© T-ANTH 2020
PRINT: ISSN 0972-0073 ONLINE: ISSN 2456-6802
Anthropologist, 40(1-3): 1-9 (2020)
DOI: 10.31901/24566802.2020/40.1-3.2041

A Study of Factors Affecting Success of Producer Company

V. Jagadeesh Pandian[1*] and Madhavi Ganesan[2]

[1]Research Scholar, Centre for Water Resources, Anna University, Chennai, India*
[2] Professor, Centre for Water Resources, Anna University, Chennai, India

KEYWORDS Commitment. Communication. Fair Price. Farmers. Managerial. Participation

ABSTRACT The aim of the study is to perform an Exploratory Factor Analysis and to find the factors, which affect the success of the Producer Company. The study explains the factors. which are most influential for the success of the producer company. The study was carried out in Lathur Block of Kancheepuram district, Tamil Nadu in India, and consists of 200 respondents of the Producer Company with questionnaire instrument by random sampling method. Exploratory factor analysis was carried out in order to reduce the data. The first factor explained 34.27 percent of the variance, second factor explained 14.67 percent of the variance, third factor explained 10.0 percent of the variance, fourth factor explained 8.35 percent of the variance and the fifth factor illustrates 7.80 percent of the variance. The obtained results of Exploratory Factor Analysis revealed that five factors explain 75.14 percent of the variance of factors influencing the success of a Producer Company. The results showed that the important factors were the mean value of the commitment factor (16.13), managerial factor (13.90) and the participation factor (10.75).

INTRODUCTION

In India, for rural and community development, the government had many schemes at the beginning of the 1960s after the independence period. But the government was not able to achieve success in the schemes by meeting the beneficiaries under the concept of meeting one to one. There was a lot of duplication in the beneficiaries and it is difficult also for reaching the farmers one by one. Group concepts evolved during 1986 with the concept of Self Help Groups (SHGs). Previously the Government of India was working with the concept of an individual for enhancing their livelihoods. But there is a repetition of beneficiaries and they do not have any control over the members. Hence, the shift from individual to group concept emerged. There were many group concepts in India but it was not sustainable in the long run. The Producer Company emerged in the year 2002 by modifying the existing act of the Indian Companies Act of 1956. This model is a hybrid between the public and private company. It has the characteristics of both the public and private companies. Successfully managed Producer Companies have great prospective in agriculture growth in particular and rural progress in general. Pandian and Ganesan (2018) explain that Producer Company is a tool to attain all the objectives for the farmers that have been planned by the implementation agency and government departments. The Producer Company model will facilitate the farmers to get a fair price for their produce.

The main idea for the formation of Producer Company was to fetch a fair price for their produce, crop production practices, access to new technologies, and access to inputs at lesser rates and remove the farmers from the clutches of middlemen. It also helps for collective production and direct marketing as per the requirement of traders and customers. It also advises the farmers to work together by using the group marketing strategies (Salokhe 2017). The success of the Producer Company mainly depends on a farmer's commitment to the company and the condition that prevails in the market. The integrity and quality of leadership acceptance within the community is also needed for the success of the organisation (Trebbin and Hassler 2012).

The farmers are not aggregated under one umbrella and they do not have any structured organisation in India. Since the farmers are not united, this is the major advantage for the middlemen to exploit the farmers. The farmers were not able to get minimum support price for the produce, and the rate is fixed by the traders and wholesalers. The farmers are also exploited in the

[*]*Address for correspondence:*
V. Jagadeesh Pandian
Centre for Water Resources,
CEG Campus
Anna University, Chennai 600 025,
Tamil Nadu, India
E-mail: jagadeeshsh1818@gmail.com

selling of extra price for chemical fertilisers, manures, pesticides, etc. In order to overcome all the problems faced by the farmers, amendments had been made in the Indian Companies Act of 1956, that the farmers could form a farmers' producer company with minimum legal procedures. This would help the farmers to aggregate, procure inputs needed for them at minimum price, access economies of scale, and better and fair prices for their produce (NABARD 2015).

Producer Company helps in the collection of small, marginal and landless farmers to give them collective strength to deal with various issues. The advantages of the members in the producer company are access to technology, farm inputs, marketing, fair price, finance, latest technologies, credit facilities, enriching the knowledge, etc. Since the farmers are united, they were able to get increase their economies of scale, which leads to increase in bargaining power of the farmers.

