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Sustainable Struggles: Unraveling the Limitations Encountered by Organic Paddy Farmers in Andhra Pradesh

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ABSTRACT: An investigation was conducted in Andhra Pradesh in the year 2022-23 to identify the key constraints faced by certified organic paddy farmers. Data was collected from 200 farmers using structured interviews and analyzed using the Garrett ranking method. The findings revealed significant technical challenges, including insufficient entrepreneurial skills, limited technical guidance, a scarcity of university-developed technologies, and the unavailability of ready-to-use organic inputs. Policy constraints included insufficient premium prices, high labour costs and availability issues, and inadequate government support. Social constraints involved a lack of unity among farmers, low credibility of extension workers, and limited organic-related Farmer Producer Organizations. Economic constraints encompassed high risks and uncertainty of returns and a lack of institutional credit facilities. Marketing constraints included inadequate networks, storage facilities, and storage pest damage. The study concludes with meaningful recommendations provided by certified organic farmers to promote the adoption of organic farming practices in the study area. Addressing these constraints is crucial for enhancing the sustainability of the organic paddy farming sector in Andhra Pradesh, thereby providing a potential solution to the disadvantages associated with chemical-intensive paddy cultivation.

Keywords: Andhra Pradesh, Constraints, Impediments, Organic farming, Paddy.

INTRODUCTION

Organic paddy farming is gaining popularity as a sustainable and environmentally friendly agricultural practice in many regions, including Andhra Pradesh. Morshedi *et al.* (2015) recommended to use organic farming to improve Food security. However, despite its numerous benefits, organic paddy farmers face various constraints that can hinder their efforts and impact on the successful implementation of organic farming methods, such as low production in initial years, need of certification for sale of organic product, distant location of certification agencies and high certification charges, non-remunerative price of organic products, lack of demarcated place for sale of organic products in regulated markets, lack of proper guidance and training, lack of marketing news, inadequate input supply centres, slow process of organic manure preparation and lack of knowledge of recommended package of practices were the major issue (Heena *et al*., 2022). Understanding and addressing these constraints is crucial for promoting and sustaining organic paddy farming in the region. In this study, we focus on examining the key constraints faced by certified organic paddy farmers in Andhra Pradesh. Constraint analysis is widely used in research of agriculture (Lal *et al*., 2022), environmental sciences (Mallick *et al*., 2023) and veterinary sciences (Goyal *et al*., 2014). By identifying and analyzing these constraints, we aim to shed light on the challenges that farmers encounter in their pursuit of organic paddy cultivation. This analysis will be helpful in improving sustainability and developing organic paddy farming as a potential solution to the disadvantages caused by chemical-intensive paddy cultivation. These constraints can arise from technical, policy, social, economic, and marketing factors, creating barriers that impede the growth and expansion of organic paddy farming.

METERIAL AND METHODS

This study aimed to analyze the challenges encountered by certified organic paddy farmers in Andhra Pradesh during the 2022-23 period. The researcher employed an ex-post facto research design to examine the constraints faced by these farmers. A sample of 200 certified organic paddy farmers was selected for the study, with 87 farmers from Nellore, 68 from Vishakhapatnam, and 45 from Vizianagaram districts. The selection process involved using a proportionate stratified random sampling method, based on the certified organic paddy farmers' list obtained from the certifying agencies of PGS India. The districts of Nellore, Vishakhapatnam, and Vizianagaram had 155, 121, and 79 farmers listed, respectively. Data collection was carried out using a structured interview schedule, and Garrett ranking method was employed to measure the scores of constraints, which was followed by Bandhavya *et al*. (2022). This approach allows us to gain insights into the most significant constraints faced by organic paddy farmers in Andhra Pradesh.

RESULT AND DISCUSSION

The study revealed major constraints and suggestions which were discussed below.

Constraints as Perceived by the farmers in organic paddy farming. The study identified and categorized the perceived constraints faced by organic paddy farmers into five major components: technical, policy, social, economic, and marketing constraints. The findings of the study provide insights into the challenges that farmers encounter during the implementation of organic paddy farming.

