

Impediments encountered by farmers in implementation of organic farming practices and strategic recommendations essential to surmount them effectively

Chandrika Sharma¹, Seema Naberia², Ajay Raut³, Sonam Agrawal² & Kamini Bisht²

1. Lab Technician, Deptt. of Extension Education, College of Agriculture, J.N.K.V.V. Jabalpur,

2. Asstt. Prof., Deptt. of Extension Education, College of Agriculture, J.N.K.V.V. Jabalpur,

3. Scientist, ATARI Zone IX J.N.K.V.V. Jabalpur

Corresponding author's email: chandrikasharma1991@gmail.com

ABSTRACT

India has witnessed a growing interest in organic farming in recent years, driven by a desire for sustainable agricultural practices and healthier food production. Several aspects characterize the relationship between India and organic farming. The current study has been the part of doctoral research conducted in Jabalpur district of Madhya Pradesh with the aim to identify major impediments encountered by the farmers in practicing organic farming with strategic recommendations on their part to encounter them. Within the spectrum of six primary categories of impediments namely, production, situational, economic, marketing & communicational, extension & technical and socio-personal impediments; socio-personal impediments emerged as the foremost challenges confronted by farmers in the pursuit of organic farming, followed by extension and technical challenges, production constraints, situational obstacles, marketing and communicational impediments and economic impediments with the lowest rank on the criteria of mean score and rank value. The recommendations provided by farmers were arranged by frequency and percentage, highlighted the priority areas. The paramount suggestion given by the majority of farmers included provision of Minimum Support Price (MSP), alternative market development for organic produce, timely and simplified certification process, ensured accessibility of quality organic manure at reasonable prices, government's supportive role in marketing, subsidies, and loans during the transition period and the need for skilled and experienced organic farming experts to guide new entrants. Also the farmers stressed importance of conducting awareness programs for both producers and consumers, establishing networks of organic farmers for the exchange of ideas, technology, inputs, and experiences, promoting Public-Private Partnerships (PPP) and contract farming for organic cultivation. Additionally, fostering collaboration among farmers, policymakers and researchers can create a supportive ecosystem for the successful implementation of organic farming practices, promoting sustainable agriculture and environmental well-being.

Key words: *Organic Farming, Impediments, Socio-personal, MSP, Transition, PPP, Contract Farming, Recommendations.*

INTRODUCTION

The concept of organic farming emerged with the adverse impact of agro-chemicals on the plant and animal life. The period of green revolution although solved the problems of low yields in Indian sub-continent and transformed the image of the nation but simultaneously introduced us with the short and long term effects of the chemicals in the food chain (Sharma *et al.* 2022). Hence, the concept of organic farming came into existence with aim of human and environment welfare including the soil.

The demand for organic food products is growing due to high purchasing power and increase in health-conscious consumers (Sharma *et al.* 2022). The organic food consumption is very low as compared to western markets. In order to be self sufficient in organic food production we need stress free adoption of organic farming practices among most of the farmers. This paper highlights the problems encompassed by the farmers in practicing organic farming along with the recommendations to overcome them.

METHODOLOGY

The current research was undertaken in 2021-22 with the aim of finding major impediments in implementation of organic farming practices among the farmers with the strategic recommendations to surmount them in wheat crop respectively. The research was conducted in the Jabalpur district of Madhya Pradesh, recognized as the foremost contributor to wheat production within the division. From the four blocks of the district deliberately chosen named Jabalpur, Patan, Sihora and Majholi 120 farmers engaged in organic farming practices and an equal number practicing conventional farming constituted the total 240 respondents for the study. Following the application of a three-stage multisampling technique, an ex-post facto research design was employed to conduct the study (Sharma Chandrika *et al.* 2016). The impediments to be studied were majorly classified as production, situational, economic, marketing & communicational, extension & technical and socio-personal impediments. Mean score and rank method was statistically applied in impedimenta and strategic recommendations to analyze the severity.

RESULTS AND DISCUSSION

Impediments faced by farmers in organic farming

Within the spectrum of six primary categories of impediments namely, production, situational, economic, marketing and communicational, extension and technical and socio-personal impediments; socio-personal impediments emerged as the foremost challenges confronted by farmers in the pursuit of organic farming, registering a mean score value of 4.936. Subsequently, extension and technical impediments followed closely with a mean score of 2.493, succeeded by production impediments at 2.442 and situational impediments at 2.438. Marketing and communicational impediments recorded a mean score of 2.197, while economic impediments ranked the lowest at 1.451, as illustrated in Table 1.

Table 2 delineates various hindrances categorized under the six primary sections. Within

production impediments, the issue of heightened weed infestation emerged as the most severe problem, garnering a mean score of 2.829. The second-ranking challenge (2.821) highlighted by farmers was the lack of resistant varieties against insect-pests and diseases, coupled with the absence of recommended wheat varieties for organic farming. Ranking third (2.800) was the non-availability of pre-prepared organic input formulations. The complexity of organic input production methods and a dearth of knowledge regarding recommended organic manure use secured the fourth position (2.775). The fifth-ranked obstacle (2.763) pertained to the high incidence of insect-pest attacks in organic crops, while the absence of appropriate control measures for insect-pests constituted the sixth challenge reported by farmers (Verma and Shrivastava, 2019).

