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Performance of farmer producer organisations and its associated factors: A case study in Tripura

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Abstract

The present study, investigates the performance of FPOs in Tripura. It was carried out by taking 5 Farmer Producer Organisations of Tripura viz., Satadol Fish Farmer Producer Company (SFFPCL), Bagma Agri. Producer Company Limited, Chaudhadevta Organic Producer Company Limited, Chokreng Organic Farmers Producer Company Ltd. and Hillstop Horti Producer Company Ltd. A total of 120 respondents which comprises of 100 nos. of member farmers of FPOs (20 farmers from each FPOs) and 20 officials (4 officials from each FPOs) were taken for the study. To measure the performance of FPOs, a performance index was prepared. Bagma Agri Producer Company Limited had the highest index score with 10.28. Hillstop Horti Producer Company Limited ranked second with an index score of 8.99. Satadol Fish Farmers Producer Company Limited ranked 3rd with the score of 8.07 followed by Chaudhadevta Organic Producer Company Limited (7.93). Chokreng Organic Farmers Producer Company Limited is the least scorer in respect of performance with an index score of 7.23. The findings suggest that attitude of farmers towards FPOs, share capital, functional effectiveness and managerial competency can increase performance of FPOs. This research seeks to make a positive impact on the effectiveness and sustainability of Tripura's FPOs.

Keywords: Farmer producer organisations, performance index, managerial competency, sustainability

Introduction

Agriculture is indispensable to India's economic growth and development. Agriculture and related sector activities employ 54.6 percent of the labour force and account for 18.6% of India's GVA at current prices in 2021-2022. As per the Annual Report, Ministry of Agriculture & Farmers Welfare, 2022-23 [3], the nation's total land area is 328.7 million hectares, of which 197.3 million hectares are grossly cropped with a cropping intensity of 141.6% and 139.3 million hectares are the reported net planted area. In percentage terms, the net area sown represents 42.4% of the entire geographical area. There are around 86% of small and marginal farmers with an average land holding size of 1.08 ha (Agriculture Statistics at a Glance, Ministry of Agriculture, GoI, 2022) [1]. Farmers with small and marginal land holdings confront a number of difficulties, including limited access to inputs, poor price realisation, transportation issues, market links and problems with marketing infrastructure etc. One of the most effective approaches to handle the numerous issues faced by small and marginal farmers may be collectivization of small and marginal farmers through Farmer Producer Organisations (FPOs).

There are 33,711 registered FPOs in India, with over 28.20 lakh farmers affiliated across 28 states and 7 Union Territories (Anand *et al.*, 2023; FPO Platform of India, Tata Cornell Institute, 2023) [2, 5]. Many FPOs in India face challenges in creating sustainable business model that yield substantial profits for their members. Research into the factors that enhance or impede FPO performance could provide valuable insights for policymakers seeking to improve their effectiveness. Research into different ways to enhance FPO members' income, yield, and living standards, the government can create policies that will maximize the benefits of the new FPOs.

Several studies had shown the performance of FPOs. According to Mukherjee (2018) [10], MP Women Poultry Producer Company Ltd., Sahyadri Farms and Vasundhara Agro Producer Company Ltd. members were highly satisfied with the performance of company and effective in enhancing farmer's income. Gorai *et al.* (2022) [7] reported that attitude of the group members assumed great importance as a positive attitude of members would provide for more success and a negative attitude of some members would pull down the success of the group. Anand *et al.* (2023) [2] stated that the FPC diversifying their products and

performing processing, manufacturing, and marketing functions showed the highest effectiveness as compared to the FPCs dealing with single products. Talukdar (2023) [12] in her studies stated that performance of any company is not static, it changes from time to time based on many internal and external factors.

