

International Journal of Agriculture Extension and Social Development

Volume 7; Issue 3; March 2024; Page No. 335-341

Received: 02-12-2023
Accepted: 06-02-2023

Indexed Journal
Peer Reviewed Journal

Exploring the key success factors of farmer producer companies in Gujarat: A farmer's perspective

¹YA Lad and ²YB Unjia

¹Associate Professor, Department of Human Resource Development & Personnel Management, International Agribusiness Management Institute, Anand Agricultural University, Anand, Gujarat, India

²Ph.D. (ABM), Student, International Agribusiness Management Institute, Anand Agricultural University, Anand, Gujarat, India

DOI: <https://doi.org/10.33545/26180723.2024.v7.i3d.452>

Corresponding Author: YA Lad

Abstract

India is an agrarian country, where eighty-five percent of farmers are small and marginal farmers (with land holding less than 2 hectares). Farmers frequently cannot extract the maximum value from their produce due to a lack of a grassroots value chain linking various inputs cohesively to a firm output. Keeping this lack of availability of a grassroots connected value chain, the concept of Farmer Producer Company was mooted as the best option for the grassroots level organization for the creation and manifestation of such a value chain. However, the concerns regarding the working and sustenance of such initiatives for creating the intended impact are still looming large. To evaluate the impacting factors for the success and failure of an FPC, a study was designed and conducted in ten randomly selected farmer-producer companies in the State Of Gujarat. Factor analysis was used to analyze the collected data and to determine the factors that are important for the cause. The result of factor analysis inferred that all 11 factors together contribute 70.65% in success of a farmer producer company. The result shows that the most important factor for the success of the Farmer Producer Company was its management perspective, which contributed the highest 12.502% to the success. The other important factors were the Management team, Group cohesiveness, Input and Output Services and Infrastructural Facility. Surprisingly, the least important factor was Training and Meeting, which contributed the lowest 3.625% in success of a Farmer Producer Company.

Keywords: Success factors, farmer producer company, farmer member, management perspective, input and output services

Introduction

Agriculture was the main occupation when India became independent in 1947; it was also a major source of economic activity. However, it was labor intensive with very low productivity. The green Revolution was attempted in 1960-1970 to make India self-reliant in food production by increasing productivity. However, an economic turnaround for Indian Farmers is still elusive. Indian Farmers are still grappling with the absence of technological expertise, information dissemination, marketing skills, and resources to meet formal market requirements. As a consequence, there is a continuous struggle to generate a remunerative price on a regular basis. Mobilizing farmers for group action to arrange input and collectively sell their products through FPCs is one of the possible alternatives for successful marketing. The fundamental FPC ideology is to collectivize farmers, generate income, and improve productivity.

Farmers are frequently unable to extract the maximum value from their produce due to a lack of grassroots organization. Also, the producers' share of consumer rupees is low, implying that a very low fraction of consumer spending is reaching to the farmer or actual producer. The subsequent chains, including middlemen, are more prominent and have a large holding capacity and, therefore, have the capability

to exploit the farmer. Primary Producers' organizations or collectivities are being argued to be the only institutions that can protect small farmers from globalization by helping farmers buy or sell better due to economy-of-scale benefits and lower transaction costs with technical help in production and eventually creating and enhancing social capital. But producer organizations still struggle to become successful, and some successful producer organizations continue facing various problems like being effective and competent in the long run. The majority of FPCs in the country primarily start with marketing of input supply services, and once they are successful, they tend to widen their market opportunities by entering into processing and value addition. Around 25% of FPOs are engaged in post-harvest processing, and about 20% of FPOs apply organic production methods. The key success factors of Farmer Producer Companies (FPCs) and their role in transforming the agricultural landscape. FPCs have emerged as powerful institutions that empower farmers by enabling collective action, promoting sustainable agriculture practices, and enhancing market access. Understanding the factors contributing to their success is crucial for policymakers, researchers, and agricultural stakeholders to develop effective strategies and policies for fostering the growth and

sustainability of FPCs. Through a systematic review of existing literature, this study identifies and synthesizes the critical success factors that have contributed to the growth and success of FPCs. The findings will provide valuable insights for stakeholders to enhance their understanding of FPCs and guide future endeavors in strengthening agricultural cooperatives (Radadia & Lad, 2023) [16].