Concerning situational impediments, the most pressing issue with a rank one and a mean score of 2.792 was the arduous certification process for organic produce. This was closely followed by the second-ranked challenge (2.788) of non-availability of biopesticides. Inadequate irrigation facilities and the bulky nature of organic inputs claimed the third spot (2.767), while high risk and uncertainty of returns secured the fourth position (2.733). The unavailability of organic inputs on time (2.004) and the management of skilled labor on a timely basis (1.217) rounded out the situational impediments (Meena *et al.* 2020).

Within the economic impediments category, the foremost challenge was the absence of governmental financial support in organic farming, leading with a mean score of 2.675. Following closely were the high wages of labor (1.279), the high cost of production, and the lack of timely available credit (1.229). High costs associated with organic inputs (1.196) and the perceived limited profit advantage in organic products (1.100) completed the economic impediments (Naik *et al.* 2018).

In the realm of marketing and communicational impediments, the most significant obstacle was the lack of a local market or consumer

demand, earning a top rank with a mean score of 2.817. Second in line (2.783) was the absence of labeling and standards for organic produce, while the third position (2.696) highlighted the lack of market support for organic products. Challenges such as the absence of contract and forward marketing (2.654) and a dearth of markets for organic inputs (2.642) were identified as the fourth and fifth impediments, respectively. Storage issues for bulky inputs (2.575) were ranked sixth, followed by the challenge of insufficient local processing units (1.221) in seventh place. Inadequate transport facilities (1.196) claimed the eighth spot, and the variability in prices of organic produce (1.188) ranked last (Devi et al. 2020).

Regarding extension and technical impediments, a significant challenge emerged in the form of a scarcity of Front Line Demonstrations (FLDs) dedicated to organic farming, leading with a mean score of 2.813. Subsequent impediments included the irregular visits of extension personnel (2.746), the deficiency in skilled and quality training

for organic farming practices (2.700), the absence of awareness programs for organic farming on social media (2.696), the limited availability of experts in the preparation of organic inputs (2.017), and the insufficiency of research and development initiatives in organic farming (1.988) (Barik 2017).

Within the socio-personal impediments category, the primary obstacle was the farmers' perception that organic farming is more about self-reliance than commercial viability, ranking highest with a score of 5.592. The second major concern (5.575) was the negative perception that organic agriculture yields less and is non-beneficial for farmers with debts. Lack of consumer awareness regarding organic produce secured the third position (5.275). The absence of a suitable agricultural policy in organic farming ranked fourth (5.217), followed by the lack of experience in organic farming practices among farmers at fifth (4.000), and the deficiency of awareness among farmers regarding organic farming at sixth (3.958) (Haneef et al. 2019).

Table 1
Impediments faced by farmers in organic farming (N=240)

S. No.	Impediments	Mean score	Rank
1.	Production impediments	2.442	III
2.	Situational impediments	2.438	IV
3.	Economic impediments	1.451	VI
4.	Marketing & Communicational impediments	2.197	V
5.	Extension & Technical impediments	2.493	II
6.	Socio-personal impediments	4.936	I

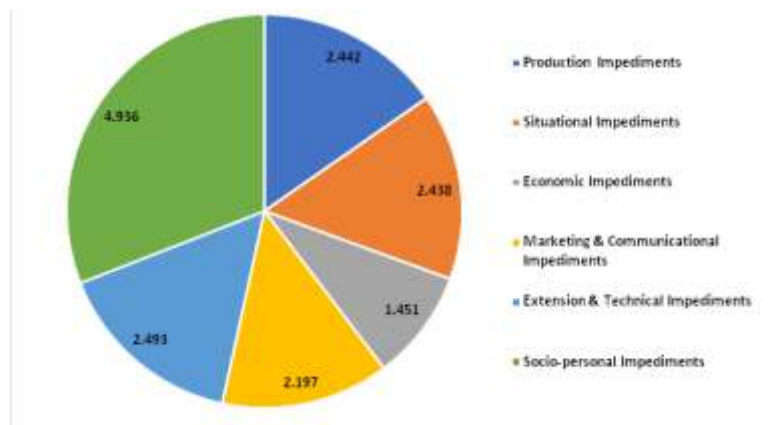


Fig. 1 Impediments faced by the farmers

Table 2
Different impediments faced by farmers in organic farming (N=240)

