CONSTRAINTS EXPERIENCED BY THE FARMERS IN RESPECT OF GAINING KNOWLEDGE AND ADOPTING THE ORGANIC FARMING PRACTICES

Abstract:

The study examine the challenges faced by farmers in Chitrakoot district, Uttar Pradesh, in adopting organic farming practices. Conducted across five blocks and 25 villages, data was collected from 250 randomly selected farmers using a descriptive research design to capture the current state of organic farming and the barriers to its adoption. The findings indicate that the most significant constraints hindering farmers from adopting organic practices include insufficient premium prices for organic produce (55.6%), lack of awareness (50.4%), and inadequate technical guidance (50.0%). Other notable challenges reported were small land holdings, high input costs, and limited market channels for organic products. The study suggests several measures to overcome these constraints, such as increasing awareness programs about organic farming benefits, providing financial support through low-interest loans, and implementing government initiatives to directly purchase organic produce for programs like the Midday Meal Scheme. Additionally, establishing minimum support prices for organic products and enhancing access to organic inputs are recommended to improve the adoption rates of organic farming practices in the region. These insights are crucial for guiding policymakers and stakeholders in designing targeted interventions that promote organic farming, thereby improving agricultural sustainability and farmers' livelihoods. The findings also underscore the need for a holistic approach that addresses both market and non-market barriers to facilitate a transition towards more sustainable agricultural practices in Chitrakoot district.

Keywords: Organic farming, Awareness, Constraints, Chitrakoot district, Uttar Pradesh, Farmer adoption, Agricultural sustainability.

Introduction:

Organic farming represents a sustainable agricultural approach centered on natural methods that prioritize ecological balance, soil health, and biodiversity conservation, while minimizing dependence on synthetic inputs like chemical fertilizers, pesticides, and GMOs. Rooted in principles of environmental stewardship, organic farming practices include crop rotation, composting, biological pest control, and the use of organic fertilizers, all aimed at enhancing soil fertility and promoting plant health. Organic livestock farming emphasizes ethical treatment by providing animals with natural diets, outdoor access, and avoiding growth hormones or prophylactic antibiotics. Compliance with regional organic certification standards, which typically require adherence to rigorous guidelines on production methods, inputs, and record-keeping, ensures transparency for consumers and maintains the integrity of organic farming principles. Through these practices, organic farming seeks to produce nutritious, high-quality food while fostering environmental sustainability and supporting animal welfare.

With rising environmental concerns and the urgency of sustainable agriculture, organic farming has emerged as a compelling alternative to conventional farming. Its focus on avoiding synthetic chemicals and fostering natural agricultural processes aligns with efforts to reduce the ecological impact of food production and improve public health outcomes. The growing awareness of the risks associated with chemical-intensive agriculture has led to increased interest in organic farming as a solution to these challenges. By promoting ecological balance and reducing dependency on non-renewable inputs, organic farming not only contributes to the wellbeing of ecosystems but also holds potential for building resilient, sustainable food systems. This study examines the barriers to adopting organic farming in Chitrakoot district, Uttar Pradesh, shedding light on challenges faced by local farmers and suggesting ways to enhance adoption for more sustainable agricultural practices in the region.

Research Methodology:

To explore the constraints faced by farmers in gaining knowledge and adopting organic farming practices, this study employed a descriptive research design. This approach was chosen to capture a clear picture of the existing challenges in knowledge dissemination and the organic farming adoption process. The study was conducted in Chitrakoot district of Uttar Pradesh, selected for its agricultural diversity and rural significance. From five blocks in this district— Manikpur, Karwi, Pahadi, Ramnagar, and Mau—five villages were randomly selected, resulting in a total of 25 villages. A sample of 250 farmers was chosen through simple random sampling to ensure that each farmer had an equal chance of selection, representing a variety of agricultural experiences and practices.

Data collection was conducted using a structured questionnaire with both open and closed-ended questions, designed to gauge the challenges related to knowledge acquisition and organic farming adoption. Personal interviews supplemented the questionnaire, allowing for deeper insights into specific constraints and farmer perspectives. Descriptive statistics, including mean scores and frequency distributions, were employed to analyze the data. The constraints were ranked based on their mean scores to identify the most significant challenges. This method of data collection and analysis provided an organized approach to understand and prioritize the difficulties farmers face, thus paving the way for targeted solutions and support in organic farming practices.

