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## Assessing the impact of farmer producer companies on farmers and addressing constraints faced by member farmers

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### Abstract

This research paper aims to evaluate the impact of Farmer Producer Companies (FPCs) on individual members and identify the challenges faced by them within this organizational structure. FPCs have emerged as an important agricultural development model, facilitating collective action and empowering farmers through improved market access, enhanced bargaining power, enhanced forward & backward linkage and shared resources. This study seeks to provide a comprehensive understanding of the implications of FPCs on farmers' livelihoods, economic well-being and social empowerment. Additionally, it aims to identify and address the common problems encountered by FPC members, offering recommendations for effective solutions and policy interventions.

**Keywords:** Farmer producer company, the impact of FPC on member farmers, challenges faced by member farmers, economic well-being, social empowerment, policy interventions

### Introduction

Agriculture is India's principal economic sector, which has a wide number of fragmented land holdings, and employs more than 43.96% of the Indian workforce. Small and marginal farmers make up the majority of cultivators in Indian agriculture; 86.08% of those with operational holdings are less than or equal to two hectares (Agriculture Census 2015-16). The Government of India created a clear action plan in the Union Budget 2022-23 and allocated 1,24,000 Cr to it because of the sector's sustained importance. Small farms have a significant role in reducing poverty and increasing food production overall. In a similar vein, the contribution of marginal and small farmers to total output is higher than their share of total land holdings (Gururaj *et al.* 2017) [7].

It's no surprise that these farmers are not able to get a better price for their produce because the sector is majorly unorganized. To avoid isolating small-scale farmers from the benefits of agricultural products, they must be integrated as farmer associations, as they are considered a vital component in linking smallholders to contemporary markets (input and output), which give numerous benefits to these farmers. Small farms have a significant role in reducing poverty and increasing food production overall. In a similar vein, the contribution of marginal and small farmers to total output is higher than their share of total land holdings (Trebbin & Hassler 2012) [16]. Smallholders have been linked to the input and/or output markets through a variety of institutional interventions, both formal and informal. These interventions were started either by the government or by private corporate and civil society organizations. These include farmer producer organizations, producer firms, self-help groups, commodity interest groups, contract farming, direct marketing, etc. (Bernard & Spielman 2009) [2].

Producer organizations are sometimes described as "membership-based organizations or federations of organizations with elected leaders accountable to their constituents" and are thought of as a bridge between cooperative societies and commercial enterprises (Trebbin and Hassler 2012) [16]. Farmer Producer Companies (FPCs), which aim to empower farmers, improve their economic well-being, and promote sustainable agricultural practices, have become a crucial organizational structure within the farming sector (Bebbington *et al.* 1994) [1]. FPCs work under the tenet of collective action, uniting farmers to participate in a range of tasks such as production, processing, marketing, and value addition. FPCs give farmers better market access, increased bargaining power, and access to shared resources, which empowers them to overcome personal restrictions and tackle shared issues.

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Under various programs like Paramparagat Krishi Vikas Yojana (PKVY), Rashtriya Krishi Vikas Yojana (RKVY), and Vegetable Initiative for Urban Cluster (VIUC), among others, various state departments and central-level agencies are involved in the act of mobilizing the primary producers into producer organizations. SFAC and NABARD are the two main organizations working to promote FPOs in the nation among the central-level organizations. By utilizing economies of scale in production and marketing, Farmer Producer Organizations (FPOs) play a vital part in achieving the goal of doubling farmers' income. Cluster-Based Business Organizations (CBBOS) have reached to great extent to optimize FPOs, from mobilizing farmers to identifying markets for FPOs. According to the Union Ministry of Corporate Affairs, there were 16,000 FPCs nationwide as of February 2023. Around half of all registered PCs in India are FPCs, with the majority of them situated in the states of Maharashtra (33%), Uttar Pradesh (12%), Tamil Nadu (6%) and Madhya Pradesh (5%); source: Ministry of Agriculture & Farmers Welfare, 2022. As of April 21, more than 5.87 lakh farmers had been mobilized through the Scheme and around 3 lakh of them had been enrolled as FPO shareholders. Farmers' equity contributions total 36.82 Cr INR.