Technical constraints as perceived by farmers in organic paddy farming. It can be observed from the Table 1 that, among the technological constraints perceived by the organic paddy farmers in Andhra Pradesh, “Lack of entrepreneurial ability" with mean score 54.98 ranked first and “Limited access to technical support for organic farming methods” (mean score = 54.14) ranked second followed by "Scarce development of organic farming technologies by universities in organic farming practices" (mean score = 53.71), "Unavailability of readily formulated organic inputs" (mean score = 52.98), "Inadequate knowledge for effective weed, pest, and disease control in organic farming" (mean score = 51.95), "Take a long period to get positive responses from the ecosystem" (mean score = 48.92), “Lack of expertise on the part of the labour in the preparation of organic inputs” (mean score = 49.24), “Inadequate and timely availability of organic inputs in time” (mean score = 46.23), “Lack of training on organic farming practices” (mean score = 43.72) and “Lack of standard package of practices for practicing organic farming” (mean score = 40.16) were perceived as third, fourth, fifth, sixth, seventh, eight, nine and tenth respectively perceived as major problems by majority of respondents.

“Lack of entrepreneurial ability" with mean score of 54.98 ranked first critical technical constraint in Andhra Pradesh, this may be because some organic paddy farmers may struggle with entrepreneurial skills due to lack of business acumen as traditional farming practices often prioritize crop cultivation and production, rather than business management skills. Organic paddy farmers may have limited knowledge or experience in areas such as financial planning, market analysis, supply chain management, and product differentiation. Limited access to markets, insufficient training, risk aversion, and inadequate policy and infrastructure support like challenges also hinder their ability to effectively sell their products. Addressing these issues requires a collaborative effort involving farmers, government agencies, NGOs, and the private sector to provide targeted training, improve market linkages, offer financial support, and create a favourable policy environment. “Lack of entrepreneurial ability" ranked as first major critical constraint in Nellore with mean score of 56.80, second major constraint in Vizianagaram with mean score of 58.49.

“Limited access to technical support for organic farming methods” with mean score of 54.14 ranked second critical technical constraint in Andhra Pradesh. Without proper guidance, farmers may struggle to implement effective organic farming practices, like, to manage pests and diseases, soil fertility, maintain crop health and marketing. This can lead to reduced yields, lower quality produce, and increased production costs, less selling price. Access to comprehensive technical guidance, including training programs, expert advice, and information resources, is crucial for organic paddy farmers to enhance their knowledge and skills and to overcome the specific challenges associated with this farming approach. “Limited access to technical support for organic farming methods" ranked as first major critical constraint in Vizianagaram with mean score of 59.36, third major constraint in Vishakhapatnam with mean score of 53.65.

“Scarce development of organic farming technologies by universities in organic farming practices” ranked third critical technical constraint in Andhra Pradesh, first in Vishakhapatnam, third in Nellore with mean scores of 53.71, 57.79, 52.79 respectively. The development of technologies specifically for organic farming practices by universities is relatively limited compared to conventional agriculture. This is due to the emphasis on natural and traditional methods in organic farming may not align with the traditional research and development model of universities. Organic paddy farmers mainly need small machineries to prepare inputs and machineries for small fields which won’t damage earthworms in soil and also reduce number of labours.

“Unavailability of readily formulated organic inputs” ranked fourth critical technical constraint in Andhra Pradesh with mean score of 52.98, second in Nellore and third in Vizianagaram with mean scores of 55.87 and 53.96, respectively. The non-availability of readymade organic input formulations poses challenges for organic farmers. Unlike conventional farming, where synthetic inputs are easily accessible, organic farmers struggle to find pre-formulated organic inputs that meet their specific requirements. This leads to increased labour costs and time investment in collecting leaves and preparing organic solutions. The odor from

these solutions also discourages laborers from participating, resulting in higher wage demands. Consequently, farmers may face difficulties in scaling up organic farming operations. Enhancing the availability and accessibility of standardized and certified organic input formulations can greatly support organic farmers in adopting sustainable agricultural practices.