Result and Discussion:

Constraints experienced by the farmers in respect of gaining knowledge and adopting the organic farming practices:

Table-1 Constraints experienced by the farmers in respect of gaining knowledge ofthe organic farming practicesN=250

S.	Constraints		Respondents		
No.		No	%	Rank	
A	Personal				
1.	Lack of awareness.	126	50.4	II	
2.	Inadequate farming infrastructure.	74	29.6	XIX	
3.	Organic conversion period takes longer time which is risky for small farmers.	85	34.0	XVI	
4.	Inadequate availability of organic inputs in time.	71	28.4	XXIII	
5.	Small land holding.	116	46.4	IV	
B.	Social				
1.	Lack of promotional incentives for the farmers.	86	34.4	XV	
2.	Limited experts in preparation of organic inputs.	74	29.4	XX	
3.	Lack of awareness programmed on organic farming in the media.	79	31.6	XVII	
4.	Lack of quality training on organic farming practices.	87	34.8	XIV	
5.	Substantial research program on organic farming.	93	37.2	XI	
C.	Economical				
1.	High input cost of farming.	112	44.8	V	
2.	Lack of financial supports.	64	25.6	XXV	

3.	Lack in governmental policies to promote organic agriculture.	68	27.2	XXIV
4.	High risk and uncertainty of returns.	91	36.4	XII
5.	High cost and non-availability of labor.	73	29.2	XXI
D.	Farmers			
1.	Lack of technical guidance on organic farming.	125	50.0	Ш
2.	Lack of control measures for pest and disease.	88	35.2	XIII
3.	Less number of technologies in organic forming system.	72	28.8	XXII
4.	How fulfilment of nutrient management.	75	30	XVIII
5.	Conversion period three years are required.	93	37.2	Х
E.	Market			
1.	Insufficient market channels for organic produce.	107	42.8	VI
2.	Insufficient premium price for organic produce.	139	55.6	Ι
3.	Non-availability of traditional seed.	95	38.0	IX
4.	No-availability of readymade organic inputs formulation.	103	41.2	VII
5.	lack of good marketing policies.	96	38.4	VIII

It is obvious from the Table 1 that an overwhelming majority of the respondents (%) were agreed with the statements that 'Insufficient premium price for organic produce (55.6) ranked at Ist place was the common problem, followed by 'Lack of awareness' (50.4%) ranked at IInd, 'Lack of technical guidance on organic farming' (50.0%) ranked at IIIrd, 'Small land holding' (46.4%) ranked at IVth, 'High input cost of farming' (44.8%) ranked at Vth, 'Insufficient market channels for organic produce' (42.8%) ranked at VIth,

'No-availability of readymade organic inputs formulation' (41.2%) ranked at VIIth, 'lack of good marketing policies' (38.4%) ranked at VIIIth, 'Non-availability of traditional seed' (38.0%) ranked at IXth, 'Conversion period three years are required' (37.2%) ranked at Xth, 'Substantial research program on organic farming' (37.0%) ranked at XIth, 'High risk and uncertainty of returns' (36.4%) ranked at XIIth, 'Lack of control measures for pest and disease' (35.2%) ranked at XIIIth, and 'Lack of quality training on organic farming practices' (34.8%) ranked at XIVth, Lack of promotional incentives for the farmers' (34.4%) ranked at XVth, Organic conversion period takes longer time which is risky for small farmers' (34%) ranked at XVIth, Lack of awareness programmed on organic farming in the media (31.6%) ranked at XVIIth. How fulfilment of nutrient management' (30%) ranked at XVIIIth, Inadequate farming infrastructure' (29.6%) ranked at XIXth, Limited experts in preparation of organic inputs' (29.4%) ranked at XXth, High cost and non-availability of labor' (29.2%) ranked at XXIth, Less number of technologies in organic forming system' (28.8%) ranked at XXIIth. Inadequate availability of organic inputs in time' (28.4%) ranked at XXIIIth, Lack in governmental policies to promote organic agriculture, (27.2%) ranked at XXIVth, Lack of financial supports' (25.6%) ranked at XXVth, respectively. The score value for each constraint indicated the seriousness which had considerable effect towards low awareness of organic farming practices. Similar finding was found sivraj et al. (2017).