Sr. No.	Problems	Mean score	Rank
Production Impediments			
1	Non availability of resistant varieties against insect -pest and diseases along with recommended varieties of wheat for organic farming	2.821	II
2	Lack of knowledge regarding recommended used of organic manures	2.775	IV
3	Complexity of production methods of organic inputs	2.775	IV
4	Non availability of readymade organic input formulations	2.800	III
5	More weed infestation in organic crops	2.829	I
6	High attack of insect-pest in organic crops	2.763	V
7	Lack of appropriate control measures for insect-pest	1.388	VI
8	Longer transition period in organic farming to produce as much as produced from inorganic farming	1.385	VII
	Overall mean	2.442	
Situational Impediments			
1	Inadequate irrigation facilities	2.767	III
2	Unavailability of organic inputs on time	2.004	V
3	Non availability of biopesticides	2.788	II
4	Unavailability of skilled labour on timely basis	1.217	VI
5	Bulky nature of organic inputs	2.767	III
6	High risk and uncertainty of return	2.733	IV
7	Cumbersome certification process for organic produce	2.792	I
	Overall mean	2.438	
Economic Impediments			
1	High cost of organic inputs	1.196	IV
2	High wages of labour	1.279	II
3	Lack of timely available credit	1.229	III
4	High cost of production	1.229	III
5	Not much profit advantage on organic products	1.100	V
6	Lack of government financial support for organic farming	2.675	I
	Overall mean	1.451	
Marketing & Communicational Impediments			
1	Lack of market or consumer demand at local level	2.817	I
2	Lack of market for organic inputs	2.642	V
3	No provision of MSP for organic products	2.696	III
4	Lack of contract and forward marketing in organic farming	2.654	IV
5	Variations in prices of organic produce	1.188	IX
6	Problem of storage of bulky inputs	2.575	VI
7	Lack of local processing units	1.196	VIII
8	Inadequate transport facilities	1.221	VII
9	No labelling and standards for organic produce	2.783	II
	Overall mean	2.197	
Extension & Technical Impediments			
1	Irregular visits of extension personnel	2.746	II
2	Limited experts in preparation of organic inputs	2.017	V
3	Lack of skilled and quality training of organic farming practices	2.700	III
4	A very few FLDs are conducted on organic farming	2.813	I
5	Insubstantial research and development programmes on organic farming	1.988	VI
6	Lack of awareness programmes for organic farming on social media	2.696	IV

Socio-Personal Impediments			
1	Lack of awareness among farmers regarding organic farming	3.958	VI
2	Lack of awareness among consumers regarding organic produce	5.275	III
3	Lack of experience of organic farming practices among farmers	4.000	V
4	Lack of suitable agricultural policy in organic farming	5.217	IV
5	Negative perception of organic agriculture that it gives less yields and non beneficial for farmers with debts	5.575	II
6	Perception of farmers towards organic farming is self-reliance rather than commercial farming	5.592	I
Overall mean		4.936	

Strategic recommendations of the farmers to overcome the impediments

The recommendations provided by farmers, detailed in Table 3 and arranged by frequency and percentage, highlight the priority areas. The paramount suggestion, voiced by the majority of farmers (85.42%), emphasized the necessity for the provision of Minimum Support Price (MSP). Subsequently, alternative market development for organic produce secured the second position, endorsed by 81.67% of respondents (Akhtar 2018). The call for a timely and simplified certification process garnered significant support at 81.25%. Other pivotal recommendations included ensuring the availability of quality organic manure

at reasonable prices (77.50%), advocating for the government's supportive role in marketing, subsidies, and loans during the transition period (75.00%), and the need for skilled and experienced organic farming experts to guide new entrants (71.67%) (Jaganathan 2004). Additionally, farmers stressed the importance of conducting awareness programs for both producers and consumers (70.84%), establishing networks of organic farmers for the exchange of ideas, technology, inputs, and experiences (68.75%), promoting Public-Private Partnerships (PPP) and contract farming for organic cultivation (70.00%), and making suitable resistant and improved varieties accessible for organic farming (68.75%) (Balachandran 2004).

*Table 3
Strategic recommendations provided by the farmers to promote organic farming (N=240)*

Sr. No.	Strategic recommendations	f	%	Rank
1.	PPP and contract farming for promoting organic farming	168	70.00	IX
2.	Alternative market development for organic produce	196	81.67	II
3.	There should be timely and easy certification process	195	81.25	III
4.	Suitable resistant and improved varieties should be available for organic farming	165	68.75	X
5.	Provision of MSP for organic produce	205	85.42	I
6.	Skilled and experienced organic farming experts to guide new entrants to organic farming	172	71.67	VI
7.	Assuring availability of quality organic manure at reasonable prices	186	77.50	IV
8.	Awareness programmes both for the producers and consumers should be conducted	170	70.84	VII
9.	Creation of networks of organic farmers to facilitate exchange of ideas, technology, inputs and experience	165	68.75	VIII
10.	Supportive role of the government in marketing, subsidies and loans during transition	180	75.00	V

CONCLUSION

The study inferred that socio-personal constraints were the major impediments among production, situational, economic, marketing & communicational, extension & technical and socio-personal impediments. To surmount these obstacles effectively, it is imperative to adopt strategic recommendations. These may encompass financial

support and incentives, widespread education programs and establishment of robust organic markets. Additionally, fostering collaboration among farmers, policymakers and researchers can create a supportive ecosystem for the successful implementation of organic farming practices, promoting sustainable agriculture and environmental well-being.

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