FPO participation has a statistically significant positive influence on the variety of technologies accepted by farmers, with FPO members embracing 1.5 times more technologies than non-members (Verma *et al.* 2019) <sup>[19]</sup>. The members make the best use of irrigation, labour, FYM, and seeds. While seeds, FYM, labour, equipment, fertilizers, and plant protection chemicals were not employed to their full potential when used by non-members. (Bikina *et al.* 2018) <sup>[3]</sup> The members' affiliation with FPO has made it possible for them to use more advanced chilli cultivation techniques. However, the FPOs must arrange more training sessions for farmers to raise their adoption levels because a large fraction of their members falls into the low and very low adoption categories (Rao 2019) <sup>[12]</sup>. The integrity and caliber of the leadership, its acceptance in the community and its market expertise are the most important characteristics for a successful PC (Shilpa 2017) <sup>[14]</sup>. The success of any organization or group is dependent on the dedication of its members as well as member engagement, hence it is urged that they improve the involvement of members in decision-making (Katiki *et al.* 2021) <sup>[8]</sup>.

Farmer Producer Organizations (FPOs) in India, whether registered as FPOs or Co-operatives, can assist small and medium farmers. They do, however, have severe financial and managerial constraints, particularly about their capacity for negotiation and leadership. (Bisnoi & Kumari 2020) <sup>[4]</sup>. Constraints on marketing include a lack of adequate warehouses, transportation vehicles and well-developed processing facilities (Verma *et al.* 2020) <sup>[8]</sup> The majority of the members were having problems with inconsistent produce purchases, followed by inadequate infrastructure and an absence of credit options for the members (Navya *et al.* 2022) <sup>[10]</sup>. All research on the operation of FPOs has identified ineffective professional management as a major barrier; there is an urgent need to train individuals involved in FPO management or to require specific credentials for FPO officials. This will aid in improving FPO efficiency (Chaudhary 2023) <sup>[5]</sup>.

## Literature review

Chauhan *et al.* (2021) <sup>[6]</sup> found that Farmer Producer

Organizations, which mostly employ the concept of aggregation, facilitate small farmers to participate in the market with greater efficacy and collectively, lowering transaction costs of accessing inputs and outputs, obtaining necessary market information, securing access to new technologies, and competing with larger farmers. To develop specific strategies that will aid in the efficient operation of the organization, the purpose of this study was to identify the difficulties that the Farmer Producers Organisation (FPO) faces. The study was carried out in the Cooch Behar-I, Cooch Behar-II, Dinhata-I, Dinhata-II, Tufanganj-I, and Tufanganj-II blocks of West Bengal's Cooch Behar district. After pre-testing with the personal interview approach, data were acquired utilizing a structured interview schedule, and the data was then evaluated to produce results. Organizational limitations, marketing restrictions, labour and budgetary restrictions, and technical limitations were among them.

Venkatakumar and Sontakki (2012) <sup>[17]</sup> In light of their research, which revealed that the producer business model in India and scaling up of this notion may bring wealth to the future of peasants in a setting where Indian agriculture faces great obstacles, they analyzed producer firms in India and addressed specific issues. Indian farmers' purchasing ability was extremely constrained. They had little knowledge of the value of high-quality seeds and other agricultural inputs and were illiterate. Poor connections to producer companies put villages in a tough situation as well. To boost farmers' capability, businesses offer a range of training programs; however, it was impossible to train every farmer at once. Producer companies need a significant amount of working capital for purchasing, adding value, and marketing as well as for providing credit, loans, and advances. For a five-year term, the M.P. government pays these producers' official and administrative costs.

Prabhakar *et al.* (2012) <sup>[11]</sup> showed the difficulties encountered in financing producer enterprises. The necessity for a producing firm to contribute margin money, which they are unable to provide due to a lack of resources, and the problem of offering collateral security for a loan are two examples of this. Additionally, producer companies do not have the accreditations required for profitable company operations, which makes it challenging for banking institutions to lend money to them. Finally, producer firms cannot receive concessions and other benefits like tax exemptions, subsidies, and other resources offered to cooperatives because the government and other organizations do not regard them on par with producer cooperatives.