Some research offers contradictory evidence findings. According to Garg (2012) [6], the company's poor financial performance in terms of liquidity, solvency, and efficiency highlights the inefficiencies in financial management. Kakati and Roy (2017) [8] in his study revealed that the Farmer Producer Companies have experienced financial difficulties, including a lack of profitability, efficiency, and solvency, over the past three years. The corporations faced severe liquidity constraints. According to Mathuabirami and S. Kalaivani (2022) [9] cultural differences, lack of cooperation, participation and involvement were found to be the reasons for low level of group performance.

Materials and Methods

The study was conducted in Tripura, a north eastern state of India during the year 2023-24. Agriculture and allied sectors play a crucial role in driving the State's economic growth which accounts for 24% of its net shown area, or 2.56 lakh hectare as of March 31, 2022. The average land holding size decreased from 1.25 ha in 1976-1977 to 0.49 hectare against all India average of 1.08 ha. Approximately 96% of all farmers in Tripura are small and marginal farmers. (Economic Review of Tripura, 2022-23) [4]. A total number of five (5) FPOs were purposively selected based on the criteria that the FPOs have been working for 3 years and that they have a sizeable membership of 500 members. The profiles of the five selected FPOs are presented in Table. 1. A total of 120 respondents which comprises of 100 nos. of member farmers of FPOs (20 farmers from each FPOs) and 20 officials (4 officials from each FPOs) were selected by simple random sampling method.

Table 1: Profile of selected Farmer Producer Organisations

S. N.	Name of the FPOs	Year of reg.	Promoting organization	No. of members	Area of operation	Products/ activities	Market landscape	Service provided	Available infrastructure
1	Satadol Fish Farmers Producer Company Limited	2018	Tripura Rural Livelihood Mission	527	Madhab Bari, Jirania West Tripura	Fish feed making	Local and regional market	Supply of fish seed, training of members, marketing of fish feed	Feed mill, transportation facilities, storage
2	Bagma Agri Producer Company Limited	2019	NABARD	10061	Bagma, South Tripura.	Honey, cattle feed, milk, Handicraft product	Local, regional and national market	Supply of cattle feed, live bee, selling of milk, training of members	Storage facilities, quality inspection of milk, transportation
3	Chaudhadevta Organic Producer Company Limited	2017	SIMFED (Sikkim State Cooperative Supply & Marketing Federation)	547	Supari Bagan Krishna Nagar of West Tripura	Ginger, turmeric, pineapple	Local market	Supply of inputs, training of members, marketing	Storage, transportation
4	Chokreng Organic Farmers Producer Company Limited	2020	SIMFED (Sikkim State Cooperative Supply & Marketing Federation)	596	Maharam Sardar Para Champaknagar, Jirania, West Tripura	Paddy (Rice), Pineapple	Local market	Supply of inputs, training of members, marketing	Storage, transportation
5	Hillstop Horti Producer Company Limited	2020	SFAC	550	Saida Cherra, Unokoti, North Tripura	Jam, vegetables, Pineapple	Local market, regional market	Supply of inputs, training of members, marketing	Storage, transportation, processing unit, tractor

Operationalization of performance

Performance is the process of putting a plan into action. In this study, we have evaluated the Farmer Producer Organisations' operational performance. It demonstrates the organizations' ability to execute their duties effectively. It shows how well the organisations carry out their duties. Performance can be assessed by farmers satisfaction, increase in income, sustainability of Farmers Producer Organisations and empowerment etc.

The performance of Farmers Producer Company was measured by an index which includes seven components (1) Functioning efficiency/Functional Effectiveness, (2) Increase in income, (3) Increase in farmers share in consumers rupee (4) Inclusiveness, (5) Sustainability of Farmers Producer Company, (6) Farmers satisfaction and (7) Empowerment. The index was calculated by using the methodology of Saaty (2008) [11] and Mukherjee *et al.* (2018) [10].

The performance index prepared based on the above mentioned parameters is calculated by the following equation:

$$FE*W1+I*W2+FSC*W3+Inc*w4+S*W5+FS*W6+E*W7$$

$$\sum_{i=1}^7 W_i * 100$$

Where,

1. FE = Functioning effectiveness,
2. I = Increase in Income,
3. FSC= Increase in farmers share in consumers' rupee
4. Inc = Inclusiveness,
5. S = Sustainability of farmers producer company
6. FS= Farmers satisfaction and
7. E = Empowerment

Wi are respective weight calculated based on Analytical Hierarchy Process (AHP) of experts rating to the seven components as identified by Mukherjee *et al.* (2018) [10].

The concept 'performance' conceptually has been defined as the accomplishment of objective set forth by the FPOs. The performance index comprised of the seven following components.

Results & Discussion

The mean score of the seven indicators for performance measurement of the selected Farmer Producer Organisations, is shown in Table 2. Bagma Agri Producer

Company Limited received the highest score of 0.78 for functional effectiveness, followed by Hillstop Horti Producer Company Limited and Satadol Fish Farmers Producer Company Limited, that received scores of 0.75 and 0.74, respectively. With a score of 0.73, the Chokreng Organic Farmers Producer Company Limited came in fourth place, and Chauddadevta Organic Producer Company Limited came in fifth place with a score of 0.70.

When comparing the percentage increase in income, Chokreng Organic Farmers Producer Company Limited had the lowest increment (3.97) and Bagma Agri Producer Company Limited had the highest (18.57).

It was noted that all of the FPOs had increased in terms of their percentage of the consumer rupee. With a score of 30.37 percent, Bagma Agri Producer Company Limited showed the largest gain, followed by Satadol Fish Farmers Producer Company Limited and Hillstop Horti Producer Company Limited, with respective scores of 15.43 and 6.66 percent respectively. Chauddadevta Organic Producer Company Limited secured fourth place with a score of 4.03 whereas, Chokreng Organic Farmers Producer Company

Limited secured fifth place with a score of 3.97.

All the member farmers felt empowered after association with the FPOs. The highest score in empowerment were observed in Bagma Agri Producer Company Limited with 0.73 score followed by Hillstop Horti Producer Company Limited with 0.72. It was discovered that every FPO featured every type of farmer, including male and female farmers, as well as those from castes and socioeconomic levels. However, Satadol Fish Farmers Producer Company Limited was the only organisation with female board of management officials. As such, women's participation in FPOs was determined to be inadequate.

Regarding sustainability, Hillstop Horti Producer Company Limited and Satadol Fish Farmers Producer Company Limited came in second and third place, with scores of 0.87 and 0.81, respectively, behind Bagma Agri Producer Company Limited, which came in first. It was thought that the business sustainability of these three FPOs was very good. Both Chokreng Organic Farmers Producer Company Limited and Chauddadevta Organic Producer Company Limited have an equal score of 0.75 on the domain.

Table 2: Mean score of the 7 indicators of performance of selected Farmer Producer Organisations

Sl. No.	Name of the FPOs	Functional effectiveness	Increase in income (%)	Increase in share in consumers' rupee (%)	Level of satisfaction	Empowerment	Inclusiveness	Sustainability
1.	Bagma Agri Producer Company Limited	0.78	18.57	30.37	0.80	0.73	0.91	1
2.	Hillstop Horti Producer Company Limited	0.75	6.66	13.13	0.68	0.72	0.91	0.87
3.	Satadol Fish Farmers Producer Company Limited	0.74	15.43	12.17	0.68	0.70	0.83	0.81
4.	Chauddadevta Organic Producer Company Limited	0.70	4.03	9.67	0.62	0.67	0.83	0.75
5.	Chokreng Organic Farmers Producer Company Limited	0.73	3.97	8.31	0.61	0.69	0.83	0.75