The farmers are scattered and they are not united, as is the case with other organisations. This is the major advantage for the traders and intermediaries, as they can exploit the farmers and they can fix the prices, which the farmers have to accept. In order to overcome the difficulties the farmers are facing the Farmers Producer Organised are organised. Once the farmers are taken in a structured form, the farmers can achieve and reap the benefits that are available for them. The farmers in India are facing a lot of problem with producing and marketing their produce. In this situation, the Producer Organisation is a driving tool to make the farmer reduce the input cost and sell their produce at a fair price.

Farmers Producer Companies Act was incorporated in the year 2002, in the existing Indian Companies Act of 1956. Before this the farmers' organisation was incorporated under the Indian Societies Act. In order to overcome the disadvantages the farmers are facing in the Societies Act, the Farmers Producer Companies Act was formed. In this act, the farmers are independent and they have more power to take decisions with less intervention of government officials, and they can raise the funds with the approval of the shareholders. All the disadvantages faced in the Societies are overcome in the Farmers Producer Companies Act. Hence, this model became the need of the hour and became a boon for the farmers.

Objectives of the Study

The aim of the study is to explain the steps involved in performing the Exploratory Factor Analysis and to analyse the factors that influence the success of the Producer Company. The first section discusses the introduction of the study, the second section deals with the related works of the study, the third sections explains the results and discussions, and the fourth section deals with the conclusion section.

Related Works

The managerial factor is essential for the proper functioning of cooperatives along with the farmers' perception of democratic administration, the frequency of visits to cooperatives by managing directors, and awareness of cooperative principle amongst farmers (Ozdemir 2005). Wadsworth and Business (2001) concluded that effective farmers relations and communication between farmers and management are important for the success of cooperatives. Pervez et al. (2018) has stated that the government should emphasise on the women to take part and actively participate in the Income Generation Activities. The government also has to facilitate a redistribution of the available land, access to credit facilities and provide capacity building to the women members. Tanga and Maliehe (2011) explained that community participation leads to poverty reduction among the members in Lesotho. The findings also show that people at the grass root level use their indigenous knowledge for project initiation and implementation.

The activities that include farmer participation in cooperatives include serving on committees, attending meetings, involving in recruiting and patronage (Osterberg and Nilsson 2009).

Through cooperatives, farmers shall realise economies of scale in obtaining farm inputs, improve their quantity of production and standard of marketing, access finance, transport facilities, professional services and processing, funds for improvement of socio-economic services and creating off-farm employment (Clegg 2006). Farmers' commitment is important to the organisation for the well being of the farmers, as the commitment of members leads to improvement of the financial and organisational health of the organisation (Fulton and Giannakas 2007).

Producer Organisations in the recent years are looked at by donors, government and non-government institutions alike as a suitable institution for capacity building among farmers and for facilitating them to participate in further competitive and scattered market environments (World Bank 2007).

Constraints to farmers in rice production in Assam are due to lack of quality seed material, lack of machineries, natural disasters like flood and drought, unorganised markets, inadequate storage and processing, technology shy farmers, limited irrigation facility and inadequate service delivery mechanism (Ghritlahre et al. 2019).

Services provided by the Producer Organisations are financial services, procurement and packaging services, input supply services, insurance services, marketing services, networking services and technical services (Marbaniang et al. 2019).

Farmers can access quality farm inputs at low cost, can access the market information of different markets and their prices, and access new technologies through a Producer Company. It is the best way of linking producers to market for getting fair prices for their produce (Salokhe 2016).

Members revealed that 96.66 percent of them are able to get a fair price for their far producer by eliminating the intermediaries after joining the farmers producer company in Kerala. Other advantages are reducing risk of farming, access to upgraded technology, value addition, upliftment of women, capacity building, and training and storage facility (Jose et al. 2019).

The influence of political interference in the farmers' cooperatives paved the way for the origin of Farmer Producer Organisations (Navaneetham et al. 2017).

The success of the Producer Company depends on the identification of opportunities, an adaptation of improved technologies, coordination at the cluster level for collective production, grading, processing and marketing (Sankri and Ponnusamy 2015).

