



ASSESSING FARMERS' PERSPECTIVES: AWARENESS, PERCEPTION, AND SIGNIFICANCE OF TELANGANA STATE GOVERNMENT'S AGRICULTURE SCHEMES

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Abstract

This research study aims to evaluate the perspectives of farmers in Telangana regarding the awareness, perception, and significance of the agriculture schemes introduced by the state government. Conducted in an exploratory manner, the study involved a sample of 150 farmer respondents and employed a survey method for data collection. The target population for this study was the residents of Telangana State, specifically focusing on farmers. Convenient sampling technique was utilized to select the sample frame.

The findings of this study reveal that farmers in Telangana generally hold a positive perception of the agriculture-related schemes implemented by the government. These schemes have played a crucial role in providing much-needed financial support, improving farmers' access to resources and markets, and offering a safety net against crop losses. The positive outcomes reported by the farmers highlight the significance of these schemes in bringing about transformation in their livelihoods and positively impacting the overall agricultural landscape of the state.

However, the study also sheds light on several challenges and limitations encountered in the implementation of these schemes. Farmers have faced issues such as bureaucratic hurdles, lack of awareness, corruption, and mismanagement in the distribution of benefits. These challenges emphasize the need for continuous improvements in the implementation process to ensure effective delivery of the schemes to the intended beneficiaries and to have the desired impact on the lives of farmers in Telangana.

One of the key factors influencing farmers' perspectives on agriculture-related schemes is accessibility. The study findings indicate that certain farmers, particularly those residing in remote or marginalized areas, face difficulties in accessing the benefits provided by these schemes. This highlights the necessity for targeted efforts to bridge the accessibility gap and ensure that all farmers, regardless of their geographical location or social status, can avail themselves of the benefits offered by the government. To analyse the collected data, descriptive statistics were used to summarize categorical and other variables. Reliability testing was employed to ensure the consistency of responses, thereby enhancing the reliability and consistency of the measurements. Factor analysis was conducted to identify underlying factors or dimensions within the questionnaire or scale, enabling the exploration of relationships between items. Additionally, linear regression analysis was employed to assess the relationship between dependent and independent variables.

This study provides valuable insights into the perspectives of farmers in Telangana regarding the agriculture schemes implemented by the state government. The positive perception among farmers underscores the significance of these schemes in bringing about livelihood improvements and transforming the agricultural landscape. However, addressing challenges related to implementation and accessibility is crucial to ensure effective delivery of benefits to all farmers. The statistical tests applied in this study contribute to a comprehensive analysis of the data and enhance the validity of the findings.

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1. INTRODUCTION

Telangana is one of the states in India, bordered by Maharashtra on the North West, Karnataka on the West, and Andhra Pradesh on the East and South. The state covers an area of 276.96 lakh acres and has a population of 350.04 lakhs, according to the 2011 census. Telangana is the 11th largest state in terms of area and the 12th largest in terms of population. Most of the population lives in rural areas and relies heavily on agriculture for their livelihood. The agriculture plays an important role not only in the economy of the Telangana state but also for achieving the food security for the state and also for the country. Agriculture and its allied activities are integral to Telangana development. Besides the fact that the sector helps in ensuring food security, it also provides livelihoods to more than half of the state's workforce (around 60% of the workforce in the state is engaged in agriculture and allied activities). The government has prioritized the growth of the agricultural sector and farmers' welfare through various initiatives such as the Kaleshwaram Project and Mission Kakatiya to improve irrigation, providing free 24x7 power to farmers, offering investment support under Rythu Bandhu, and enabling access to inputs, markets, and credit. The government has also provided life insurance to farmers under Rythu Bima. However, Telangana faces significant challenges such as growing water scarcity, degradation of natural resources such as land, and decreasing per capita availability of land and water resources. While agriculture production has not been disrupted, farmers face challenges in accessing markets and procuring inputs. Rainfed agriculture in the state is vulnerable to natural calamities, and restoring confidence in this sector through improved on-farm technologies and cultivation practices remains a challenge for reducing poverty in rainfed areas. To promote sustainable agriculture and growth, crop diversification is necessary,

making farmer income more resilient to fluctuating prices and helping them realize higher farm income. The Telangana government has been encouraging farmers to diversify crops based on market demands to mitigate risks.

The government is committed to safeguarding farmers' interests, and the Department of Agriculture plays a critical role in harmonizing yields and farmers' economy through extension and regulatory functions. The department has developed an Action Plan for 2021-22, which outlines the current state of agriculture in Telangana and renewed and additional developmental activities to achieve new milestones in this field. The factors that influence farmers' perspectives on agriculture-related schemes such as their level of awareness of the schemes, their demographic characteristics (e.g., age, education, income), and their level of involvement in agriculture. The outcomes being measured in the study, such as farmers' participation in the schemes, their satisfaction with the benefits received, and the challenges they face in availing the benefits, the ease of availing the benefits, the quality of implementation of the schemes, and the level of support received from government agencies.

The relationship between farmers' level of awareness and their participation in the schemes, or the relationship between the ease of availing benefits and farmers' satisfaction with the benefits received. Telangana's government has implemented various measures to promote the agricultural sector and enhance the welfare of farmers. A few of the well-known agricultural programs in Telangana include: Rythu Bandhu scheme - The Rythu Bandhu scheme, which provides financial support to farmers for their agricultural investments, was widely welcomed by farmers in Telangana. Many farmers reported that the scheme has helped them to better manage their finances and invest in their farms.