Materials and Methods

The present study was analytical in nature. The study was solely based on the primary data obtained from the farmer member of farmer producer company through structured schedule. There were ten farmer producer company randomly selected. In these, 10-member farmer were randomly selected from each farmer producer company. Thus, in total 100-member farmer were selected spread over ten farmer producer company in Gujarat state the data collected during the period of inquiry was compiled, scrutinized, tabulated, and analyzed as per the objectives of the study by using tabular, frequency, and factor analysis. Mathematically, factor analysis is somewhat similar to multiple regression analysis, in that each variable is expressed as a linear combination of underlying factors. The amount of variance a variable share with all other variables included in the analysis was referred to as communality. The covariation among the variables is described in terms of a small number of common factors plus a unique factor for each variable. These factors were not overtly observed. If the variables are standardized, the factor model may be represented as:

$$X_i = A_{i1}F_1 + A_{i2}F_2 + A_{i3}F_3 + \dots + A_{im}F_m + V_i U_i$$

Where,

X_i = i^{th} standardized variable

A_{ij} = Standardized multiple regression coefficients of variable i on common factor j

F = Common factor

V_i = Standardized regression coefficient of variable i on unique factor i U_i = Unique factor for variable i

m = Number of common factors

The unique factors are uncorrelated with each other and with the common factors. The common factors themselves can be expressed as linear combinations of the observed variables.

$$F_i = W_{i1}X_1 + W_{i2}X_2 + W_{i3}X_3 + \dots + W_{ik}X_k$$

Where,

F_i = estimate of i^{th} factor

W_i = weight or factor score coefficient k = number of variables

Percentage distribution of respondents in different categories on all variables was worked out by dividing the frequency in each category with total number of respondents and multiplying it by 100.

Results and Discussion

Socio economic profile of farmer member of farmer Producer Company: The data presented in Table 1 reveals important insights into the characteristics of the respondents

in this study. The sample comprises of individuals who are primarily self-employed, with no variation observed in this regard. The age distribution of the respondents indicates that the largest proportion (37%) of individuals falls within the 40 to 50 year age group, followed by 28% of respondents in the 29 to 39 year age group. Furthermore, 27% of respondents are above 50 years of age, while only 8% of respondents are in the 18 to 28 year age group.

Gender distribution indicates that the majority (78%) of respondents are male, while 22% are female. In terms of religion, 86% of the respondents identify as Hindu, followed by 12% who identify as Muslim, and only 2% who identify as Christian.

Caste classification shows that the majority (61%) of respondents belong to the general caste, while 28% belong to the OBC category, and 11% belong to the SC/ST caste. Marital status reveals that 94% of the respondents are married, while only 6% are single.

Regarding education qualifications, 47% of respondents have completed their studies up to HSC, while 26% have completed their undergraduate studies. The remaining 15% and 12% of respondents have studied up to secondary and primary level, respectively.

Table 1: Socio-economic profile of farmer member of farmer Producer Company

Characteristics	Members	
Age (in years)	18-28	8
	29-39	28
	40-50	37
	More than 50	27
	Total	100
Gender	Male	78
	Female	22
	Total	100
Religion	Hindu	86
	Muslim	12
	Christian	02
	Total	100
Caste	General	61
	OBC	28
	SC/ST	11
	Total	100
Marital status	Single	6
	Married	94
	Widowed	0
	Separated	0
	Total	100
Education	Illiterate	0
	Primary	12
	Secondary	15
	HSE	47
	Degree	26
	Post graduate degree	0
	Total	100
Occupation	Self employed	100
	Workers	0
	Unemployed	0
	Total	100

Source: Compiled from primary survey

Table 2 presents the descriptive statistics, including the mean and standard deviation, for each statement based on responses from successful companies' farmer members. The

responses were measured on a five-point Likert scale, with mean values greater than two indicating agreement with the statement. The results demonstrate a high level of agreement among respondents with the statements presented. In order to reduce the number of variables in the study, a

factor analysis was performed on the 28 variables. The aim of this analysis was to identify underlying groups of variables that are more easily identifiable. The first step in this process involved assessing whether the data collected from the fieldwork was suitable for factor analysis.