Suggestions to overcome the constraints

Table-2 Suggestions to overcome the constraints.

N=250

S.	Suggestions	Respondents		
No.		No	%	Rank
А.	Awareness			
1.	Supplying organic materials at reduced costs.	131	52.4	V
2.	The government directly purchases organic produce to provide the Midday Meals Scheme (MMS) and the Public Distribution System (PDS).	128	51.2	VI

3.	Providing a minimum support price for products that are organic.	146	58.4	III
4.	Providing regular instruction on the processing and value-adding of organic inputs.	137	54.8	IV
5.	Start teaching about organic farming in schools.	126	50.4	VII
6.	increasing awareness of organic farming, its produce, and its goods.	165	66.0	I
7.	Particularly for organic farming operations, the financing must to be easily accessible at a low interest rate.	148	59.2	Ш
8.	Awareness about organic certification and Policy Initiation by Agriculture department.	108	43.2	VIII
9.	Extension facilities should be available on demonstration and visiting basis.	103	41.2	IX
10.	Using a single window system, providing organic certification.	80	32.0	X

In case of awareness suggested that the an overwhelming he majority of respondents (66%) were agreed with the statements that 'increasing awareness of organic farming, its produce, and its goods.' ranked at Ist place, followed by 'Particularly for organic farming operations, the financing must to be easily accessible at a low interest rate.' (59.2%) ranked at IInd, 'Providing a minimum support price for products that are organic' (58.4%) ranked at IIIrd, 'Providing regular instruction on the processing and value-adding of organic inputs.' (54.8%) ranked at IVth, 'supplying organic materials at reduced costs.' (52.4%) ranked at Vth, 'The government directly purchases organic produce to provide the Midday Meals Scheme (MMS) and the Public Distribution System (PDS).' (51.2%) ranked at VIth, 'Start teaching about organic farming in schools' (50.4%) ranked at VIIth, Awareness about organic certification and Policy Initiation by Agriculture department' (43.2%) ranked at

VIIIth, Extension facilities should be available on demonstration and visiting basis' (41.2%) ranked at IXth, using a single window system, providing organic certification' (32.0%) ranked at Xth, respectively. Similar finding was also reported by Patel (2012) and slathia *et al.* (2013).

Conclusion

This study identifies a range of constraints that hinder farmers in Chitrakoot district from fully adopting organic farming practices. Key barriers include insufficient premium prices for organic produce, lack of technical guidance, limited awareness, and economic challenges such as high input costs. Market limitations and inadequate farming infrastructure further complicate efforts to transition to organic methods, highlighting the need for a comprehensive approach that includes policy support, financial incentives, and technical guidance. Addressing these constraints is crucial for enabling a broader shift toward organic farming, which promises enhanced sustainability, environmental health, and improved livelihoods for farmers in the region.

Future Scope

There is significant potential for future research and development in organic farming adoption within rural regions like Chitrakoot. Studies focusing on innovative financial models, such as crop insurance schemes tailored for organic farmers, could mitigate risks associated with organic conversion periods. Research into localized organic input production and efficient pest and disease management can help reduce dependency on external inputs, making organic farming more accessible to smallholders. Additionally, the establishment of more structured market channels and organic certification programs would support better access to premium pricing. Building upon this research, policymakers and agricultural extension services can design targeted interventions to increase organic adoption rates, benefiting both farmers and the larger ecosystem through more sustainable agricultural practices.

References:

- Chandhana, B., Sashikala, G., Reddy, B. K. K., Madhavi, K., Sudharani, Smt. K., and Sadhineni, S. N. M. (2023). A Study on Knowledge Level and Attitude of Farmers towards Organic Farming in Ananthapuramu District, Andhra Pradesh, India. *International Journal of Environment and Climate Change*. Volume 13, Issue 11, Page 1344-1349, 2023;
- Chanpaneri, H. C. (2012). Adoption of organic farming practices by the tribal farmers of North Gujarat. M.Sc. (Agri.) Thesis (Unpublished), SDAU, Sardar krushinagar, Gujarat.
- Darandale, A. D. (2010). Attitude of tribal farmer towards organic farming practices in maize crop. M.Sc. (Agri.) Thesis (Unpublished), Anand Agricultural University, Anand.
- Gangadhar, J. (2009). Marketing behavior of cotton farmers in Warangal district of Andhra Pradesh. M.Sc. (Ag.) Thesis. Acharya N G Ranga Agricultural University, Hyderabad, India.
- Gorade, S.W., Sananse, S.L and Kashirsagar, S.M. (2008). Training needs of farmers for certification of organic farming in the context of Globalization. Journal of Maharashtra Agricultural Universities. 33(2): 224-225.
- Gupta, V., Singh, D., Mishra, A.K., Singh, B.P., Kumar, R. and Pandey, R.K. (2017) A study on constraints faced by cauliflower growers in cauliflower cultivation in Western Uttar Pradesh, India. *Inter. J. Curr. Microb. App. Sci.*, 6(7): 2646-2651.
- Hanglem, A., Modak, S., Roy And, D., Pal, P. K. (2019), Constraints faced by the organic farmers of Manipur state, India, *Journal of Crop and Weed*, 15(1): 178-181 (2019).
- Krishnamurthy, A.T. Meti, S.K., Sathish, H.S. and Nagesh (2016). Constraints perceived and suggestions offered by the farmers in adoption of improved production technologies of tomato. *I.J.S.N.*; 7 (1): 112-115.
- Pandit, J. C. and Basak, N. C. (2013). Constraints faced by the farmers in commercial cultivation of vegetables. J. Bangla. Agril. Uni., 11(2):193–198.
- Parsa, S., Morse, S., Bonifacio, A., Chancellor, T.C.B., Condori, B., Crespo- Pérez, B., Hobbs, S.L.A., Kroschel, J. B. M., Rebaudo, F., Sherwood, S.G., Vanek, S.J., Faye, E., Herrera, M.O. and Dangles, O. (2014) Obstacles to integrated pest management adoption in developing countries. *Pro. Nat. Aca. Sci.*, 111(10):3889–3894.
- Patel, V. B. (2012). Attributes encouraging organic farming in North Gujarat. M.Sc. (Agri.) Thesis (Unpublished), SDAU, Sardar krushinagar, Gujarat.

- Peer, Q.J.A., Ahmad, S.M., Chesti, H., Kaur, J. and Bhat, A. (2014). Constraints for adoption of recommended crop production technologies faced by the potato growers in the subtropical zone of Jammu division. Eco. Aff., 59(4):675-679.
- Sangada, B. and Deshmukh, G. (2014) Tomato growers with their psychological variables, constraints and suggestions. *Adv. Res. J. Soci. Sci.*, 2(5):193-197.
- Sangada, B. and Deshmukh, G. (2014). Tomato growers with their psychological variables, constraints and suggestions. *Adv. Res. J. Soci. Sci.*, 2(5):193-197.
- Savitha, B. (2009). Organic farming in Andhra Pradesh Potential and constraints. A stake holder analysis. Ph. D Thesis. Acharya N G Ranga Agricultural University, Hyderabad, India.
- Singh, A., Singh, A. S., Yadav, B. & Malik, J. S. (2024) Farmers Attitude towards Organic Farming in Uttar Pradesh. Indian Journal of Extension Education, 60 (3), 33-36
- Sivanarayana, G., Ramadevi, M and Venkataramaiah, P. (2008). Awareness and adoption of cotton Integrated Pest Management practices by the farmers of Warangal district in Andhra Pradesh. Journal of Research, ANGRAU. 36: 33-40.
- Sivaraj, P., Philip, H., Chinnadurai1, M., Asokhan1, M. and Sathyamoorthi, K. (2017), Constraints and Suggestions of Certified Organic Farmers in Practicing Organic Farming in Western Zone of Tamil Nadu, India, *International Journal of Current Microbiology and Applied Sciences ISSN: 2319-7706* Volume 6 Number 3 (2017) pp. 1270-1277.
- Slathia, P. S., Kumar, P., Paul, N. and Ali, L. (2013). Problems faced by organic farmers in hilly areas of Udampur district in Jammu Region. Indian Res. J. Extn. Edu. & R.D. 21: 55-59.