"Inadequate knowledge for effective weed, pest, and disease control in organic farming" is a fifth significant critical technical challenge in Andhra Pradesh with mean score of 51.95, second significant in Vishakhapatnam with 57.19 mean score. Organic farming practices often rely on natural and biological methods for weed, pest and disease management, which require a deep understanding of ecological interactions and alternative control measures. Farmers may lack awareness of organic pest and disease management techniques, such as crop rotation, companion planting, biological controls, and organic-approved pesticides. Extension agents should be available to farmers. Agricultural officers are not available to farmers and Village Agricultural Assistants don't have enough knowledge in many areas. This result in failure in control of pests and diseases. In some villages farmers failed to control Brown Plant Hoppers and burned the fields thinking that burning will prevent BHP attach in next season. Frequent contact of the farmers with extension agents and subject matter specialists can be helpful to get relevant information from authentic sources (Shukla *et al.*, 2022). To address this issue, organic farmers need access to comprehensive training, extension services, and resources that provide them with the necessary knowledge and skills to effectively control weeds, pests, and diseases in an organic farming context.

Policy as perceived by farmers in organic paddy farming. It can be observed from the Table 1 that, among the policy constraints perceived by the farmers under organic paddy cultivation, "Insufficient premium price for organic produce" with mean score 52.65 ranked first, "Expensive and limited availability of labor" (mean score = 51.58) ranked second followed by "Lack of sufficient support from the government" (mean score = 50.91), "Complex and time-consuming organic certification process" (mean score = 49.77), "Problems in the processing of organic produce" (mean score = 47.79) and "Lack of awareness programs on organic farming in various media channels" (mean score = 47.32) were perceived as third, fourth, fifth and sixth major problems by majority of respondents, respectively.

"Inadequate premium price for organic produce" with mean score 52.65 ranked first critical policy constraint in Andhra Pradesh, second in Nellore, first in Vishakhapatnam and Vizianagaram with mean scores 51.29, 53.96 and 53.29 respectively. Organic farming involves higher production costs due to the use of organic inputs, adherence to certification requirements, and the implementation of manual sustainable farming practices which are expensive. However, the price difference between organic and conventionally grown produce is often not proportionate to the increased costs incurred by organic farmers. This can result in lower profit margins for organic farmers and discourage more farmers from transitioning to organic practices. Increasing the premium price for organic produce can incentivize farmers to embrace organic farming and help them sustain their operations. Government policies play a crucial role in shaping the agricultural market, including the pricing mechanisms for organic products. So, this can be achieved through consumer education, promoting the value of organic products, and creating stronger market demand for organic produce, ultimately ensuring a fair return for the efforts and investments made by organic farmers.

"Expensive and limited availability of labor" (mean score = 51.58) ranked as second significant policy constraint in Andhra Pradesh, first in Nellore, second in Vishakhapatnam and third in Vizianagaram with mean scores 52.26, 50.59, and 51.76 respectively. This issue can arise due to multiple factors, including rural-urban migration, changing demographics, and the labor-intensive nature of organic farming activities. These activities, such as manual weeding and harvesting, can be challenging as the use of heavy machinery can negatively impact earthworms and soil biota. Furthermore, in the case of good and organic feed for animals, manual harvesting was employed, requiring farmers to provide higher wages to laborers. Insufficient labor availability due to MGNREGS programme led to increased labor costs for farmers, impacting their profitability and competitiveness. Additionally, the high cost of labor can discourage farmers from adopting labor-intensive practices, including organic farming, which often require more manual work. This can be addressed by linking MGNREGS with agriculture or by implementing the programme in non-agricultural seasons.