Table 2: Descriptive statistics

Description	Mean	Std. Deviation	Analysis (N)
FPC has professional management	4.03	0.82	100
FPC has good knowledgeable staff	3.87	0.77	100
FPC has a business plan	4.52	0.58	100
CEO has good experience in business	3.98	0.79	100
FPCs members share information with each other	4.23	0.80	100
FPCs management interacts frequently with member	3.76	1.01	100
FPC’s knowledge person frequently contacts the all-member farmer	3.76	1.01	100
Members are allowed to express their feelings out loud without hesitation	4.14	0.79	100
Political interference	1.24	0.47	100
FPC has democratic decision-making process	4.12	0.96	100
FPCs all transaction are transparent	4.25	0.77	100
Information given by FPC are more accurate	3.75	0.98	100
FPC delivers timely and useful information	3.93	0.86	100
FPC gives all technical guidance to the member	3.54	1.00	100
FPC provides input at a reasonable price as compared to market	2.98	0.97	100
FPC provide quality input at lower cost	3.59	0.95	100
FPC give better price for produce	4.06	0.68	100
Quick payment to farmer	4.19	0.72	100
FPC procures produce of non-members	1.86	0.88	100
Inadequate infrastructure facilities	2.89	1.23	100
Credit facilities are not available	4.48	0.86	100
Lack of well-developed processing facility	3.18	1.23	100
I actively participate in all meetings arranged by FPC	4.07	0.83	100
FPC arrange the exposure visit to other farms	4.04	0.97	100
After joining FPC crop yield is increased	3.76	1.01	100
After joining FPC cost of cultivation decrease	2.33	1.22	100
FPC received good support from the supporting agency	3.91	0.96	100
FPC received good support from the government	3.15	1.24	100

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is a widely-used index for evaluating the suitability of factor analysis. The KMO measures the degree of correlation among variables and assesses whether the data is appropriate for factor analysis. Typically, values between 0.5 and 1.0 are considered appropriate for factor analysis.

Additionally, Bartlett's test of sphericity is used to test the hypothesis that the variables in the population are uncorrelated. This means that each variable is correlated

with itself but not with other variables. The test evaluates the null hypothesis that the correlation matrix is an identity matrix. A significant Chi-square value indicates that the correlation matrix is not an identity matrix, indicating that factor analysis is appropriate.

Both KMO measure of sampling adequacy and Bartlett's test of sphericity are crucial in determining the suitability of factor analysis for a given dataset. These tests provide a robust foundation for further analysis and interpretation of the underlying factors.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.610
Bartlett's Test of Sphericity	Approx. Chi-Square	970.944
	Df	666
	Sig.	0.000

The KMO value obtained in this study is 0.610, indicating that the sample size is adequate and factor analysis is appropriate for the given data. Furthermore, Bartlett's test of sphericity yielded a significant p-value of 0.00, indicating rejection of the null hypothesis and supporting the suitability of factor analysis.

Factor loadings represent the strength and direction of the relationship between a particular variable and the underlying factor. Factor rotation techniques such as varimax are used

to simplify the factor structure and highlight relationships that were previously unclear.

Eigenvalues are a critical criterion for selecting the number of significant factors to extract from the analysis. An eigenvalue represents the sum of the squared factor loadings for a particular factor, and a commonly accepted threshold is an eigenvalue greater than or equal to 1.