Srikanth *et al.* (2022) <sup>[15]</sup> carried out a study regarding how tribal farmers in Andhra Pradesh might gain assistance from Farmer Producer Groups (FPGs). The current study in Andhra Pradesh's Srikakulam district studied the perceived influence of FPGs in a range of categories to gain a better understanding of alterations among tribal FPG members. The study's 145 participants were picked using a multi-stage proportionate random selection procedure. The personal interview strategy was used to obtain data utilizing a carefully structured interview schedule. According to the research findings, the formation of FPGs had a direct impact as a 14924.14 increase in average incomes and indirect effects such as psychological, sociological, monetary, and political empowerment of tribal farmers. The psychological dimension attracted the most attention among the empowerment dimensions evaluated. The psychological component obtained the highest mean score of 2.64 among the means of

empowerment aspects studied, while the political aspect received the lowest mean score of 2.06. In addition to pooling tribal farmers' inputs through a collective method, FPGs were also implementing a variety of activities aimed at increasing their earning potential and their way of livelihood.

Rathour *et al.* (2022) [13] conducted research through FPO on the socioeconomic advancement of tribal women in Chhattisgarh's Bastar District. The study was carried out in the Bastar area of Chhattisgarh state between the years 2021 and 2022. According to the length of their membership in the Bhumigadi Mahila Krushak Farmer Producer Organisation (BMKFPO), the results showed that the BMKFPO member had seen a 37.28 percent increase in income (₹ 11653/-) over the previous four years, whereas the member of the FPO had seen increases in income of 36.81 percent (₹ 11456/-), 32.97 percent (₹ 10203/-), and 31.62 per cent (₹ 9420/-) since the last three years, two years and one year respectively. The significance level of differences in income of respondents before and after joining the BMKFPO, Bastanar; P value were recorded as 0 ( $p=0$ ,  $p<0.05$ ) for income generating activities and overall annual income & 0.002 ( $p=0.002$ ,  $p<0.05$ ) for the non-FPO activity (wages) and found to be highly significant. The FPO module is believed to have assisted people to increase both their net worth and their revenue from a variety of sources.

Verma *et al.* (2019) [19] investigated how farmer participation in Farmer Producer Organizations (FPOs) influenced the adoption of technology and GAPs in Bihar. It was pointed out that credit, education, female engagement, farming as a major occupation and education all had significant roles in joining the FPO.

Kujur *et al.* (2019) [9] carried out a study on the socioeconomic impacts of farmer-producer organizations in Chhattisgarh's plains. They found that whereas FPOs increased the income of 68.33% of member farmers, only 50% of non-member farmers saw a similar increase. Similar to the previous statistic, just 43.33 percent of non-member farmers had a rise in employment, as opposed to 70.83 percent of members. Due to member farmers' higher rates of employment and income growth than non-member farmers, members' financial state is more stable than that of non-members.

### Objectives

1. To study socio-economic profile of farmers
2. To study the impact of Farmer Producer Company on member farmers
3. To identify constraints faced by member farmers

### Methodology

The study was carried out in the Narmada district of Gujarat during a period between 10<sup>th</sup> April to 10<sup>th</sup> June. A total of 100 respondents were selected for fulfilling the research objectives, out of 100 respondents, 50 respondents were selected who are members of the farmer producer company in that area and the rest of the respondents are non-involved in any farmer producer company and its related organization. The purposive sampling method was used to select the respondent from nearby village areas. The paired sample t-

test, also known as the dependent sample t-test, is a statistical process used to determine whether the mean difference between two groups of observations is zero or not. Each subject or entity is measured twice in a paired sample t-test, resulting in pairs of observations. Case-control studies and repeated-measures designs are two common circumstances where the paired sample t-test is used. Paired T-test was employed to identify whether there is a significant mean difference in income of members before and after joining Farmer Producer Company (FPC). An Independent sample T-test was utilized to identify whether there is a significant mean difference in the income of members and non-members of Farmer Producer Company (FPC). The data collected from the respondents were analyzed using the above statistical techniques to determine whether or not the difference was significant.