"Lack of sufficient support from the government" (mean score = 50.91) was third critical policy constraint in Andhra Pradesh, second in Vizianagaram (mean score = 52.82), third in Nellore (mean score = 50.74) and Vishakhapatnam (mean score = 49.85). Government support plays a crucial role in promoting and facilitating the adoption of organic farming practices. However, inadequate support in terms of policies, financial incentives, technical assistance, and infrastructure development can hinder the growth and success of organic farming initiatives. Policies like providing premium price, creating organic certification standards, facilitating access to organic markets, and offering incentives for organic farmers, developing region-specific organic farming techniques can address this constraint.

Social constraints as perceived by farmers in organic paddy farming. It can be observed from the Table 1 that, among the social constraints perceived by the organic paddy farmers, "Lack of unity among farmers" with mean score 51.37 ranked first and "Low credibility of extension worker" (mean score = 50.57) ranked second followed by "Less number of organic-related FPOs" (mean score = 49.74), "Lack of effective supervision and monitoring by the extension worker" (mean score = 48.88), and "Chemical contamination threat from neighbours' field" (mean score = 48.45)

were perceived as third, fourth and fifth respectively perceived as major problems by majority of respondents.

"Lack of unity among farmers" was first critical social constraint in Andhra Pradesh, with mean score of 51.37, first in Nellore (mean score = 53.86), third in Vishakhapatnam (mean score = 49.01) and Vizianagaram (mean score = 50.11). Unity and collective action are crucial for addressing common challenges, mainly in negotiating better prices, sharing knowledge and resources, and advocating for the interests of organic paddy farmers as a collective group. However, in some cases, farmers may struggle to come together due to lack of effective leadership, communication among farmers, differences in opinions, competition, or past experiences can affect the level of trust and coordination among farmers. To address the lack of unity among organic paddy farmers, awareness should be raised about the advantages of unity, and platforms for knowledge sharing should be facilitated. Individual and collective efforts are needed, along with support from government agencies, NGOs, and agricultural extension services.

"Low credibility of extension worker" was second critical social constraint in Andhra Pradesh, with mean score of 50.57, first in Vishakhapatnam (mean score = 53.37), Vizianagaram (mean score = 53.56) and fifth in Nellore (mean score = 46.83). Extension workers play a crucial role in co-ordinating, disseminating information, providing technical guidance, and supporting farmers in adopting best practices. Effective communication and engagement skills are crucial for extension workers to build trust and credibility among farmers. However, their effectiveness can be compromised if they lack credibility and the trust of farmers. Sharma *et al.* (2022) reported that friends and relatives were the most frequently used information sources for organic farmers. To address this, it is essential to focus on improving communication and engagement skills, providing comprehensive training in organic farming practices, and establishing feedback mechanisms to ensure the quality and credibility of extension services in organic farming.

Economic constraints as perceived by farmers in organic paddy farming. It can be observed from the Table 1 that, among the economic constraints perceived by the respondents under organic paddy cultivation, "High risk and uncertainty of returns" with mean score 51.30 ranked first and Lack of institutional credit facilities (mean score = 48.70) ranked second were perceived as major problems by majority of respondents.

High risk and uncertainty of returns" with mean score 51.30 ranked first critical economic constraint in Andhra Pradesh, second in Vishakhapatnam (mean score = 49.24), first in Vizianagaram (mean score = 52.02) and Nellore (mean score = 52.54). Organic farmers often face challenges in achieving stable and predictable returns due to several factors such as weather abnormalities, market demand fluctuations, yield variations, transition costs, and limited access to finance and insurance contribute to this challenge. To address these constraints, farmers can employ risk management strategies, diversify income sources, and seek market development support. Additionally, improving access to tailored financial products and insurance schemes can mitigate financial risks. Investing in research and innovation specific to organic paddy farming can also enhance productivity and risk management practices, ultimately fostering long-term sustainability in organic agriculture.