Table 3: Ranking of Performance of Farmer Producer Organisations

Name of the FPOs	Index score	Rank
Bagma Agri Producer Company Limited	10.28	I
Hillstop Horti Producer Company Limited	8.99	II
Satadol Fish Farmers Producer Company Limited	8.07	III
Chauddadevta Organic Producer Company Limited	7.93	IV
Chokreng Organic Farmers Producer Company Limited	7.23	V

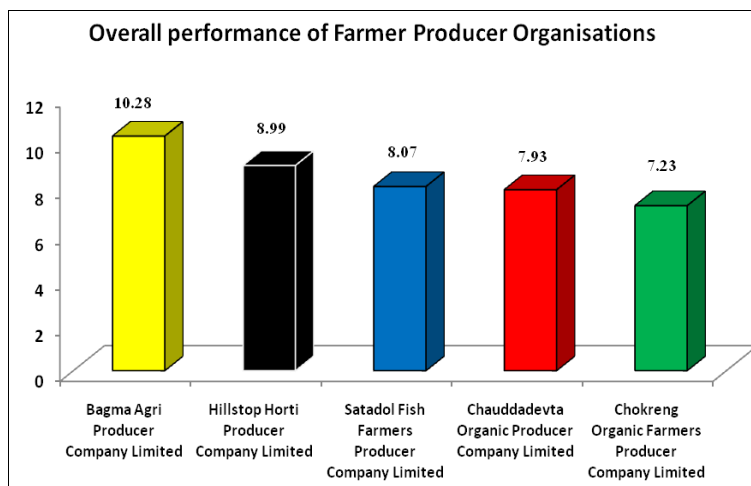


Fig 1: Graph showing the overall performance of FPOs

After analysing the overall performance index score as depicted from Figure 1 and Table 3, Bagma Agri Producer Company Limited had the highest index score with 10.28. Hillstop Horti Producer Company Limited ranked second with an index score of 8.99. Satadol Fish Farmers Producer Company Limited ranked 3rd with the score of 8.07 followed by Chaudhadevta Organic Producer Company Limited (7.93) and Chokreng Organic Farmers Producer Company Limited be the least scorer in respect of

performance with the score of 7.23.

Factors determining the performance of FPOs

An investigation was conducted to determine the performance of FPOs and its associated factors. The study used multiple regression analysis to establish the relationship between these factors and performance of FPOs. The outcomes of the analysis have been depicted in the below table 4:

Table 4: Multiple linear regression of Factors determining the performance of FPOs

Independent variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.500	1.282		-.390	.698
Farming Experience	-.001	.002	-.011	-.741	.461
Occupation	-.011	.064	-.015	-.168	.867
Annual income (Farm)	4.715E-8	.000	.005	.225	.823
Training attended	.028	.047	.009	.601	.550
Land Holdings	-.129	.062	-.032	-2.094	.040
Attitude of farmers towards FPOs	.008	.003	.066	3.153	.002
Group cohesiveness	-.011	.009	-.017	-1.258	.212
Group role differentiation	.014	.009	.021	1.639	.105
Group leadership	-.005	.009	-.008	-.591	.556
Communication process in the group	-.016	.011	-.021	-1.438	.155
Critical issues in group	.006	.010	.009	.654	.515
Team spirit	-.002	.011	-.002	-.154	.878
Leadership ability	-.012	.010	-.019	-1.263	.210
Capacity building	-.010	.009	-.014	-1.091	.279
Decision making power	-.011	.009	-.017	-1.258	.212
Achievement Motivation	.014	.009	.021	1.639	.105
Communication Behaviour	-.005	.009	-.008	-.591	.556
Risk Orientation	-.016	.011	-.021	-1.438	.155
Innovativeness	-.017	.012	-.021	-1.366	.176
Self Confidence	.005	.009	.007	.513	.610
Share capital	6.684E-6	.000	1.180	25.666	.000
Equity	-1.830E-7	.000	-.153	-1.922	.058
Functional effectiveness	19.586	1.816	.486	10.785	.000
Managerial competency	8.021	.616	.711	-13.026	.000

R²= .989, F=287.353, **Significant at 0.01 level

According to the results, approximately 98.9 percent of the variance can be explained by the variables included in the regression equation. This is evident from the R² value of 0.989, which is significant at 0.01 level of probability. Among all the independent variables, four variable was found to be significant i.e., attitude of farmers towards FPOs, share capital, functional effectiveness and managerial competency which was significant at 0.01 level of probability. The findings suggest that attitude of farmers towards FPOs, share capital, functional effectiveness and managerial competency can increase performance of FPOs.