Garrett's Ranking Technique was used to convert preferences, constraints and benefits into numerical scores. The primary advantage of this technique over basic frequency distribution is that the constraints are organized according to their severity in the eyes of respondents. Here, Garrett's ranking method was employed to determine the outcome of problems encountered by the FPC and its members. According to this method, respondents were asked to rank each problem and the results of this ranking were then transformed into a score value using the following formula:

$$\text{Percent position} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

Where,

$R_{ij}$  = Rank given for the  $i^{\text{th}}$  variable by  $j^{\text{th}}$  respondents

$N_j$  = Number of variable ranked by  $j^{\text{th}}$  respondents

With the help of Garrett's table, the percent position was estimated to convert them into scores. Then for each factor, the scores of each individual are added and then the total value of scores and mean values of score is calculated. The factors having the highest mean value was considered to be the most important factor.

### Result and Discussion

#### Socioeconomic characteristics of sample farmers

The age of the respondents is a very important demographic factor that influences the decision-making process of farmers. Young farmers easily understand the FPC concept and benefits, leading to their active participation in FPC. Hence the age of the farmer is a very important criterion for converting non-members to become members of FPC. Table 1 shows the majority of member farmers of FPC fall in the category of 25 to 40 years of age (56%), while in the case of non-members, only 20% of the farmer fall in

the category of 25 to 40 years. Most of them were included in the category of more the 55 years (38%) and 40 to 55 years (34). So, we can say that age of the respondents was a very much important factor as younger farmers were more likely to accept the concept of farmer producer company or organization

**Table 1:** Age of the respondents

Age (in years)	Member (50)		Non-member (50)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Less than 25	10	20	4	8
25-40	28	56	10	20
40-55	7	14	17	34
More than 55	5	10	19	38
Total	50	100	50	100

Small and marginal farmers accounted for the highest percentage (72%) of total sample farmers, followed by medium (17%) and large (10%) among the members of FPO. Whereas, in the case of non-members, the medium farmers were the dominant group comprising 36% of the total farmers.

It is revealed that the FPOs were accessible to all classes of farmers. However, a slightly higher proportion of small and marginal size farmers was from members of FPO who provide strong leadership and capital for running its various activities.

**Table 2:** Size of land holding of the respondents

Landholding (hectare)	Member (50)		Non-member (50)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Less than 1 ha	11	22	6	12
1 to 4 ha	25	50	11	22
4 to 10 ha	9	18	18	36
More than 10 ha	5	10	15	30
Total	50	100	50	100

Out of all the members of FPO under study, it was found that 34% of them have education up to HSC followed by SSC (24%) and illiterate (22%) respectively. In the case of non-members of FPO, it was found that 44% of the total sample

farmers were found to be illiterate followed by studied up to primary (32%) and SSC (20%). Education has an impact on the decision-making of farmers on whether or not to become members of FPC.

**Table 3:** Education level of the respondents

Education	Member (50)		Non-member (50)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Illiterate	11	22	22	44
Up to Primary	10	20	16	32
SSC	12	24	10	20
HSC	17	34	2	4
Graduate	2	4	0	0
Total	50	100	50	100

It was observed that the majority of farmers (68%), in the case of the member side, were associated with agriculture as well as livestock-related activity with the majority of farmers from the non-member side i.e., 82% involved in agriculture as well

as labour work-related activity. The off-farm income serves as a cushion against the risk involved in any new enterprise, the farmer intends to adopt.

**Table 4:** Income source of the respondents

Income source	Member (50)		Non-member (50)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Agriculture and livestock	34	68	9	18
Agriculture and labour work	16	32	41	82
Total	50	100	50	100

Income is the basic factor for any farmers whether they are member or non-member, which affect their standard of living. From table 5, it was observed that the income of member farmers was high as compared to non-member farmers. In the case of member farmers, 42% of respondents have earned income between 5 to 10 lakh, 46% of respondents have

earned income between 1 to 5 lakh and only 12% of respondents have earned income below 1 lakh. While in the case of non-member farmers, the majority of respondents i.e. 42% have income below 1 lakh followed by 40% of respondents have income between 1 to 5 lakh and only 18% of respondents have income between 5 to 10 lakh.

**Table 5:** Income level of the respondents

Income (₹ in lakh)	Member (50)		Non-member (50)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Less than 1 lakh	6	12	21	42
1 to 5 lakh	23	46	20	40
5 to 10 lakh	21	42	9	18
Total	50	100	50	100

Table 6 shows the season of cultivation in which farmers grow different crops. It can be analyzed that the majority of member farmers of FPC i.e. 52% cultivate their land throughout the year and harvest the produce followed by 48% of farmers who grow crops in two seasons. This scenario is

different in the case of non-member respondents. The majority of non-members cultivate their land in only two seasons i.e. 46% and only 18% of respondents grow crops throughout the year.