Marketing constraints as perceived by farmers in organic paddy farming. It can be observed from the Table 1 that, among the marketing constraints perceived by the respondents under organic paddy cultivation, "Inadequate marketing networks for organic paddy" with mean score 54.59 ranked first and "Inadequate storage facility" (mean score = 50.70) ranked second followed by "Storage pest damage" (mean score = 50.22), "No labelling / Standards for organic inputs" (mean score = 49.10), "Poor marketing infrastructure" (mean score = 47.75) and "Inadequate transport facilities" (mean score = 47.67) were perceived as third, fourth, fifth and sixth as major problems by majority of respondents, respectively.

"Inadequate marketing networks for organic paddy" with mean score 54.59 ranked first critical marketing constraint in Andhra Pradesh, Nellore (mean score = 53.93), Vishakhapatnam (mean score = 55.34) and Vizianagaram (mean score = 54.73). Marketing networks play a crucial role in connecting producers with consumers and facilitating the flow of goods from farms to markets. If the marketing networks are inadequate, it can limit the visibility and accessibility of organic paddy in the market, leading to lower sales and reduced profitability for organic paddy farmers. Many farmers started organic paddy farming as an experiment by farming FPOs, by the support of NGOs got failed in marketing and restricted organic farming of subsistence purpose i.e., for family consumption. This challenge can be address by establish partnerships with agricultural cooperatives to strengthen marketing networks. Utilize direct marketing channels and online platforms to connect with consumers directly to build a loyal customer base for organic paddy. Participate in networking events like organic melas and trade shows to build connections with potential buyers. Obtain organic certification and use clear labelling to differentiate organic paddy and gain consumer trust, attracting health-conscious buyers. Collaborate with retailers and restaurants focused on organic products for wider market reach.

"Inadequate storage facility" ranked second critical marketing constraint in Andhra Pradesh with mean score 50.70, second in Vishakhapatnam (mean score = 52.16) and Vizianagaram (mean score = 50.69), fourth in Nellore (mean score = 49.55). Insufficient storage capacity can lead to several issues, such as post-harvest losses, quality deterioration of agricultural products, and limited market access. This problem can be addressed by following some strategies like: investing in development of storage infrastructure like warehouses or cold storage, collaborating with existing storage providers. Supriya and Pirabu (2022) reported in salem district, half of the beneficiaries (50.83 per cent) said that market facilities for organic produce as

insufficient, less than one-third (30.17 per cent) quite sufficient and the rest of less than one-fourth (19.17 per cent) were had sufficient marketing facilities.

"Storage pest damage" ranked third critical marketing constraint in Andhra Pradesh with mean score 50.22, second in Nellore (mean score = 50.54) and third in Vizianagaram (mean score = 50.18), Vishakhapatnam (mean score = 49.82). Organic farming practices, which avoid the use of synthetic pesticides, can make crops more vulnerable to pest infestations during storage which hinders marketing. To address this issue, here are some strategies that can be employed: Preventive measures: Maintain cleanliness and good hygiene in storage areas to reduce potential food sources for pests. Implement proper on-farm storage techniques to minimize losses such as using appropriate sterilized containers, bins, or bags and sterilized walls of warehouses before placing produce. Natural pest control: Utilize biological agents or botanical extracts with pest-repellent properties to manage storage pests such as keeping neem leaves, cloves, sand. Explore preservation techniques to extend the shelf life of agricultural products by following some ITKs. Optimize storage conditions: Maintain proper temperature, humidity, and ventilation to create unfavourable conditions for pest survival. Physical pest control: Implement traps, screens, or sieving techniques to prevent and remove pests from storage areas. Regular monitoring: Conduct frequent inspections to detect early signs of pest infestations and take immediate action to prevent further damage.

Table 1: Constraints as Perceived by the farmers in organic paddy farming.