Conclusion

FPOs can provide a significant advantage in accessing and benefiting from emerging market opportunities. However, the situation is different for FPOs in Tripura. Bagma Agri. Producer Company Ltd. is the only FPO which had been successful, profitable and was the highest performing FPO among the selected FPOs in Tripura. Apart from these, other FPOs were in the early stage of operations and do not have a comprehensive business plan in place. The findings suggest that attitude of farmers towards FPOs, share capital, functional effectiveness and managerial competency can

increase performance of FPOs. A significant number of office bearers were not efficient in running FPOs. This necessitates effective FPO leadership, capacity building and more awareness which government and extension organisations can focus their efforts. The success of FPOs is largely determined by the quality of their management. Therefore, experts managing FPOs need to enhance their skills and competencies to improve their performance. Joining in FPOs had resulted to get exposure to trainings and capacity building programmes and getting inputs at comparatively low cost. The success of FPOs depends on a collaborative approach involving farmers, FPOs, and all stakeholders, supported by continuous learning and innovation. Therefore, an efficient and unique business model for the FPOs need to be design and implemented.

References

1. Agriculture Statistics at a Glance. New Delhi: Ministry of Agriculture & Farmers Welfare, Government of India; c2022.
2. Anand S, Ghosh S, Mukherjee A. Effectiveness of Farmer Producer Organisations (FPOs) at Different Growth Stages in Transitioning to Secondary

- Agriculture. Indian Journal of Extension Education. 2023;59(3):90-96.
3. Annual Report. New Delhi: Ministry of Agriculture & Farmers Welfare. Department of Agriculture & Farmers Welfare. Government of India; c2022-23.
 4. Economic Review of Tripura. Directorate of Economics & Statistics, Government of Tripura; c2023 [cited 2025 Apr 21]. Available from: <https://ecostat.tripura.gov.in>.
 5. FPO Platform of India, Tata Cornell Institute. 2023 [cited 2025 Apr 21]. Available from: <https://fpo.tci.cornell.edu/>.
 6. Garg T. Business performance of a producer company in Madhya Pradesh [Thesis]. Bangalore: Department of Agricultural Marketing, Co-Operation and Business Management University of Agricultural Sciences; c2012.
 7. Gorai SK, Wason M, Padaria RN, Rao DUM, Paul RK. Factors contributing to the stability of the farmer producer organisations: A study in West Bengal. Indian Research Journal of Extension Education. 2022;58(2):91-96.
 8. Kakati S, Roy A. A study on the financial performance of farmer producer companies with special reference to Northeast India. Amity Journal of Agribusiness. 2017;2(1):37-56.
 9. Mathuabirami V, Kalaivani S. Group performance of Tribal FIGs in Erode District of Tamil Nadu. 2022;23(1):221-227.
 10. Mukherjee A. An Analytical Study on Status, Prospects and Challenges of Farmers Producer Companies [Ph.D. Thesis]. New Delhi: Indian Agricultural Research Institute; c2018.
 11. Saaty TL. Decision making with the analytical hierarchy process. International Journal Services Sciences. 2008;1(1):83-98.
 12. Talukdar D. Performance and skill gap analysis in the FPO ecosystem: A study in South Dinajpur District, West Bengal [M.F.Sc. Thesis]. West Bengal University of Animal and Fishery Sciences; c2023.