The success of the Producer Company depends on a member's commitment to the company. The quality of leadership and integrity, the acceptance of leadership within the community, and market environment are the most vital factors for a successful Producer Company (Sawairam 2015).

Factor analysis is an important instrument, which is used in refinement, development and evaluation of tests, measures and scales (Williams et al. 2010).

Beilmann and Realo (2012) examined the relationship between individualism and social capital-collectivism at the individual level through a sample of adults collected via the Estonian Survey of Culture and Personality. The indicators of social capital were trust, honesty, interest in politics, participation, voluntary work, relations with relatives, relations with friends, relatives with neighbours, relations with colleagues and unrotated factor loading method was used. The three social capital indexes consisted of factor loading with trust (0.77), honesty (0.78) and interest in politics (0.42), which had a loading of 0.40 and above. The remaining six items were not meaningfully correlated and did not measure the concept of social capital management.

Exploratory Factor Analysis (EFA) is extensively used and mostly applied the statistical approach in social sciences, information systems, education and psychology. Exploratory Factor Analysis was used for a broad range of applications, such as finding relationships between socioeconomic, travel patterns, land use and participation variables (Pitombo et al. 2011).

Objectives of Exploratory Factor Analysis is used to reduce the number of variables, assessment of multicollinearity and correlation among factors, unidimensionality of constructs, evaluation of construct validity, examination of factors relationship, development of constructs and prove proposed theories (Thompson 2004).

The literature review explains the need of commitment, communication, managerial and participation factors for the success of Producer Company and the usage of Exploratory Factor Analysis.

MATERIAL AND METHODS

The study was carried out at Lathur Block of Kancheepuram district, Tamil Nadu in India during February and March 2018. Farmers Producer Organisations were formed by the National Agro Foundation, facilitating agency at Lathur Block of Kancheepuram district. In order to organise the farmers under one umbrella and reap the benefits of the Producer Company the organisation is formed. According to Hair et al. (1998), the sample size to perform the factor analysis should be 100 and above. Comrey (1973) explains the sample sizes as 100 is poor, 200 is fair, 300 is good, 500 is very good and

1000 or more is excellent. A questionnaire was distributed using a random sampling method to 200 farmers who are members of the producer company. The data, which was collected using the questionnaire was analysed using the Statistical Package for Social Sciences (SPSS). Reliability was checked by Cronbach's coefficient value of 0.856 and the content validity was checked with the subject experts in Centre for Water Resources, Anna University and Department of Management Studies, University of Madras, Chennai. The five-point Likert's scale was used and collected the data regarding the perceptions of farmers regarding the items, which are important for the success of a Producer Company. A step-by-step process is done and explained for how to perform the Exploratory Factor Analysis. Descriptive analysis was used to identify the influential factors for the success of the Producer Company.

RESULTS AND DISCUSSION

Exploratory Factor Analysis is a technique that is used for data reduction and data summarising (Tabachnick and Fidell 2007). In this study, Exploratory Factor Analysis was used through principal component analysis with varimax rotation. The purpose of using Exploratory Factor Analysis with the principal component analysis is to extract the maximum variance from the construct. It also includes testing of correlations using Kaiser-Meyer-Olkin (KMO) and Barlett's test of sphericity.

From Table 1, KMO measure of sampling adequacy is 0.655, which indicates that the data is suitable for factor analysis. Tabachnick and Fidell (2007) suggest that values greater than 0.5 are acceptable and values less than 0.5 are unacceptable for factor analysis. Bartlett's Test of Sphericity is used to test the correlation matrix, which is having an identity matrix. It is used to find whether all the statements are perfectly correlated with themselves. The P value is less than 0.001, which is significant to perform the factor analysis. Hair et al. (2010) suggested that if P value less than 0.05, the factor analysis can be performed, but if it is higher, one cannot perform the analysis.