Sr. No.	Technical Constraints	Nellore (n=88)		Vishakapatnam (n=68)		Vizianagaram (n=45)		Total (n=200)	
		Score	Rank	Score	Rank	Score	Rank	Score	Rank
1.	Insufficient entrepreneurial skills	56.80	1	50.31	5	58.49	2	54.98	1
2.	Limited access to technical support for organic farming methods	51.83	4	53.65	3	59.36	1	54.14	2
3.	Scarce development of organic farming technologies by universities	52.79	3	57.79	1	49.31	5	53.71	3
4.	Unavailability of readily formulated organic inputs	55.87	2	48.63	7	53.96	3	52.98	4
5.	Inadequate knowledge for effective weed, pest, and disease control in organic farming	47.22	7	57.19	2	53.16	4	51.95	5
6.	Lengthy time required to observe positive results within the ecosystem	48.37	6	52.06	4	45.22	8	48.92	6
7.	Lack of expertise among laborers in preparing organic inputs	50.09	8	49.43	6	47.31	6	49.24	7
8.	Inadequate and untimely availability of organic inputs	46.36	8	46.10	8	46.16	7	46.23	8
9.	Lack of training on organic farming practices	44.15	9	43.29	9	43.51	9	43.72	9
10.	Lack of standard package of practices for practicing organic farming	42.52	10	37.54	10	39.53	10	40.16	10
	Policy Constraints								
1.	Inadequate premium price for organic produce	51.29	2	53.96	1	53.29	1	52.65	1
2.	Expensive and limited availability of labor	52.26	1	50.59	2	51.76	3	51.58	2
3.	Lack of sufficient support from the government	50.74	3	49.85	3	52.82	2	50.91	3
4.	Complex and time-consuming organic certification process	50.05	4	49.75	4	49.24	4	49.77	4
5.	Problems in the processing of organic produce	49.40	5	47.21	6	45.56	6	47.79	5
6.	Lack of awareness campaigns on organic farming across various media channels	46.26	6	48.65	5	47.33	5	47.32	6
	Social constraints								
1.	Lack of unity among farmers	53.86	1	49.01	3	50.11	3	51.37	1
2.	Low credibility of extension worker	46.83	5	53.37	1	53.56	1	50.57	2
3.	Less number of organic-related FPOs	47.48	4	50.69	2	52.64	2	49.74	3
4.	Lack of effective supervision and monitoring by the extension worker	50.99	2	47.07	5	47.53	4	48.88	4
5.	Chemical contamination threat from neighbours' field	49.84	3	48.85	4	45.16	5	48.45	5
	Economic constraints								
1.	High risk and uncertainty of returns	52.54	1	49.24	2	52.02	1	51.30	1
2.	Lack of institutional credit facilities	47.46	2	50.76	1	47.98	2	48.70	2
	Marketing constraints								
1.	Inadequate marketing networks for organic paddy	53.93	1	55.34	1	54.73	1	54.59	1
2.	Inadequate storage facility	49.55	4	52.16	2	50.69	2	50.70	2
3.	Storage pest damage	50.54	2	49.82	3	50.18	3	50.22	3
4.	No labelling / Standards for organic inputs	48.98	5	49.12	4	49.22	4	49.10	4
5.	Poor marketing infrastructure	46.99	6	47.94	5	48.93	5	47.75	5
6.	Inadequate transport facilities	50.01	3	45.62	6	46.24	6	47.67	6

Suggestions given by respondents to overcome the constraints faced by organic paddy farmers. Organic paddy farmers have given some important suggestions which are ranked using garrett ranking method followed by Shanjeevika *et al.* (2022), in order to improvise the organic paddy farming to overcoming constraints. The Table 2 shows that, out of all the suggestions given by organic paddy farmers "Implementing a fair and higher premium pricing system for organic produce" ranked fist with 54.57 score, as insufficient of premium price is major policy constraint it might be reflected here. Establishing storage facilities to support organic produce preservation was ranked second with 53.78 score. Develop machineries for small fields and link MGNREGS with agriculture ranked third most important suggestion with the score of 53.46. Establishing an effective monitoring mechanism to combat the presence of counterfeit organic products in the market ranked fourth with score of 53.01. Here are some strategies i.e., establish and enforce clear regulations and standards for organic certification to control fake organic produce, Implement robust certification and accreditation processes, including regular audits and inspections, to verify compliance with organic standards, Enhance traceability systems and labelling requirements for organic products to ensure transparency and authenticity, conduct market surveillance, testing, and prompt removal of non-compliant products to prevent the presence of fake organic items, educate consumers about organic certification, labelling, and the importance of purchasing from trusted sources to make informed choices, foster collaboration among regulatory authorities, industry associations, and consumer organizations to share information and combat the issue together, establish mechanisms to protect whistle blowers and encourage reporting of suspected cases of fake organic products, encourage public-private partnerships to enhance monitoring, enforcement, and collective efforts against fake organic produce. Ensure timely availability and sufficient quantities of organic inputs ranked fifth important suggestion given by organic paddy farmers with score of 52.99. Timely and adequate quantity availability of organic inputs mainly bio-pesticides and bio-fertilizers is important. Sixth important suggestion was Introducing Aadhar linkage for the purchase of chemical fertilizers to promote responsible usage with 52.87 score. Linking Aadhaar to chemical fertilizer purchases may helpful indirectly identify genuine organic paddy farmers, as organic farming practices typically do not involve the use of chemical fertilizers. Strengthening technical advisory services through extension programs with score 52.34 was seventh ranked suggestion as Limited access to technical support for organic farming methods was important technical constraint it was reflected in suggestions.

Table 2: Suggestions given by respondents to overcome the constraints faced by organic paddy farmers.

Sr. No.	Suggestions	Total (n=200)	
		Score	Rank
1.	Implementing a fair and higher premium pricing system for organic produce	54.57	1
2.	Establishing storage facilities to support organic produce preservation	53.78	2
3.	Develop machineries for small fields and link MGNREGS with agriculture	53.46	3
4.	Establishing an effective monitoring mechanism to combat the presence of counterfeit organic products in the market	53.01	4
5.	Ensure timely availability and sufficient quantities of organic inputs	52.99	5
6.	Introducing Aadhar linkage for the purchase of chemical fertilizers to promote responsible usage	52.87	6
7.	Strengthening technical advisory services through extension programs	52.34	7
8.	Conducting regular training programs on organic input preparation and value addition	52.25	8
9.	Creating awareness about organic farming and its products through various channels	51.93	9
10.	Facilitating direct procurement of organic produce by the government for Mid-day Meals Scheme (MMS) and Public Distribution System (PDS)	51.84	10
11.	Promoting the formation of more organic-focused Farmer Producer Companies (FPCs), Farmer Producer Organizations (FPOs), Farmer Interest Groups (FIGs), and Community Interest Groups (CIGs)	51.61	11
12.	Providing free distribution of cows to organic farmers to preserve indigenous breeds	51.47	12
13.	Establishing seed hubs for the production and sale of traditional seeds	51.19	13
14.	Offering support and subsidies from the Department of Animal Husbandry	51.03	14
15.	Streamlining the organic certification process through a single-window system	50.83	15
16.	Providing organic inputs at subsidized rates	50.30	16
17.	Introducing organic farming education starting from the school level.	50.05	17

CONCLUSIONS

The findings of this study will contribute to a better understanding of the specific challenges faced by organic paddy farmers in Andhra Pradesh. Moreover, it will provide valuable insights for policymakers, agricultural organizations, and stakeholders to develop targeted interventions and support mechanisms that address these constraints. Ultimately, the aim is to create an enabling environment for organic paddy farming, enhance farmers' livelihoods, and promote sustainable agricultural practices in Andhra Pradesh.

FUTURE SCOPE

In future studies on the constraints of organic paddy farmers, it is suggested to conduct comparative analysis across different regions, employ longitudinal studies to assess evolving challenges, incorporate quantitative

analysis to measure the extent of constraints, analyze market dynamics, and evaluate policy effectiveness. Understanding constraints and knowing suggestions and implementing those suggestions would support the growth and sustainability of organic paddy farming.

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Conflict of Interest. None.

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