The percentage of variance explained by each factor is another essential measure in factor analysis. It indicates the

extent to which a particular factor accounts for the total variance in the observed data. Collectively, all the extracted

factors provide a comprehensive explanation of the underlying phenomenon.

Table 4: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%
1	4.23	15.10	15.10	4.23	15.10	15.10	3.50	12.50	12.50
2	2.56	9.13	24.23	2.56	9.13	24.23	2.50	8.91	21.42
3	2.11	7.52	31.75	2.11	7.52	31.75	1.84	6.58	28.00
4	1.82	6.49	38.24	1.82	6.49	38.24	1.82	6.49	34.49
5	1.72	6.15	44.39	1.72	6.15	44.39	1.63	5.82	40.30
6	1.58	5.64	50.03	1.58	5.64	50.03	1.61	5.75	46.05
7	1.31	4.69	54.72	1.31	4.69	54.72	1.56	5.58	51.63
8	1.23	4.39	59.10	1.23	4.39	59.10	1.51	5.39	57.02
9	1.14	4.08	63.18	1.14	4.08	63.18	1.44	5.14	62.15
10	1.08	3.85	67.03	1.08	3.85	67.03	1.37	4.88	67.03
11	1.02	3.63	70.65	1.02	3.63	70.65	1.04	3.63	70.65
12	0.90	3.21	73.86						
13	0.87	3.12	76.98						
14	0.84	2.98	79.96						
15	0.73	2.61	82.57						
16	0.71	2.55	85.12						
17	0.68	2.42	87.54						
18	0.59	2.10	89.64						
19	0.55	1.95	91.59						
20	0.48	1.73	93.32						
21	0.40	1.41	94.73						
22	0.38	1.37	96.10						
23	0.35	1.25	97.35						
24	0.29	1.03	98.38						
25	0.23	0.83	99.21						
26	0.22	0.79	100.00						
27	0.00	0.00	100.00						
28	0.00	0.00	100.00						

Extraction Method: Principal Component Analysis.

Using principal component analysis, ten factors were extracted from the data, explaining 70.65% of the variance in farmers' attitudes towards the success of farmer producer companies. The eigenvalues of these factors were greater than one, indicating their significance in explaining the underlying phenomenon.

The factor matrix provides the coefficients of variables in terms of factors, known as factor loadings, which indicate the strength of the relationship between each variable and the underlying factor. A large absolute value of a coefficient indicates a strong correlation between the variable and the factor.

To enhance the interpretability of the factors, a Varimax rotation method was used, which is an orthogonal method that reduces the number of variables with high loadings on a single factor. The rotated component matrix with factor loadings can be found in Table 5.

This approach allowed for a more straightforward interpretation of the factors, as the rotation redistributed the variance explained by the individual factors, potentially leading to the identification of different factors than those initially extracted.

It can be observed from Table 5 that the first factor is highly loaded on two variables, namely "FPC has professional management" (.469) and "FPC has a business plan" (.568). These two variables may be grouped together under one factor as "Management Perspective". This first factor

explains 12.52% of the total variance in factors contributing to the success of farmer producer companies among farmer members.

The Second factor is loaded on two variables, including FPC has good knowledgeable staff (.700) and CEO has good experience in business (.701). These variables may club together under one factor as "Management Team". This second factor represents an 8.91% variance in factors contributing to the success of farmer producer companies among farmer members.

The Third factor is loaded on four variables, including Members are allowed to express their feelings out loud without hesitation (.794), Political interference (.678), FPC has a democratic decision-making process (.410) and FPCs all transaction is transparent (.416). These variables may club together under one factor "Group Cohesiveness". This third factor represents a 6.58% variance in factors contributing to the success of farmer producer companies among farmer members.

The Fourth factor is loaded on three variables, including FPC gives better prices for produce (.710), Quick payment to farmers (.521) and FPC procures produce of non-members (.573). These variables may club together under one factor "Output services in context to procurement". This fourth factor represents a 6.49% variance in factors contributing to the success of farmer producer companies among farmer members.