Table 1: Factor Analysis – Kaiser-Meyer-Olkim (KMO) and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.655
Bartlett's Test of Sphericity	Approx. Chi-square	2026.198
	Df	120
	Sig.	<0.001**

Note: ** Denotes significant at 1% level
Source: Primary data, 2018

Table 2: Review of communalities

Communalities	*Initial*	*Extraction*
Commitment among farmers	1.000	0.573
Farmers share the information with other farmers	1.000	0.643
Attend all training	1.000	0.871
Active role in governance	1.000	0.854
Participate in Annual General Body Meeting	1.000	0.701
Take necessary steps to influence the decision	1.000	0.741
Attend all the meetings	1.000	0.795
Farmers able to get information on time	1.000	0.851
Information are accurate	1.000	0.883
Information disseminated equally for all farmers	1.000	0.754
A good medium of communication	1.000	0.771
Staff have the good interpersonal skill	1.000	0.639
Staff possess adequate knowledge	1.000	0.763
Staff are dedicated to their work	1.000	0.750
Staff have well experience	1.000	0.704
Staff possess business and managerial skills	1.000	0.729

Extraction method: Principal component analysis

Table 2 gives the communalities chart that points out the proportion of the variance of each statement that is explained by factors. Under the extraction heading, the values should be 0.50 and above. Hair et al. (2010) explains variables, which are having communalities of more than 0.5 and shall be included for analysis.

Table 3 shows the Eigen value and the percentage of variance. Items, which have the Eigen value greater than 1 are retained for interpretation. The first factor has 34.27 percent, the second accounts for 14.67 percent of the variance, the third factor explained 10.0 percent of the variance, the fourth illustrates 8.38 percent and the fifth factor explained 7.80 percent of the variance with all factor Eigen values greater than 1. Hence, the researchers retain all the 5 factors for interpretation, which explained 75.14 percent of variance. According to Kaiser's (Kaiser 1960) method, those items with Eigen value higher than 1 should be kept for interpretation.

Table 3: Total variances explained

Component	*Initial Eigen values*			*Extraction sums of squared loadings*		
	Total	*% of variance*	*Cumulative %*	*Total*	*% of variance*	*Cumulative %*
1	5.484	34.277	34.277	5.484	34.277	34.277
2	2.348	14.673	48.950	2.348	14.673	48.950
3	1.601	10.004	58.954	1.601	10.004	58.954
4	1.342	8.385	67.339	1.342	8.385	67.339
5	1.248	7.802	75.141	1.248	7.802	75.141
6	0.749	4.683	79.824			
7	0.668	4.174	83.998			
8	0.621	3.879	87.877			
9	0.473	2.957	90.834			
10	0.423	2.641	93.475			
11	0.338	2.114	95.589			
12	0.203	1.268	96.857			
13	0.175	1.092	97.949			
14	0.164	1.023	98.972			
15	0.099	0.616	99.588			
16	0.066	0.412	100.000			

Extraction method: Principal component analysis

Figure 1 gives the number of factors in the items. It gives the five components, retain the factors above the bend and discard the remaining after the bend in the scree plot. The scree plot and the total variance explained shall be similar, hence it is concluded the factors are loaded correctly. This is another popular method to determine the number of factors to keep is Cattell's Scree test (Cattell 1966), which gives the graphical representation of the items of the eigenvalues to retain and discard.

Table 4 shows the rotated component matrix by using a principal component analysis method

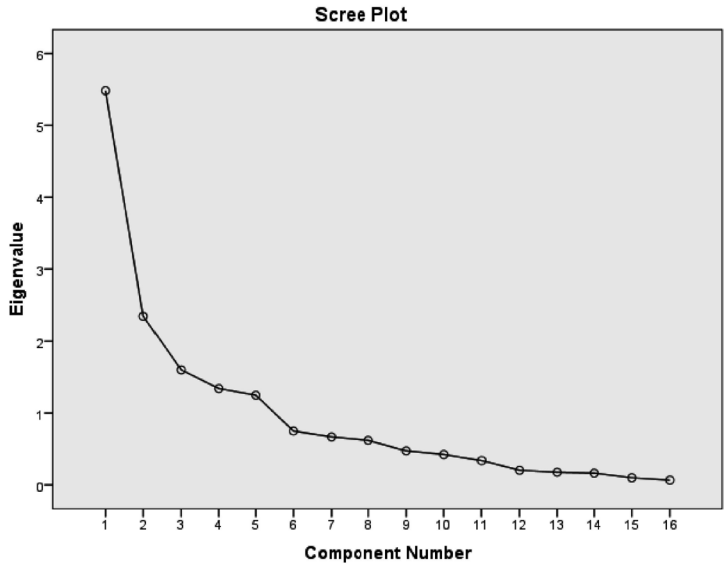

Fig. 1. Scree-plot
Source: Primary data, 2018

Table 4: Rotated component matrix

	Component				
	1	*2*	*3*	*4*	*5*
Farmers able to get information on time	0.910				
Information is accurate	0.835				
Farmers share the information with other farmers	0.570				
Commitment among farmers	0.564				
Active role in governance		0.838			
Attend all training		0.803			
Attend all the meetings		0.789			
Staff have well experience			0.772		
Staff possess business and managerial skills			0.769		
Staff are dedicated in their work			0.749		
Staff possess adequate knowledge			0.686		
Take necessary steps to influence the decision				0.808	
Attend Annual General Body Meeting				0.699	
Good interpersonal skill				0.506	
Information disseminated equally for all farmers					0.849
A good medium of communication					0.847

Extraction Method: used is Principal Component Analysis.
Rotation Method is Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations (Source: Primary data, 2018)

for extraction of variables with varimax rotation method. Varimax rotation is the commonly used method for factor analysis, which shall give simple structure (Thompson 2004). It gives the factor loading through rotating the variables, and greater the loading the variable is a factor of the pure measure. The items are rotated and clustered under the factor, which is correlated to one another and it gives five factors with factor loading above 0.5.

Table 5 shows the five factors with the relevant items loaded to its factors. The researchers note that 5 factors had been extracted with Eigen values greater than one. The cumulative percentage of 5 factors account for 75.14 percent of the total variance, which is a good result. The researchers are able to economise 75.14 percent of the information and only 24.86 percent of the content is lost for the problem. The first factor has the loadings of 0.910, 0.835, 0.570 and 0.564 with Eigen value 5.484 and the extraction percentage is 34.277. The second factor has the loadings of 0.838, 0.803 and 0.789 with Eigen value 2.348 and the extraction

Table 5: Success of Producer Company

Factor	*Statement for success of Producer Company*	*Factor loading*	*Eigen values*	*% of variance*	*Cumulative %*
I	Farmers able to get information on time	0.910	5.484	34.277	34.277
	Information is accurate	0.835			
	Farmers share the information with other farmers	0.570			
	Commitment among farmers	0.564			
II	Active role in governance	0.838	2.348	14.673	48.950
	Attend all training	0.803			
	Attend all the meetings	0.789			
III	Staff have well experience	0.772	1.601	10.004	58.954
	Staff possess business and managerial skills	0.769			
	Staff are dedicated to their work	0.749			
	Staff possess adequate knowledge	0.686			
IV	Take necessary steps to influence the decision	0.808	1.342	8.385	67.339
	Attend Annual General Body Meeting	0.699			
	Good interpersonal skill	0.506			
V	Information disseminated equally for all farmers	0.849	1.248	7.802	75.141
	A good medium of communication	0.847			

percentage is 14.673. The third factor with loadings of 0.772, 0.769, 0.749 and 0.686 and Eigen value of 1.601 has the extraction percentage of 10.0. The fourth factor is having the loadings of 0.808, 0.699 and 0.506 with Eigen value 1.342 and the extraction percentage is 8.385, and the fifth factor with factor loadings of 0.849 and 0.847 with Eigen value 1.248 and the extraction percentage is 7.802.

Table 6 explains the names that could be given to the items with similarity, as that Factor I named as Group factor, Factor II as Participation factor, Factor III as Managerial factor, Factor IV as Commitment factor and Factor V as Communication factor.

Table 7 shows the factor with their mean and standard deviation, which is important for the success of the producer company. Commitment factor has mean 16.13 and standard deviation of 1.869, which has the high potential to influence the success of Producer Company, secondly followed by Managerial factor with mean value of 13.90 and standard deviation of 2.077 and the least important factor is Communication factor with the mean value of 7.20 and standard deviation of 1.585. This study is same as the study by Cook (1995) and Costa (2003) that commitment factor is essential among the members for the successful functioning of the producer company.

Table 6: Assigning the names for the factors

Factor	*Statement for success of producer company*
Commitment	Farmers able to get information on time
	Information is accurate
	Farmers share the information with other farmers
	Commitment among farmers
Participation	Active role in governance
	Attend all training
	Attend all the meetings
Managerial	Staff have well experience
	Staff possess business and managerial skills
	Staff are dedicated to their work
	Staff possess adequate knowledge
Group	Take necessary steps to influence the decision
	Attend Annual General Body Meeting
	Good interpersonal skill
Communication	Information disseminated equally for all farmers
	A good medium of communication

Table 7: Comparison of factors for the success of producer company

Factors	*Mean*	*Std. deviation*
Commitment factor	16.13	1.869
Participation factors	10.75	3.186
Managerial factors	13.90	2.077
Group factor	10.58	2.663
Communication factors	7.20	1.585

CONCLUSION

The study was carried out to explain the steps to be adopted while performing the Exploratory Factor Analysis to analyse the factors for the success of the Producer Company. A step-by-step process is followed and explained to perform the Exploratory Factor Analysis. It is performed to reduce and summarise the data. At the beginning of the analysis 16 items are taken and performed Kaiser-Meyer-Olkin measures of sampling adequacy and Bartlett's Test of Sphericity, to check whether to perform the factor analysis or not. Then the communities check the factor loading with the eigen value greater than 1. The total variance explained and scree plot to decide a number of factors to be kept for the data. Scree plot is used for graphical representation of the factor loading. Varimax rotated matrix is used to rotate the variable and have the factor loading with the Principal Compound Method. Five factors are arrived by reducing the 16 items and factor names are given appropriately. This study is carried out to help the researchers on how to perform the Exploratory Factor Analysis. The procedures, the protocols and how to perform the Exploratory Factory Analysis is explained and discussed. The Exploratory Factor Analysis is performed in order to reduce the data and to carry out the analysis. The Farmers Producer Companies Act of 2002 was amended in order to overcome the difficulties the farmers are facing in the Indian Societies Act, the disadvantages are looked into carefully and the Farmers Producer Companies Act was introduced. It is an independent body and can act on its own without outsider intervention. It can take decisions on its own and perform its regular activity without the government intervention, which was a disadvantage in the Societies Act. Descriptive analysis is performed for the above five-factor to identify the factor, which influence more on the success of the producer company. As a result, the Commitment factor is more influential followed by Managerial factors for the success of the Producer Company and the least influential factor

is the Communication factor. The study reveals that commitment among the farmers is the most important factor, the commitment leads to mutual understanding between the farmers. Managerial factor is the second most influential factor for the success of the farmers producer company. Hence, this will act as a real phenomenon for the government and the non-government agencies who are facilitating the producer company to concentrate more on Commitment and Managerial Factors.

RECOMMENDATIONS

The facilitation agencies, government departments, NGOs can concentrate on the commitment, managerial and communication factor.

Commitment factor is said to be the most influential factor, hence more emphasis should be given to the capacity building to farmers and followed by managerial factors.

Managerial factors, the staff capacity building, continuous training and exposure on the concept of Producer Company should be given to the staff members of the facilitating agencies.

It is found there are some communication gaps between the staff members and farmers, hence proper communication steps need to be followed to eliminate the issues.

More quantitative studies have to be undertaken in the area of Farmers Producer Company, since more qualitative work is available. This shall help many researchers to concentrate, which shall also help the implementing agencies for policy and decision-making.

REFERENCES

Beilmann M, Realo A 2012. Individualism – Collectivism and social capital at the individual level. *TRAMES Journal of the Humanities and Social Sciences,* 16(3): 205-217.

Cattell RB 1966. The scree test for the number of factors. *Multivariate Behavioral Research,* 1: 245-276.

Clegg Jenny 2006. Rural cooperatives in China: Policy and practice. *Journal of Small Business and Enterprise Development,* 13(2): 219-234.

Comrey AL 1973. *A First Courses in Factor Analysis.* New York: Academic Press.

Cook ML 1995. The future of US agricultural cooperatives: A neo-institutional approach. *American Journal of Agricultural Economics,* 77(5): 1153-1159.

Costa AC 2003. Work team trust and effectiveness. *Personnel Review*, 32(5): 605-622.