**Table 6:** Cultivating season of the respondents

Irrigation source	Member (50)		Non-member (50)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Rainfed	0	0	18	36
Kharif and Rabi	31	62	23	46
Throughout the year	19	38	9	18
Total	50	100	50	100

### The extent of adoption of new technology/cultivation methods in farming:

The proportion of farmers falling in the adoption category was more in the case of members as compared to non-members. Thus it is revealed that the association with FPO has enabled the members to adopt improved cultivation

practices in the case of rice (SRI for rice) as well as using drip or sprinkler irrigation method for most of the crops. However, the FPOs need to organize more training for the farmers to improve their adoption scores. The membership in FPO increases year by year which shows the acceptance level among farmers for such type of organization.

**Table 7:** New technology/method for irrigation or cultivation of rice adopted by the respondents

New technology/method	Member (50)		Non-member (50)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Drip or sprinkler	17	34	11	22
SRI for Rice	15	30	14	28
BOTH	18	36	2	4
None	0	0	23	46
Total	50	100	50	100

Paired T-test was employed to identify whether there is a significant mean difference between the member's income before joining Farmer Producer Company (FPC) and after

joining. From Table 8, we can analyze that member income increased after participating in FPC and that was statistically significant. (P value > 0.001)

**Table 8:** Differences in the income of farmers before and after joining FPC

	Member income before (n=50)	Member income after (n=50)	Difference	df	T-test	P value
Total income (₹/annum)	3,50,573	5,19,629	1,69,056	98	3.09**	0.001

(\*\*Significant at 5% levels of significance)

Paired T-test was not employed for the identification of the significant mean difference in the income of members and non-members. That's why an Independent sample T-test was employed to identify whether there is a significant mean difference between the income of members farmers and non-

members farmers. Table 9 shows the monetary benefit of participating in FPOs: member farmers' total average annual income was Rs. 5,19,629, about 46.85% more than that of non-members, a statistically significant difference.

**Table 9:** Impact of FPC in the income of member farmers

	Member farmer (n=50)	Non-member farmers (n=50)	Difference	df	T-test	P value
Total income (₹/annum)	5,19,629	3,53,849	1,65,780	98	2.99**	0.001

(\*\*Significant at 5% levels of significance)

### Constraints faced by member farmers of farmer producer company

From the above table, it is observed that lack of processing facility, non-existence of a procurement system for all crops, inadequate knowledge about various services provided by FPC, the complexity of the registration process, high initial share capital/membership charge, absence of proper market linkage, absence of proper market linkage, having too much

paperwork and bookkeeping, lack of proper input supply were the problems that faced by members of farmer producer company; of these, lack of processing facility, non-existence of procurement system for all crops and inadequate knowledge about various services provided by FPC were the major problems which got the mean score 59.40, 58.54 and 46.94 respectively as per Garrett's ranking method.

**Table 10:** Constraints faced by members of FPC

Sr. No.	Factors	Mean Score	Rank
1.	Lack of processing facility	59.40	I
2.	Non-existence of a procurement system for all crops	58.54	II
3.	Inadequate knowledge about various services provided by FPC	46.94	III
4.	The complexity of the registration process	44.80	IV
5.	High initial share capital/membership charge	38.60	V
6.	Absence of proper market linkage	25.10	VI
7.	Having too much paperwork and bookkeeping	24.80	VII
8.	Lack of proper input supply	13.76	VIII

### Conclusion

In India, farming is becoming an extremely challenging career, and the majority of farmers particularly small and marginal were leaving in a stressed-out state. The government and civil society are battling the issue with several programs and other creative approaches. One such program that seeks to address farmer

problems by bringing them to a collaborative forum is the formation of FPCs. According to the results of the current study, the farmers in the Dediapada block of the Narmada district have made progress in resolving their issues by integrating themselves with the FPC. Small and marginal farmers, who tend to be younger and better educated, were more likely to accept the concept of a farmer-producer company. They excelled in some of their objectives such as better prices and better market opportunities, still far from being resolved some challenges including the lack of processing facilities, the absence of a mechanism for purchasing all crops, Lack of understanding of the range of services offered by FPC and the difficulty in the registration process of FPC. To achieve inclusive growth and self-sufficiency, they require the help of the government and civil society. Overall, findings of the result suggest that FPC function quite effectively from the perspective of member farmers to directly improve farmer income as well as the rate of technological adoption.