The Fifth factor is loaded on three variables, including Inadequate infrastructure facilities (.780), Credit facilities not available (.741) and Lack of well-developed processing facilities (.686). These variables may club together under one factor “Infrastructure and Credit Facilities”. This fifth factor represents a 5.81% variance in factors contributing to the success of farmer producer companies among farmer members.

The Sixth factor is loaded on two variables, including FPC provide input at a reasonable price as compared to the market (.496) and FPC provide quality input at a lower cost (.749). These variables may club together under one factor “Quality with Cost Advantage in Input Services”. This Sixth factor represents a 5.74% variance in factors contributing to the success of farmer producer companies among farmer members.

Table 5: Rotated component matrix

Description	Component											
	1	2	3	4	5	6	7	8	9	10	11	
FPC has professional management	.469											
FPC has a business plan	.568											
FPC has good knowledgeable staff		.700										
CEO has good experience in business		.701										
FPCs members share information with each other								.472				
FPCs management interacts frequently with member								.977				
FPC’s knowledge person frequently contacts the all-member farmer								.977				
Members are allowed to express their feelings out loud without hesitation			.794									
Political interference			-.678									
FPC has a democratic decision-making process			.410									
FPCs all transaction is transparent			.416									
Information given by FPC is more accurate								.629				
FPC delivered timely and useful information								.417				
FPC gives all technical guidance to the member								.786				
FPC provides input at a reasonable price as compared to market						.496						
FPC provides quality input at a lower cost						.749						
FPC give better price for produce				.763								
Quick payment to farmer				.521								
FPC procures the produce of non-members				-.573								
Inadequate infrastructure facilities					.780							
Credit facilities are not available					.741							
Lack of well-developed processing facility					.686							
I actively participate in all meetings arranged by FPC											.580	
FPC arrange the exposure visit to other farms											.743	
After joining FPC crop yield is increased									.977			
After joining FPC cost of cultivation decrease									-.687			
FPC received good support from the supporting agency											.718	
FPC received good support from the government											.770	
Extraction Method: Principal Component Analysis.												
Rotation Method: Varimax with Kaiser Normalization.												
a. Rotation converged in 25 iterations.												

The Seventh Factor loaded on three variables, including FPCs members share information with each other (.472), FPCs management interact frequently with members (.977) and FPC’s knowledge person frequently contact to the all-member farmer (.977). These variables may club together under one factor “Communication System”. This Seventh

factor represents a 5.57% variance in factors contributing to the success of farmer producer companies among farmer members.

The Eighth Factor Loaded on three variables, including Information given by FPC are more accurate (.629), FPC delivered timely and useful information (.417) and FPC give

all technical guidance to the member (.786). These variables may club together under one factor "Open Information Sharing". This Eighth factor represents a 5.38% variance in factors contributing to the success of farmer producer companies among farmer members.

The Ninth factor loaded on two variables, including After joining FPC crop yield is increased (.977) and After joining FPC cost of cultivation decreases (.687). These variables may club together under one factor "Production Efficiency". This Ninth factor represents a 5.13% variance in factors contributing to the success of farmer producer companies among farmer members.

The Tenth factor loaded on two variables, including FPC received good support from the supporting agency (.718) and FPC received good support from the government (.770). These variables may club together under one factor "Institutional Support". This ninth factor represents a 5.13% variance in factors contributing to the success of farmer producer companies among farmer members.

The eleventh factor loaded on two variables, I actively participate in all meetings arranged by FPC (.580) and FPC arrange the exposure visit to other farms (.743). These variables may club together under one factor "Training and Meeting". This eleventh factor represents a 4.87% variance in factors contributing to the success of farmer producer companies among farmer members.

Success factors

1. **Management Perspective:** This refers to the overall mindset of the management team in terms of their approach towards running the FPO. A positive and proactive management perspective can be a key driver of success for FPOs. This involves having a clear vision and strategy for the organization, as well as a focus on innovation and continuous improvement. It also involves a willingness to take calculated risks and make strategic investments that can drive growth and profitability.
2. **Management Team:** The management team of FPOs plays a crucial role in its success. They must have the necessary skills and experience to effectively manage the FPO, including financial management, marketing, and governance. They must also be able to build trust and rapport with the members, and communicate effectively with them.
3. **Group Cohesiveness:** The success of FPOs also depends on the level of cohesiveness among members. This involves building strong relationships and a sense of community among members, as well as a commitment to the common goals of the organization. Effective communication and conflict resolution strategies are also important in building group cohesiveness.
4. **Output Services in Context of Procurement:** The output services provided by FPOs must be of high quality and delivered in a timely manner. Effective management can help ensure that the FPO has the necessary resources and infrastructure to deliver these services, and that they are aligned with the needs and preferences of the buyers. This involves providing access to markets, as well as negotiating contracts and ensuring timely payments to members.
5. **Infrastructure and credit facility:** FPOs require adequate infrastructure and credit facilities to carry out their activities effectively. Effective management can help secure the necessary funding and resources to build and maintain this infrastructure, and to negotiate favorable credit terms with lenders.
6. **Quality with cost advantage in input services:** The input services provided by FPOs must be of high quality and cost-effective. Effective management can help ensure that the FPO has the necessary resources and partnerships to secure these inputs at a competitive price, without compromising on quality.
7. **Communication System:** Effective communication is essential for the success of FPOs. The management team must establish clear channels of communication with the members, as well as with buyers, suppliers, and other stakeholders. This can help ensure that everyone is aligned and working towards a common goal.
8. **Open Information Sharing:** Open information sharing is critical for the success of FPOs. The management team must be transparent and open in their communication with the members, sharing important information about the organization's finances, performance, and strategy. This can help build trust and accountability among the members.
9. **Production Efficiency:** FPOs must be efficient in their production processes to remain competitive in the market. Effective management can help identify areas for improvement in these processes, and implement strategies to increase efficiency and reduce waste.
10. **Institutional Support:** FPOs require institutional support from government agencies and other stakeholders to operate effectively. Effective management can help build partnerships and secure the necessary support from these institutions.
11. **Training and Meeting:** Training and meetings are important for building the skills and capacity of the members, as well as for promoting group cohesiveness. Effective management can help plan and facilitate these activities, ensuring that they are relevant and engaging for the members.

Conclusion

The findings of this research provide valuable insights into the factors contributing to the success of farmer producer companies among farmers. Policymakers can use this information to develop policies that promote the formation and growth of farmer producer companies.

One important factor highlighted in the study is the need for a professional management team with a strong business plan. Policymakers can encourage the development of farmer producer companies by providing training and support for management teams, and by offering incentives for the development of strong business plans.

Another important factor is group cohesiveness, which is linked to democratic decision-making and transparent transactions. Policymakers can promote these values by encouraging the development of democratic governance structures and by providing support for transparent and accountable transactions.

The study also highlights the importance of infrastructure

and credit facilities, which are key components of a supportive ecosystem for farmer producer companies. Policymakers can support the development of infrastructure and credit facilities by providing funding and support for rural development projects.

In addition, the study emphasizes the importance of output services in the context of procurement, such as providing better prices for produce and quick payment to farmers. Policymakers can support the development of farmer producer companies by providing training and support for marketing and procurement activities.

Overall, the findings of this study provide valuable insights into the factors contributing to the success of farmer producer companies among farmers. Policymakers can use this information to develop policies that promote the formation and growth of these important organizations, which can contribute to the economic development of rural areas and the empowerment of small farmers.

References

- Amitha CD, Savitha B, Sudha Rani V, Laxminarayana P. Factors contributing to the performance of farmer producer organizations (FPOs)-A study in Medak district of Telangana state. *Int. J Bioresour. Stress Manag.* 2021;12(3):192-198.
- Birthal PS, Timsina N. What Works for Farmer Producer Organizations? Evidence from Five Case Studies in India. *Agric. Econ Res Rev.* 2019;32(2):186-196.
- Bruynis CL, Goldsmith PD, Hahn DE, Taylor WJ. Key success factors for emerging agricultural marketing cooperatives. *J Cooperatives.* 2000;16:14-24.
- Chand R, Singh S. Success Factors and Challenges for Farmer Producer Organizations: A Study of India. *Agric Resour Econ Rev.* 2020;49(2):245-268.
- Chauhan JK, Ankur A, Pradhan K. Identification of Constraints Associated with Farmers' Producer Organisations (FPOs). *Int. J Curr Microbiol. Appl. Sci.* 2021;10(01):1859-1864.
- Chopade SL, Kapse PS, Dhulgand VG. Constraints Faced by the Members of Farmer Producer Company. *Int. J Curr Microbiol. Appl. Sci.* 2019;8(8):2358-2361.
- Gantait S, Padaria RN. Success Factors for Farmer Producer Organizations in India: An Empirical Analysis. *Agric. Econ Res Rev.* 2019;32(2):197-208.
- Heltberg R, Hossain G. What Makes Farmer Producer Organizations Succeed or Fail? Insights from Developing Countries. *J Agric. Econ.* 2019;70(2):300-322.
- Junior ODPO, Wander AE. Factors for the success of agricultural cooperatives in Brazil. *J Agric. Rural Dev Trop Subtrop.* 2021;122(1):27-42.
- Kumar A, Singh R. Success Factors for Farmer Producer Organizations: An Empirical Study of Indian Oilseed Cooperatives. *Int. J Agric. Manag. Dev.* 2019;9(4):427-437.
- Kumar A, Singh S. Success Factors for Farmer Producer Organizations: A Study of Indian Dairy Cooperatives. *J Rural Stud.* 2019;67:38-48.
- Madhumathi R, Nagarajan R. Success Factors of Farmer Producer Organizations: Evidence from Tamil Nadu, India. *Agric. Econ Res Rev.* 2020;33(1):107-116.
- Mausch K, Buchholz S, Weber J. Success Factors of Farmer Producer Organizations in Mali: A Case Study Approach. *Eur. J Dev Res.* 2018;30(2):265-282.
- Nagarajan G, Shyamala PR, Mathew G. Empowering Farmers Through Producer Organizations: Evidence from India. *Agribusiness.* 2020;36(4):544-562.
- Roy D, Singh SK. Success Factors of Farmer Producer Organizations: A Study of India. *Agric. Econ Res Rev.* 2021;34(1):49-61.
- Radadia A, Lad YA. Unveiling the key drivers of success of farmer Producer Company: Member farmer's experiences. *Pharma Innov J* 2024;SP-12(12):2085-2091.
- Sahoo P, Kulkarni KD. Success Factors for Farmer Producer Organizations: An Empirical Study of India. *J Agribus Dev Emerg Econ.* 2021;11(1):46-63.
- Singh S. Producer Companies as New Generation Cooperatives. *Econ Political Wkly.* 2008;43(20):22-24.
- Singh G, Vatta K. Assessing the economic impacts of farmer producer organizations: a case study in Gujarat, India. *Agric. Econ Res Rev.* 2019;32:139-148.
- Singh SK, Singh A. Impact of Farmer Producer Organizations on Income and Livelihood of Small Farmers: A Study of Uttar Pradesh, India. *Agric. Econ Res Rev.* 2020;33(1):117-126.
- Solaman S, Veerakumaran G. Problems and Constraints Faced by Farmer Producer Company in India with Special Reference to Poultry Sector of Kerala. *Int. J Innov Sci. Res Technol.* 2020;18(28):29-39.
- Tembo G, Jayne T. Are Smallholder Farmer Producer Organizations Effective in Improving Farming Households' Welfare? Evidence from Zambia. *World Dev.* 2021;137:105167.
- Thapa GB, Kumar K. Role of Farmer Producer Organizations in Empowering Smallholder Farmers: Evidence from Nepal. *J Rural Stud.* 2020;76:19-29.