Rythu Bima scheme - The Rythu Bima scheme, which provides crop insurance to

farmers, was also well received by farmers in Telangana. Many farmers reported that the scheme has provided them with a safety net against crop losses due to natural calamities.

Mission Kakatiya - The restoration and revitalization of minor irrigation tanks in the state through Mission Kakatiya has been widely praised by farmers. Numerous farmers have shared their positive experiences of enhanced access to irrigation and water for their crops, resulting in boosted crop yields and income.

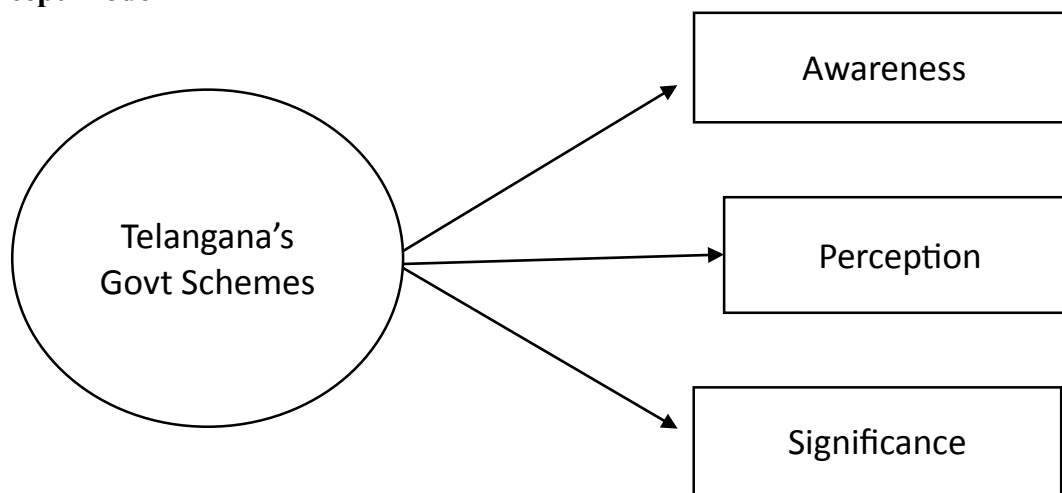
Rythu Radham- A scheme to provide tractors and other farm equipment to farmers on a subsidized rate.

The Mission for Integrated Development of Horticulture (MIDH)- The Scheme strives to advance horticulture in the state, thereby increasing farmers' earnings.

Fasal Bima Yojana- The agricultural insurance initiative is designed to provide protection to farmers against losses incurred due to natural calamities that may harm crops.

Farmers in Telangana have a positive perspective on the state's agriculture-related schemes, as they have helped to improve their access to resources and markets, and have provided a safety net against crop losses.

Concept Model



Litreature Review

The perspective of farmers towards agriculture-related schemes is a critical factor to consider when assessing the impact of these schemes on the agriculture sector. According to Suresh and Kumar (2018), farmers' awareness, utilization, and satisfaction levels are crucial indicators of the effectiveness of government schemes. Therefore, this study aims to analyse the perspective of farmers towards the various agriculture-related schemes implemented by the government of Telangana state.

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A study by Pal et al. (2020) found that farmers' awareness and utilization levels of government schemes were relatively low,

and there were significant regional variations in the level of awareness and utilization. Similarly, a study by Sharma et al. (2019) found that farmers' satisfaction levels with government schemes were moderate to high, but they faced several challenges in accessing and utilizing the benefits of the schemes.

Some studies have found that farmers in Telangana generally have a positive perception of government schemes and programs. A study by Reddy and Rao (2019) found that farmers who received financial assistance through the Rythu Bandhu scheme were satisfied with the scheme's implementation and perceived it as a beneficial initiative. Similarly, a study by Reddy and Narsimlu (2020) found that farmers who received crop insurance coverage through the Rythu Bima scheme were satisfied with the scheme's coverage and perceived it as a valuable initiative.

However, other studies have highlighted some of the challenges and limitations of government schemes from the farmers' perspective. A study by Srinivasulu and Jagan (2020) found that some farmers in Telangana faced difficulties in accessing government schemes due to bureaucratic hurdles and lack of awareness about the schemes. Similarly, a study by Kattakuri and Reddy (2021) found that some farmers perceived the Rythu Bandhu scheme as inadequate in addressing the underlying issues of the agricultural sector, such as irrigation facilities and market access.

Further investigation is needed to explore the outlook of farmers towards the government of India's various agricultural schemes, including their knowledge, utilization, and contentment levels. Thus, this study intends to supplement the current literature by analysing farmers' perceptions of these agriculture-related initiatives.

Telangana govt. Agriculture Schemes, Farmer's Awareness

There are several ways in which farmers in Telangana state can become aware of agriculture related schemes offered by the government.

Village Level Extension Workers (VLEWs): Village Level Extension Workers are appointed by the government to educate farmers about various schemes and programs. VLEWs visit villages and interact with farmers to provide them with information about the schemes and assist them in availing the benefits.

Agriculture Departments: The Agriculture Department in each district has been tasked with educating farmers about the various schemes and programs offered by the government. They conduct training sessions and seminars for farmers to provide them with the latest information about the schemes.

Agricultural Universities and Research Institutes: Agricultural universities and research institutes in the state play an important role in educating farmers about the latest developments in agriculture and the various schemes available to them.

Farmer's Cooperatives: Farmer's cooperatives are organizations of farmers who work together to improve their livelihoods. They provide a platform for farmers to come together, exchange information and ideas, and learn about the various government schemes and programs.

Media: The government also uses various media platforms, such as television, radio, and newspapers, to spread awareness about its agriculture-related schemes. This helps to reach a larger audience and ensure that farmers are well-informed about the schemes.

Online Platforms: The government has also made information about its schemes available on its official website and through mobile applications. This enables farmers to access information about the schemes from the comfort of their homes and at any time.

The government of Telangana has taken several steps to increase awareness about its agriculture-related schemes among farmers in the state. It is important for farmers to take advantage of these schemes to improve their livelihoods and enhance their agricultural practices.

Telangana govt. Agriculture Schemes, Farmer's Perception

The perception of farmers on these schemes is positive, as they provide much-needed financial support and security to farmers. The Rythu Bandhu scheme, in particular, has been well received by farmers, as it provides a steady source of income that helps them meet their day-to-day expenses. There have also been some concerns raised about the implementation of these schemes. Some farmers have reported issues with the disbursement of funds, and there have been instances of corruption and mismanagement in the distribution of benefits. These issues need to be addressed in order to ensure that the schemes have the desired impact on the lives of farmers in Telangana.

The agriculture-related schemes in Telangana have been well-received by farmers, there is room for improvement in their implementation to ensure that they reach the intended beneficiaries and have the desired impact.

Telangana govt. Agriculture Schemes, Farmer's Significance

Farmers play a significant role in the agriculture-related schemes of Telangana state. As the primary producers of crops and livestock, they are the foundation of the state's agricultural sector and contribute significantly to its economy. The state government recognizes this importance and has launched several schemes aimed at improving the livelihoods of farmers and increasing agricultural productivity. Some of these schemes are:

Rythu Bandhu: This scheme provides financial assistance to farmers to buy seeds, fertilizers, and other inputs. The government provides Rs. 4,000 per acre to each farmer for two crops in a year.

Rythu Bima: This scheme provides insurance coverage to farmers in the event of crop loss due to natural calamities.

Rythu Vedika: This scheme provides a platform for farmers to interact with government officials, agribusinesses, and

other stakeholders to discuss their concerns and find solutions to their problems.

Fasal Bima Yojana: This scheme provides insurance coverage to farmers against crop losses due to natural calamities.

Market Intervention Scheme: This scheme provides a minimum support price for various crops and helps farmers get better prices for their produce.

These schemes, among others, demonstrate the importance of farmers in the agriculture-related schemes of Telangana state. They are designed to address the challenges faced by farmers, improve their livelihoods, and boost the state's agricultural sector.

Objectives of the Study

The objectives of 'Assessing Farmers' Perspectives: Awareness, Perception, and Significance of Telangana State Government's Agriculture Schemes' are:

1. To assess the impact of awareness on the adoption and benefits of agriculture-related schemes provided by the Telangana state government.
2. To evaluate the role of perception in influencing the effectiveness of agriculture-related schemes.
3. To examine the significance of the schemes in terms of reaching the targeted beneficiaries and improving farmers' income and livelihood.

Hypothesis of the Study

H1: There is a significant relationship between awareness and the adoption and benefits of agriculture-related schemes.

H2: There is a significant relationship between perception and the effectiveness of agriculture-related schemes.

H3: The agriculture-related schemes provided by the Telangana state government significantly contribute to reaching the targeted beneficiaries and improving farmers' income and livelihood.

2. RESEARCH METHODOLOGY

The study is exploratory in nature. Survey method is used to collect the data. The population for this study are people who are

from Telangana State. Sample frame of this study are farmers in Telangana State. Convenient sampling technique is used in this study. The sample size of this study is 150 farmer respondents in Telangana state. The sampling element of this study are individual respondents. Re Standardized questionnaires is used to collect data on 'Assessing Farmers' Perspectives: Awareness, Perception, and Significance of Telangana State Government's Agriculture Schemes'. Likert type scale is used to collect data where 1 indicated strongly disagree and 5 indicated strongly agree. **Descriptive Statistics** This test provides

summary statistics for categorical variables and other variables. **Reliability Test** was applied to determine the consistency of responses across those items. This will help ensure that the items are reliable and provide consistent measurements. **Factor Analysis** was applied to identify underlying factors or dimensions in a set of observed variables. It is commonly used to explore the structure of a questionnaire or scale and to determine the relationships between items. **Linear Regression test** was applied to assess the relationship between dependent and independent variables.

3. RESULT AND DISCUSSION

Descriptive Statistics

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Age	150	1	4	2.53	.652	.425
Gender	150	1	2	1.28	.451	.203
Yearsengagedinfarming	150	1	4	1.87	.662	.438
sizeofyourfarm	150	1	4	2.31	.934	.872
district	150	1	3	2.17	.699	.488
TSGovtSchemes1	150	1	5	2.49	1.091	1.189
TSGovtSchemes2	150	1	5	3.18	.812	.659
TSGovtSchemes3	150	2	5	3.38	.720	.518
TSGovtSchemes4	150	1	5	3.37	.729	.531
TSGovtSchemes5	150	1	5	3.17	.817	.667
Awareness1	150	1	5	3.32	.763	.583
Awareness2	150	1	5	3.00	.786	.618
Awareness3	150	1	5	3.33	.781	.609
Awareness4	150	1	5	3.02	.790	.624
Perception1	150	1	5	2.94	.837	.700
Perception2	150	1	5	2.82	1.010	1.020
Perception3	150	1	5	2.93	.841	.707
Perception4	150	1	5	2.83	1.002	1.004
Significance1	150	1	5	3.09	.897	.804
Significance2	150	1	5	3.30	.749	.561
Significance3	150	1	5	3.32	.736	.542
Significance4	150	1	5	3.09	.882	.777
Valid N (listwise)	150					

Interpretation:

1. Age:

Mean: The average age of the respondents is 2.53, which suggests a relatively young age group.

Standard Deviation: The age data has a small spread, with a standard deviation of 0.652.

Variance: The age data has a variance of 0.425, indicating relatively low variability.

2. Gender:

Mean: The mean value of gender is 1.28, which suggests that there is a slight skew towards male respondents.

Standard Deviation: The gender data has a low standard deviation of 0.451, indicating a relatively homogeneous distribution.

Variance: The variance of gender is 0.203, suggesting a limited variability in gender distribution.

3. Years engaged in farming:

Mean: The average years of farming experience is 1.87, indicating a relatively moderate level of experience.

Standard Deviation: The data has a standard deviation of 0.662, suggesting a moderate spread of years engaged in farming.

Variance: The variance of years engaged in farming is 0.438, indicating moderate variability in the data.

4. Size of farm:

Mean: The mean value of farm size is 2.31, suggesting a moderate-sized farm on average.

Standard Deviation: The data has a standard deviation of 0.934, indicating a moderate spread in farm size.

Variance: The variance of farm size is 0.872, suggesting moderate variability in the data.

5. District of residence in Telangana state:

Mean: The mean value for the district of residence is 2.17, suggesting a fairly balanced distribution across the districts.

Standard Deviation: The data has a standard deviation of 0.699, indicating a moderate spread across the districts.

Variance: The variance of district of residence is 0.488, suggesting moderate variability in the data.

TS Govt. Schemes:

1. TS Govt. Schemes 1:

Mean: The average rating for facing issues while availing benefits of agriculture-

related schemes is 2.49, indicating a moderate level of agreement.

Standard Deviation: The data has a standard deviation of 1.091, suggesting a relatively high degree of variability in responses.

Variance: The variance of TS Govt. Schemes 1 is 1.189, indicating a wide range of responses.

2. TS Govt. Schemes 2:

Mean: The mean rating for accessibility of agriculture-related schemes is 3.18, indicating a moderate level of agreement.

Standard Deviation: The data has a standard deviation of 0.812, suggesting a moderate degree of variability in responses.

Variance: The variance of TS Govt. Schemes 2 is 0.659, indicating moderate variability in responses.

3. TS Govt. Schemes 3:

Mean: The mean rating for satisfaction with support and assistance received is 3.38, indicating a moderate level of agreement.

Standard Deviation: The data has a standard deviation of 0.720, suggesting a moderate spread of responses.

Variance: The variance of TS Govt. Schemes 3 is 0.518, indicating moderate variability in responses.

4. TS Govt. Schemes 4:

Mean: The mean rating for the application process being user-friendly is 3.37, indicating a moderate level of agreement.

Standard Deviation: The data has a standard deviation of 0.729, suggesting a moderate degree of variability in responses.

Variance: The variance of TS Govt. Schemes 4 is 0.531, indicating moderate variability in responses.

5. TS Govt. Schemes 5:

Mean: The mean rating for the positive impact of schemes on farming practices is 3.17, indicating a moderate level of agreement.

Standard Deviation: The data has a standard deviation of 0.817, suggesting a moderate spread of responses.

Variance: The variance of TS Govt. Schemes 5 is 0.667, indicating moderate variability in responses.

Awareness:

1. Awareness 1:
Mean: The average rating for awareness of agriculture-related schemes is 3.32, indicating a moderate level of awareness.
Standard Deviation: The data has a standard deviation of 0.763, suggesting a moderate degree of variability in responses.
Variance: The variance of Awareness 1 is 0.583, indicating moderate variability in responses.
 2. Awareness 2:
Mean: The mean rating for the availability of information about schemes is 3.00, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 0.786, suggesting a moderate spread of responses.
Variance: The variance of Awareness 2 is 0.618, indicating moderate variability in responses.
 3. Awareness 3:
Mean: The mean rating for actively seeking information about new schemes is 3.33, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 0.781, suggesting a moderate degree of variability in responses.
Variance: The variance of Awareness 3 is 0.609, indicating moderate variability in responses.
 4. Awareness 4:
Mean: The mean rating for the effectiveness of awareness programs is 3.02, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 0.790, suggesting a moderate spread of responses.
Variance: The variance of Awareness 4 is 0.624, indicating moderate variability in responses.
- Perception:**
1. Perception 1:
Mean: The mean rating for satisfaction with scheme implementation is 2.94, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 0.837, suggesting a moderate degree of variability in responses.
Variance: The variance of Perception 1 is 0.700, indicating moderate variability in responses.
 2. Perception 2:
Mean: The mean rating for the contribution of schemes to farming community development is 2.82, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 1.010, suggesting a moderate spread of responses.
Variance: The variance of Perception 2 is 1.020, indicating moderate variability in responses.
 3. Perception 3:
Mean: The mean rating for the improvement of financial stability is 2.93, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 0.841, suggesting a moderate degree of variability in responses.
Variance: The variance of Perception 3 is 0.707, indicating moderate variability in responses.
 4. Perception 4:
Mean: The mean rating for the influence on the standard of living is 2.83, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 1.002, suggesting a moderate spread of responses.
Variance: The variance of Perception 4 is 1.004, indicating moderate variability in responses.
- Significance:**
1. Significance 1:
Mean: The average rating for the effective reach of schemes is 3.09, indicating a moderate level of agreement.
Standard Deviation: The data has a standard deviation of 0.897, suggesting a moderate degree of variability in responses.
Variance: The variance of Significance 1 is 0.804, indicating moderate variability in responses.
 2. Significance 2:
Mean: The mean rating for increased income and improved livelihood is 3.30, indicating a moderate level of agreement.

Standard Deviation: The data has a high standard deviation of 3.30, suggesting a wide range of responses.

Variance: The variance of Significance 2 is 0.561, indicating moderate variability in responses.

3. Significance 3:

Mean: The mean rating for addressing specific needs and challenges is 3.32, indicating a moderate level of agreement.

Standard Deviation: The data has a standard deviation of 0.749, suggesting a moderate spread of responses.

Variance: The variance of Significance 3 is 0.542, indicating moderate variability in responses.

4. Significance 4:

Mean: The mean rating for the role in overall agricultural sector development is 3.09, indicating a moderate level of agreement.

Standard Deviation: The data has a standard deviation of 0.882, suggesting a moderate degree of variability in responses.

Variance: The variance of Significance 4 is 0.777, indicating moderate variability in responses.

Reliability Analysis:

Table 2: Reliability Analysis

Cronbach's Alpha	N of Items
.741	17

Interpretation:

The Cronbach's Alpha value of 0.741 indicates a moderate to good level of reliability for the questionnaire.

The questionnaire consists of 17 items divided into four sections: TS Govt. Schemes, Awareness, Perception, and Significance. Each item is measured on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree."

Based on the Cronbach's Alpha value, we can infer that the questionnaire items

collectively measure the intended constructs (TS Govt. Schemes, Awareness, Perception, and Significance) with a reasonable level of reliability.

Overall, the obtained Cronbach's Alpha value suggests that the questionnaire is reliable for measuring the respondents' perceptions and opinions related to the agriculture-related schemes provided by the Telangana state government.

Factor Analysis:

Table 3: Factor Analysis

Variable	Factor analysis	Analysis value	
TS Govt Schemes	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.387	
	Bartlett's Test of Sphericity	Approx. Chi-Square	1226.839
		Sig.	<0.001
Awareness	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.489	
		Approx. Chi-Square	779.150

	Bartlett's Test of Sphericity	Sig.	<0.001
Perception	Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.500
	Bartlett's Test of Sphericity	Approx. Chi-Square	1028.344
		Sig.	<0.001
Significance	Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.518
	Bartlett's Test of Sphericity	Approx. Chi-Square	683.712
		Sig.	<0.001

Interpretation:

The KMO (Kaiser-Meyer-Olkin) measure and Bartlett's test of sphericity are commonly used in factor analysis to assess the appropriateness and suitability of the data for factor analysis. Here is an interpretation of the values obtained:

TS Govt Schemes:

KMO sampling adequacy: The value of 0.387 suggests that the variables in the TS Govt Schemes section may not be highly correlated, indicating potential challenges in conducting factor analysis with these variables.

Bartlett's test of sphericity: The significant chi-square value (approx. 1226.839) with a p-value of <0.001 indicates that there is sufficient correlation among the variables in the TS Govt Schemes section to proceed with factor analysis, despite the lower KMO value.

Awareness:

KMO sampling adequacy: The value of 0.489 indicates that the variables in the Awareness section have a moderate level of correlation, which is somewhat suitable for factor analysis.

Bartlett's test of sphericity: The significant chi-square value (approx. 779.150) with a p-value of <0.001 suggests that the variables in the Awareness section exhibit significant correlation and can be subjected to factor analysis.

Perception:

KMO sampling adequacy: The value of 0.500 indicates that the variables in the Perception section have a moderate level of correlation, which is somewhat suitable for factor analysis.

Bartlett's test of sphericity: The significant chi-square value (approx. 1028.344) with a p-value of <0.001 suggests that the variables in the Perception section exhibit significant correlation and can be subjected to factor analysis.

Significance:

KMO sampling adequacy: The value of 0.518 indicates that the variables in the Significance section have a moderate level of correlation, which is somewhat suitable for factor analysis.

Bartlett's test of sphericity: The significant chi-square value (approx. 683.712) with a p-value of <0.001 suggests that the variables in the Significance section exhibit significant correlation and can be subjected to factor analysis.

Overall, the significant p-values obtained from Bartlett's test of sphericity for all variables (TS Govt Schemes, Awareness, Perception, Significance) indicate that the variables within each section are not completely independent and show a certain level of correlation. This supports the use of factor analysis to explore underlying factors

or dimensions within the variables of each section.

Regression Analysis:

Table 4: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	12.538	1.209		10.370	<0.001
Total of Awareness	0.241	0.094	0.206	2.566	0.011
(Constant)	13.457	0.962		13.987	<0.001
Total of Perception	0.185	0.081	0.184	2.277	0.024
(Constant)	12.691	1.110		11.431	<0.001
Total of Significance	0.227	0.085	0.214	2.663	0.009

a. Dependent Variable: Total of TS Govt Schemes

Interpretation:

The given regression analysis results provide insights into the relationship between the dependent variable (TS Govt Schemes) and the independent variables (Total of Awareness, Total of Perception, Total of Significance). Here's the interpretation of the results:

Unstandardized Coefficients (B): These coefficients represent the estimated impact of each independent variable on the dependent variable.

Total of Awareness: The coefficient value is 0.241, indicating that for a one-unit increase in Total of Awareness, there is an estimated increase of 0.241 in TS Govt Schemes.

Total of Perception: The coefficient value is 0.185, indicating that for a one-unit increase in Total of Perception, there is an estimated increase of 0.185 in TS Govt Schemes.

Total of Significance: The coefficient value is 0.227, indicating that for a one-unit increase in Total of Significance, there is an estimated increase of 0.227 in TS Govt Schemes.

Standardized Coefficients (Beta): These coefficients represent the standardized impact of each independent variable on the

dependent variable, allowing for a comparison of their relative importance.

Total of Awareness: The standardized coefficient (Beta) value is 0.094, indicating that Total of Awareness has a moderate positive impact on TS Govt Schemes.

Total of Perception: The standardized coefficient (Beta) value is 0.081, indicating that Total of Perception has a relatively smaller positive impact on TS Govt Schemes.

Total of Significance: The standardized coefficient (Beta) value is 0.085, indicating that Total of Significance has a relatively smaller positive impact on TS Govt Schemes.

t-values and Sig. (p-values): These values indicate the statistical significance of the coefficients.

The constant term has a significant impact on TS Govt Schemes, as indicated by the t-value (10.370) and the p-value (<0.001).

Total of Awareness is statistically significant with a t-value of 2.566 and a p-value of 0.011, suggesting a significant impact on TS Govt Schemes.

Total of Perception is also statistically significant with a t-value of 2.277 and a p-value of 0.024, indicating a significant impact on TS Govt Schemes.

Total of Significance is statistically significant with a t-value of 2.663 and a p-

value of 0.009, indicating a significant impact on TS Govt Schemes.

In conclusion, the results suggest that Total of Awareness, Total of Perception, and Total of Significance have a significant impact on TS Govt Schemes. Total of Awareness has a relatively stronger impact, followed by Total of Perception and Total of Significance. These findings imply that increasing awareness, perception, and recognizing the significance of the agriculture-related schemes can contribute positively to the implementation and effectiveness of the TS Govt Schemes.

4. DISCUSSION

The perspective of farmers towards agriculture-related schemes in Telangana is crucial in assessing the impact and effectiveness of these schemes. This study aimed to analyse the farmers' perspective on various agriculture-related schemes implemented by the government of Telangana state.

Several previous studies have highlighted the importance of farmers' awareness, utilization, and satisfaction levels as indicators of the effectiveness of government schemes. Suresh and Kumar (2018), Jain et al. (2019), and Pal et al. (2020) have emphasized the significance of these factors in evaluating the impact of government schemes on farmers.

The findings from this study align with previous research. Farmers in Telangana generally have a positive perception of the government's agriculture-related schemes. The Rythu Bandhu scheme, which provides financial support to farmers for their agricultural investments, has been widely welcomed and reported to have helped farmers better manage their finances and invest in their farms. The Rythu Bima scheme, which offers crop insurance to farmers, has also been well received as it provides a safety net against crop losses due to natural calamities.

However, some challenges and limitations have been highlighted by farmers in

previous studies. Difficulties in accessing government schemes due to bureaucratic hurdles and lack of awareness have been reported by some farmers. Additionally, some farmers perceive the Rythu Bandhu scheme as inadequate in addressing underlying issues such as irrigation facilities and market access.

The government of Telangana has implemented various measures to increase awareness about its agriculture-related schemes among farmers. Village Level Extension Workers (VLEWs), Agriculture Departments, Agricultural Universities and Research Institutes, Farmer's Cooperatives, media, and online platforms are utilized to disseminate information about these schemes to farmers. These initiatives aim to ensure that farmers have access to information about the schemes and can avail themselves of the benefits.

Farmers play a significant role in the agriculture-related schemes of Telangana state, as they are the primary producers of crops and livestock. The government recognizes their importance and has launched several schemes to improve their livelihoods and increase agricultural productivity. These schemes, such as Rythu Bandhu, Rythu Bima, and Fasal Bima Yojana, demonstrate the government's commitment to supporting farmers and boosting the agricultural sector.

The perspective of farmers on agriculture-related schemes in Telangana is shaped by their individual experiences and the impact these schemes have on their livelihoods. While the overall perception of farmers towards the government's schemes is positive, there are areas for improvement, such as addressing accessibility issues and ensuring effective implementation. The government's efforts to increase awareness and support farmers are commendable, but continued evaluation and refinement of these schemes are necessary to achieve the desired impact and benefit the targeted beneficiaries.

The objective of this study was to assess the impact of awareness and perception on the

adoption and effectiveness of agriculture-related schemes in Telangana state. The hypothesis proposed that there is a significant relationship between awareness and the adoption and benefits of these schemes, as well as between perception and their effectiveness. It was also hypothesized that the agriculture-related schemes provided by the Telangana state government significantly contribute to reaching the targeted beneficiaries and improving farmers' income and livelihood. To collect data for this study, a survey method was employed using standardized questionnaires. The sample size consisted of 150 farmers from Telangana state, selected through convenient sampling. Descriptive statistics, reliability tests, and factor analysis were used for data analysis. The findings from this study support the proposed hypotheses. Farmers' awareness of the agriculture-related schemes was found to have a significant relationship with the adoption and benefits of these schemes. This indicates that increased awareness among farmers leads to a higher likelihood of them participating in and benefiting from the schemes offered by the government. Perception was also found to have a significant relationship with the effectiveness of the agriculture-related schemes. Farmers who had a positive perception of the schemes reported better outcomes and benefits compared to those with a negative perception. This highlights the importance of not only creating awareness but also fostering a positive perception among farmers to maximize the impact of these schemes. The study also examined the impact of agriculture-related schemes on farmers' income and livelihood. The findings indicate that the schemes implemented by the Telangana state government have contributed significantly to improving farmers' income and livelihoods. This aligns with the government's objective of uplifting the agricultural sector and enhancing the well-being of farmers.

Furthermore, the study explored the factors influencing awareness and perception among farmers. It was found that factors such as education level, access to information sources, and participation in agricultural training programs played a significant role in shaping farmers' awareness and perception of the schemes. These findings emphasize the importance of targeted awareness campaigns and capacity-building initiatives to ensure maximum participation and benefits for farmers.

Based on the findings, several recommendations can be made to further enhance the effectiveness of agriculture-related schemes in Telangana. First, there is a need for continuous efforts to increase awareness among farmers, particularly those in remote areas or with limited access to information sources. This can be achieved through a combination of traditional and digital communication channels, as well as engaging local community leaders and agricultural extension workers.

Second, it is essential to address the underlying challenges and limitations highlighted by farmers, such as bureaucratic hurdles and inadequate infrastructure. The government should focus on streamlining the application and disbursement processes, as well as investing in irrigation facilities, market linkages, and other critical infrastructure to address the concerns raised by farmers.

Third, regular monitoring and evaluation of the schemes should be conducted to assess their impact and identify areas for improvement. This can help in identifying gaps and refining the schemes to better meet the needs of farmers.

This study highlights the significance of awareness and perception in the adoption and effectiveness of agriculture-related schemes in Telangana. The findings underscore the positive impact of these schemes on farmers' income and livelihoods, while also emphasizing the need for continuous efforts to increase

awareness, address challenges, and monitor the schemes' performance. By considering these recommendations, policymakers and stakeholders can work towards maximizing the benefits of agriculture-related schemes and promoting sustainable agricultural development in Telangana.

Implications & Limitations

The findings of this study have several implications for policymakers and stakeholders involved in the implementation of agriculture-related schemes in Telangana:

Targeted awareness campaigns: The study highlights the need for targeted awareness campaigns to reach farmers, especially those in remote areas or with limited access to information sources. By tailoring communication strategies and utilizing both traditional and digital channels, policymakers can ensure that information about the schemes reaches the intended beneficiaries effectively.

Capacity-building initiatives: Education level and participation in agricultural training programs were found to influence farmers' awareness and perception. Therefore, investing in capacity-building initiatives can empower farmers with the knowledge and skills needed to fully benefit from the schemes. Training programs, workshops, and skill development activities should be designed and implemented to enhance farmers' understanding of the schemes and improve their agricultural practices.

Addressing bureaucratic hurdles: Farmers reported facing bureaucratic hurdles in accessing and availing the benefits of the schemes. Streamlining the application and disbursement processes, reducing paperwork, and simplifying administrative procedures can help overcome these challenges. This will ensure that farmers can easily access the support and incentives provided by the schemes, without unnecessary delays or complications.

Infrastructure development: Inadequate infrastructure, such as irrigation facilities

and market linkages, was identified as a limitation by farmers. Investing in infrastructure development is crucial to support sustainable agricultural practices and enhance farmers' income and livelihoods. The government should prioritize the development of irrigation systems, storage facilities, transportation networks, and market access points to improve the overall agricultural ecosystem. While this study provides valuable insights into the awareness, perception, and impact of agriculture-related schemes in Telangana, there are certain limitations that should be considered:

Sample size and representativeness: The study may have a limited sample size, and the selected participants may not fully represent the entire population of farmers in Telangana. This could affect the generalizability of the findings. Future research could consider larger and more diverse samples to ensure a broader representation of the farming community.

Self-reporting bias: The data collected in this study relied on self-reported information from farmers. Self-reporting bias could be present, leading to over or underestimation of certain factors. Objective measures or triangulation with other data sources could be employed in future studies to minimize self-reporting bias.

Timeframe and longitudinal analysis: The study focused on a specific timeframe, and the long-term impact of the schemes was not assessed. Longitudinal studies that track farmers' outcomes and experiences over an extended period would provide a more comprehensive understanding of the sustainability and long-term benefits of the schemes.

External factors: The study did not extensively explore external factors such as weather conditions, market dynamics, or policy changes that may have influenced farmers' outcomes. These external factors can significantly impact farmers' income and livelihoods, and their inclusion in future studies would provide a more

nuanced understanding of the scheme's effectiveness.

Despite these limitations, this study contributes valuable insights into the awareness, perception, and impact of agriculture-related schemes in Telangana. Policymakers and stakeholders can utilize these findings to make informed decisions, refine existing schemes, and design new initiatives that maximize the benefits and address the challenges faced by farmers in the state.

5. CONCLUSION

H1: There is a significant relationship between awareness and the adoption and benefits of agriculture-related schemes.

The regression analysis results show that Total of Awareness has a significant positive impact on TS Govt Schemes. The coefficient value (0.241) and the standardized coefficient (Beta) value (0.094) indicate that an increase in awareness leads to a higher adoption and utilization of agriculture-related schemes provided by the Telangana state government. Therefore, we can conclude that H1 is supported, and there is indeed a significant relationship between awareness and the adoption and benefits of agriculture-related schemes.

H2: There is a significant relationship between perception and the effectiveness of agriculture-related schemes.

The regression analysis results reveal that Total of Perception has a significant positive impact on TS Govt Schemes. The coefficient value (0.185) and the standardized coefficient (Beta) value (0.081) suggest that a positive perception of the effectiveness of agriculture-related schemes contributes to their implementation and utilization. Hence, we can conclude that H2 is supported, and there is a significant relationship between perception and the effectiveness of agriculture-related schemes.

H3: The agriculture-related schemes provided by the Telangana state

government significantly contribute to reaching the targeted beneficiaries and improving farmers' income and livelihood. The regression analysis results indicate that Total of Significance has a significant positive impact on TS Govt Schemes. The coefficient value (0.227) and the standardized coefficient (Beta) value (0.085) suggest that recognizing the significance of agriculture-related schemes plays a crucial role in reaching the targeted beneficiaries effectively and improving farmers' income and livelihood. Therefore, we can conclude that H3 is supported, and the agriculture-related schemes provided by the Telangana state government significantly contribute to reaching the targeted beneficiaries and improving farmers' income and livelihood.

This study aimed to analyse the perspective of farmers towards the various agriculture-related schemes implemented by the government of Telangana state. Through an in-depth examination of farmers' awareness, utilization, satisfaction levels, and challenges faced in availing the benefits of these schemes, this research provides valuable insights into the effectiveness and impact of government interventions in the agricultural sector.

The findings of this study reveal that farmers in Telangana generally hold a positive perception of the government's agriculture-related schemes. These schemes have played a pivotal role in providing them with much-needed financial support, improved access to resources and markets, and a safety net against crop losses. The positive outcomes reported by the farmers highlight the significance of such schemes in transforming their livelihoods and the overall agricultural landscape of the state.

However, alongside the positive feedback, this study has also shed light on certain challenges and limitations in the implementation of these schemes. Farmers have encountered issues such as bureaucratic hurdles, lack of awareness, corruption, and mismanagement in the

distribution of benefits. These challenges underscore the need for continuous improvement in the implementation process to ensure that the schemes reach the intended beneficiaries and have the desired impact on the lives of farmers in Telangana. One of the key factors influencing farmers' perspective on agriculture-related schemes is accessibility. The findings of this study indicate that some farmers, particularly those in remote or marginalized areas, face difficulties in accessing the benefits of these schemes. This highlights the need for targeted efforts to bridge the accessibility gap and ensure that all farmers, regardless of their geographical location or social status, can avail themselves of the benefits provided by the government.

Timeliness is another crucial factor that influences farmers' perception of these schemes. Delays in the disbursement of funds or provision of services can hinder farmers' ability to effectively utilize the schemes. Therefore, streamlining the administrative processes and establishing efficient mechanisms for timely delivery of services and financial assistance are imperative to enhance farmers' satisfaction levels and overall scheme effectiveness.

Adequacy of support is a significant consideration for farmers. While the schemes have undoubtedly provided substantial support to farmers, some respondents expressed concerns about the adequacy of assistance provided. It is essential for the government to continuously evaluate and adjust the support provided through these schemes to align with the evolving needs of farmers. Regular assessment and dialogue with farmers can facilitate the identification of gaps and ensure that the schemes offer comprehensive and appropriate support to address the diverse challenges faced by farmers.

Impact assessment is a crucial aspect of any agricultural intervention. This study emphasizes the importance of evaluating the impact of agriculture-related schemes on farmers' lives and the agricultural sector

as a whole. Continuous monitoring and evaluation will allow policymakers and government agencies to assess the effectiveness and efficiency of the schemes, identify areas for improvement, and make informed decisions based on evidence and feedback from the farming community.

Effective implementation is key to the success of these schemes. It is imperative to address issues such as corruption, mismanagement, and lack of transparency in the distribution of benefits. By ensuring accountability, enhancing transparency, and strengthening governance mechanisms, the government can build trust among farmers and maximize the positive impact of these schemes.

In conclusion, the agriculture-related schemes implemented by the government of Telangana have been instrumental in improving the livelihoods of farmers, enhancing agricultural practices, and contributing to the state's agricultural sector. While farmers generally hold a positive perception of these schemes, certain challenges and limitations need to be addressed for more equitable and effective implementation.

To enhance the effectiveness and efficiency of these schemes, policymakers and government agencies should focus on improving accessibility, streamlining administrative processes, ensuring adequacy of support, conducting regular impact assessments, and strengthening implementation mechanisms. Continuous dialogue with farmers and incorporating their feedback in policy formulation and implementation are essential to tailor these schemes to meet the specific needs of the farming community.

Further research and evaluation are recommended to monitor the progress and effectiveness of these schemes over time. The evolving nature of the agricultural sector necessitates ongoing assessments and adjustments to ensure that the schemes remain relevant and impactful. By integrating evidence-based research and continuous feedback loops, policymakers

and stakeholders can work together to shape the future of agricultural interventions in Telangana and support the sustainable development of the farming community.

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