Jose Elizabeth, Meena HR, Meena BS 2019. Genesis of dairy based farmer producer companies in Kerala. *The Indian Journal of Dairy Science,* 72(2): 218-222.

Marbaniang EK, Chauhan JK, Kharumnuid P 2019. Farmer Producer Organization (FPO): The need of the hour. *Agriculture and Food,* 1(12): 292-297.

Fulton M, Giannakas K 2001. Organizational commitment in a mixed oligopoly: Agricultural cooperatives and investor-owned firms. *American Journal of Agricultural Economics,* 83(5): 1258-1265.

Ghritlahre SK, Azharudheen M, Saikia K, Deka AK, Barman P, Bhagawati R 2019. Farmers Producer Company – For quality Rice Seed Production in Assam. *Project: Genetic Improvement and Management of Rice for Rainfed Lowlands,* 6(2): 41-46.

Hair J, Anderson R, Tatham R, Black W 1998. *Multivariate Data Analysis*. New Jersey: Prentice-Hall, Inc.

Hair J, Black WC, Babin BJ, Anderson RE 2010. *Multivariate Data Analysis.* 7th Edition. United Kingdom: Pearson Education.

Kaiser HF 1960. The application of electronic computers to factor analysis. *Educational and Psychological Measurement,* 20(1): 141-151.

NABARD 2015. *Farmer Producer Organizations. Frequently Asked Questions (FAQs).* Mumbai, India.

Navaneetham B, Mahendran KK, Sivakumar SD, Senthilkumar R 2017. Status of farmer producer companies in India. *Agriculture Update,* 12: 888-892.

Pervez K, Islam MM, Uddin ME 2018. Landless rural women's participation in Income Generating Activities (IGAs): The case of Char dwellers in selected areas of Bangladesh. *Anthropologist,* 33(1-3): 104-115.

Osterberg P, Nilsson J 2009. Members' perception of their participation in the governance of cooperatives: the key to trust and commitment in agricultural cooperatives. *Agribusiness: An International Journal,* 25(2): 181-197.

Ozdemir G 2005. Cooperative–shareholder relations in agricultural cooperatives in Turkey. *Journal of Asian Economics,* 16(2): 315-325.

Pandian J, Ganesan M 2018. Economic and environmental impacts of producer company in Coimbatore District, Tamil Nadu. *Ecology, Environment and Conservation,* 24(4): 1707-1713.

Pitombo CS, Kawamoto E, Sousa AJ 2011. An exploratory analysis of relationships between socioeconomic, land use, activity participation variables and travel patterns. *Transport Policy,* 18(2): 347-357.

Salokhe S 2016. Farmers' producer organization for effective linkage of small producers with market. *International Journal of Applied Research*, 2(10): 142-146.

Salokhe S 2017. Junnar Taluka Farmers Producers Company Limited- A case study on farmers' mobilization and empowerment. *Perspectiva A Case Research Journal,* 3: 37-46.

Sankri SK, Ponusamy KA 2015. A process analysis of Erode Precision Farm Producer Company in Tamil Nadu – A case study. *Indian Journal of Natural Sciences,* 6(32): 9997-10001.

Sawairam P 2015. Case study of farmer producer organization in Maharashtra in the era of globalization. *IBMRD's Journal of Management & Research,* 4(2): 55-63.

Tabachnick BG, Fidell LS 2007. *Using Multivariate Statistics.* Washington DC, USA: Allyn & Bacon/Pearson Education.

Tanga T, Maliehe L 2011. An analysis of community participation in handicrafts projects in Lesotho. *Anthropologist,* 13(3): 201-210.

Thompson B 2004. *Exploratory and Confirmatory Factor Analysis: Undertaking Concepts and Applications.* Washington DC: America Psychological Association.

Trebbin A, Hassler M 2012. Farmers' producer companies in India: A new concept for collective action? *Environment and Planning A,* 44(2): 411-427.

Wadsworth J, Business U 2001. Keep the co-op candle burning. *Rural Cooperatives,* 68(2): 19-20.

Williams BA, Onsman A, Brown T 2010. Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine,* 8(3): 1-13.

World Bank 2007. *World Development Report 2008: Agriculture for Development*. Washington DC: The World Bank.

Paper received for publication in May, 2019
Paper accepted for publication in July, 2019