### References

- Bebbington AJ, Merrill-Sands D, Farrington J. Farmer and community organizations in agricultural research and extension: Functions, impacts and questions. London: Overseas Development Institute; c1994. p. 699-705.
- Bernard T, Spielman DJ. Reaching the rural poor through rural producer organizations? A study of agricultural marketing cooperatives in Ethiopia. *Food policy*. 2009;34(1):60-69.
- Bikkina N, Turaga RMR, Bhamoriya V. Farmer producer organizations as farmer collectives: A case study from India. *Development Policy Review*. 2018;36(6):669-687.
- Bishnoi R, Kumari S. Challenges Faced by FPOs & Strategies to Overcome: A Review. *International Journal of Advances in Agricultural Science and Technology (IJAASST)*. 2020;7(6):25-33.
- Chaudhary N. Challenges Faced by Farm Enterprises and Current Status of FPO's in India: A Review; c2023.
- Chauhan JK, Ankur A, Pradhan K. Identification of Constraints Associated with Farmers' Producer Organizations (FPOs). *Int J Curr Microbiol Appl Sci*. 2021;10(01):1859-1864.
- Gururaj B, Hamsa KR, Mahadevaiah GS. Doubling of small and marginal farmers income through rural non-farm and farm sector in Karnataka. *Economic Affairs*. 2017;62(4):581-587.
- Katiki S, Asokhan M, Karthikeyan C, Patil SG. Constraints Perceived and Suggestions Offered by the members of Tribal Farmer Producer Groups (FPGs). *Madras Agricultural Journal*. 2021;108:1.
- Kujur P, Gauraha AK. Business performance of farmer producer organizations (FPOs) in Chhattisgarh plains. *Journal of Pharmacognosy and Phytochemistry*. 2019;8(4):3476-3480.
- Navya D, Babu KM, Naik VR, Vidyasagar G, Meena A. Challenges Faced by the Members of the Farmer Producer Organizations In Telangana State; c2022.
- Prabhakar I, Manjunatha BL, Nithyashree ML, Hajong D. Farmers Producer Company - An Innovative Farmers' Institution. *Environment and Ecology*. 2012;30(2):427-430.
- Rao D. Impact of Farmer Producer Organizations on organic chilli (*Capsicum frutescens*) production in Telangana. *Indian Journal of Agricultural Sciences*. 2019;89(11):1850-4.
- Rathour V, Tiwari PK, Pandey PK, Singh KP, Singh DP. Socio-Economic Upliftment of Tribal Women through FPO in Bastar District of Chhattisgarh. *Indian Journal of Extension Education*. 2022;58(4):144-148.
- Shilpa SK. Emergence of Producer Companies as Innovative Institutions for Agriculture Development in India: Issues and Challenges. *Asian Journal of Agriculture and Development*. 2017;17(2):79.
- Srikar K, Asokhan M, Karthikeyan C. Impact of Farmer Producer Groups (FPGs) on Upliftment of Tribal Farmers in Andhra Pradesh. *Indian Research Journal of Extension Education*. 2022;22(2):176-180.
- Trebbin A, Hassler M. Farmers' producer companies in India: a new concept for collective action? *Environ Plan A*. 2012;44(2):411-427.
- Venkattakumar R, Sontakki BS. Producer companies in India-Experiences and implications; c2012.
- Verma AK, Singh AK, Dubey SK, Singh OP, Doharey RK, Bajpai V, *et al*. Constraints faced by board of members of farmer producer organizations. *Indian J Ext Educ*. 2020;56(3):75-78.
- Verma S, Sonkar VK, Kumar A, Roy D. Are farmer producer organizations a boon to farmers? The evidence from Bihar, India. *Agric Econ Res Rev*. 2019;32:123-137.
- Prabhakar I, Manjunatha BL, Nithyashree ML, