers' attitudes about natural farming are characterized by how supportive or depressive they are. An individual's attitude is how they think, act, or feel about a situation or cause. It is well acknowledged that a person's attitude has a significant impact on how they behave. Table 1 displays the information on farmers' attitudes toward natural farming.

Table 1: Farmer's distribution based on their overall attitude towards natural farming (n = 288)

Sr. No.	Category	Adopted farmers		Non-adopted farmers	
		f	%	f	%
1	Very low level of attitude (Up to 34 score)	00	00	06	04.17
2	Low level of attitude (35 to 49 score)	18	12.50	48	33.33
3	Medium level of attitude (50 to 64 score)	84	58.33	69	47.92
4	High level of attitude (65 to 79 score)	34	23.61	21	14.58
5	Very high level of attitude (Above 79 score)	08	05.56	00	00
Total		144	100.00	144	100.00

After researching farmers' detailed answers to natural farming, the overall level of their attitude was measured. Nearly three-fifths (58.33%) of the farmers who adopted natural farming had a medium level of attitude toward natural farming, followed by 23.61 percent, 12.50 percent, and 5.56 percent who had a high, low, and very high level of attitude toward natural farming; none of them had a very low level of attitude toward natural farming, according to the data presented in Table 1 and shown in Fig. 1.

In contrast, less than half (47.92%) of farmers who do not practice natural farming had a medium attitude toward it, followed by low, high, and very low attitudes (33.33%, 14.58%, and 4.17%, respectively), and none of them had a very high attitude.

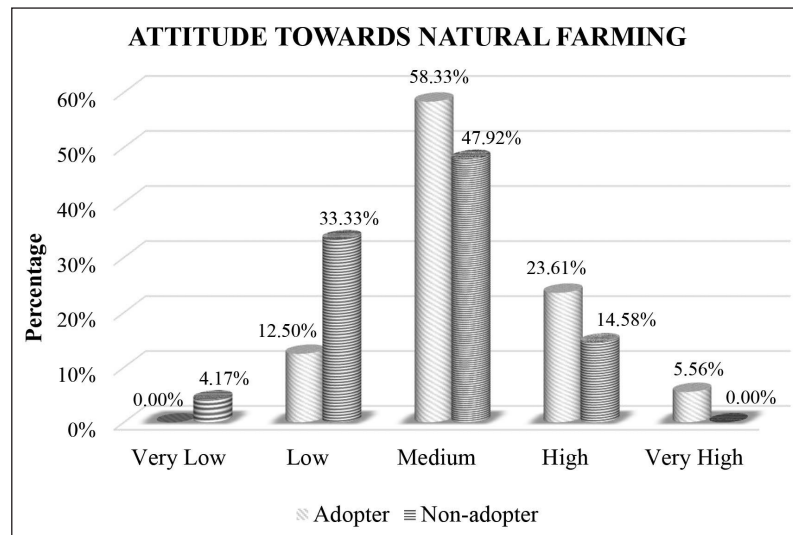


Fig. 1: Farmers' distribution based on their attitude about natural farming

factors.

The collection of 18 independent factors jointly explained $R^2 = 64.80$ percent of the total variation in attitudes toward natural farming. Additionally, it can be said that seven of the eighteen variables—participation in extension, innovativeness, environmental orientation, education, land holding size, information source, and decision-making—contributed significantly to attitude. This finding demonstrates the enormous significance of seven key factors in attitudes on natural farming.

Stepwise multiple regression analysis

Stepwise multiple regression analysis was used to identify the key factors and determine how well they could predict changes in the dependent variable. All 18 independent variables were taken into account during the stepwise regression analysis, and Table 2 displays the findings.

It can be inferred that 32.00 per cent of the variation in attitude towards natural farming of adopted natural farming farmers was encountered by environmental orientation.

However, environmental orientation + innovativeness contact in overall attitude towards natural farming of adopted farmers accounted 47.20 per cent of the variation. Likewise, environmental orientation + innovativeness + extension participation had 52.60 per cent, environmental orientation + innovativeness + extension participation + education had 55.90 per cent, environmental orientation + innovativeness + extension participation + education + source of information had 57.30 per cent, environmental orientation + innovativeness + extension participation + education + source of information+ size of land holding had 58.70 per cent, environmental orientation + innovativeness + extension participation + education + source of information+ size of land holding + decision making had 59.92 per cent of the variation encountered upon overall attitude towards natural farming of adopted farmers.

The results indicate that these characteristics may be taken into account in order to improve adopted farmers' attitudes toward natural farming. The other variables were eliminated from the model since adding more factors resulted in a non-significant improvement in R^2 .

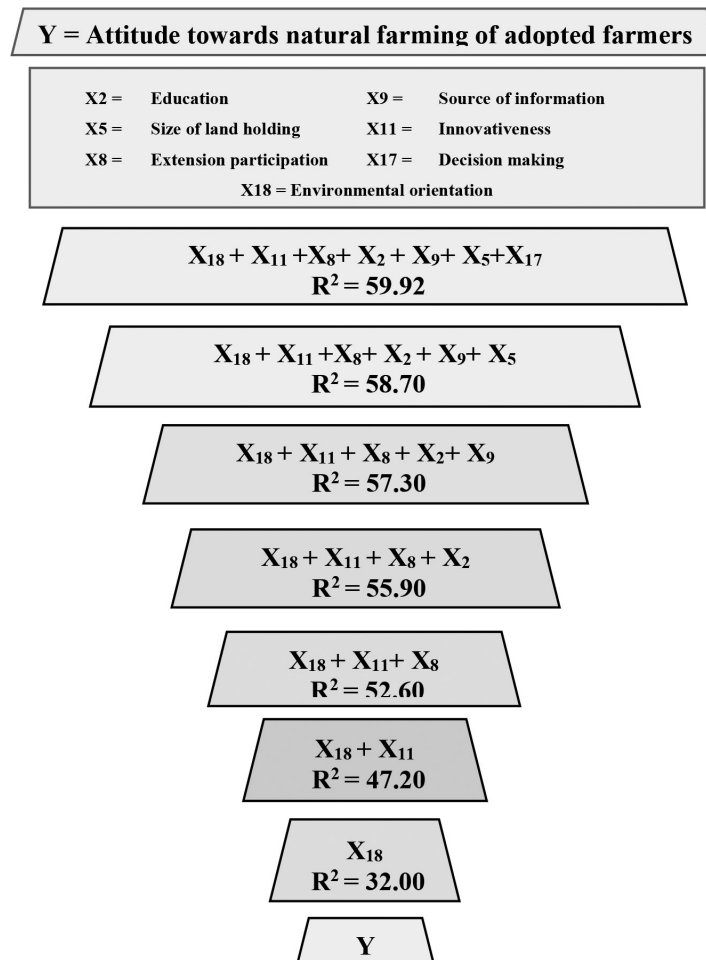


Fig. 2: Functional relationship between attitude towards natural farming of adopted farmers and independent variables

CONCLUSION

Nowadays, farmers are beginning to practice natural farming since they are aware of the negative effects of using chemical fertilizers and traditional pesticides. According to the discussion above, most adopted farmers (81.94%) and non-adopted farmers (62.50%) have a medium to high level of attitude toward natural farming. Thus more efforts should be made from grass root level in popularizing the natural farming instead of chemical farming understanding through training programmes, organized farmers visit, farmers fairs, farmers group meeting *etc.* So, that sustainable agriculture growth can be achieved. Adopted farmers' attitudes toward natural farming were significantly influenced by seven factors: viz, education, land holding size, participation in extension, information source, innovativeness, decision-making and environmental orientation. Policy and decision makers, development planners, government and non-governmental organizations who are concerned with promotion of natural farming can be focuses on this seven variable for more promoting natural farming.

CONFLICT OF INTEREST

All authors declare that there is no conflict of interest.

REFERENCES

- Chand, R. and Singh, J. (2023). From Green Revolution to Amrit Kaal Lessons and Way Forward for Indian Agriculture. Working Paper 02/2023. National Institution for Transforming India, Government of India, New Delhi. 44 p.
- Desai, J. D., Patel, S. R. and Patel, H. K. (2024). Relationship between profile of farmers and their perception about organic farming. *Gujarat Journal of Extension Education*, 37(1):101-104. <https://doi.org/10.56572/gjoee.2024.37.1.0016>.
- Gamit, Rohan A. and Vinaya Kumar H. M. (2024). Perception of farmers about natural farming. *Gujarat Journal of Extension Education*, 38(2):195-200. <https://doi.org/10.56572/gjoee.2024.38.2.0031>.
- Gamit, Rohan A. and Vinaya Kumar, H. M. (2022) Farmers attitude towards zero budget natural farming. *Gujarat Journal of Extension Education*, 34(2):41-46.
- Gupta, N., Pradhan, S., Jain, A., & Patel, N. (2021). Sustainable agriculture in India 2021: What we know and how to scale up. Council on Energy, Environment and Water. <https://www.ceew.in/sites/default/files/CEEW-FOLU-Sustainable-Agriculture-in-India-2021-20Apr21.pdf>.
- Ingale, P. 2020. Study on farmers attitude, knowledge and practices related to organic farming in Ratnagiri district. M. Sc. (Agri.) Thesis (Unpublished), Dr.B.S.K.K.V., Dapoli.
- Khodifad, P. B., Mallapalli, K. and Sharma, O. P. (2024) Perception of agricultural professionals of Navsari Agricultural University about natural farming. *Gujarat Journal of Extension Education*, 38(1):173-180. <https://doi.org/10.56572/gjoee.2024.38.1.0029>.
- Kumar, C. P. (2022). Sustainable agriculture in India- Natural farming spreads roots in Andhra Pradesh. *Humanities*. 10(2):16-21
- Patel, R. M., Patel, J. K. and Dubey, L. R. (2025) Adoption of natural farming practices by the farmers. *Gujarat Journal of Extension Education*, 39(2): 135–139. <https://doi.org/10.56572/gjoee.2025.39.2.0022>
- Rana, Harshdeepsinh and Patel, J. K. (2022) A scale to measure attitude of farmers towards zero budget natural farming. *Gujarat Journal of Extension Education*, 34(1):1-5. <https://doi.org/10.56572/gjoee.2022.34.1.0001>.
- Suresh, A., Krishnan, P., Jha, G. K. and Reddy, A. A. (2022). Agricultural sustainability and its trends in India: A macro-level index-based empirical evaluation. *Sustainability*, 14(5), 2540. <https://doi.org/10.3390/su14052540>.
- Verma, D. (2019). Attitude of farmers towards organic farming in Jabalpur district of Madhya Pradesh. M. Sc. (Agri.) Thesis (Unpublished), J.N.K.V.V., Jabalpur.
- Zala, P. H. and Kalsariya, B. N. 2022. *Indian Res. J. Ext. Edu.* 22(1):12-18.

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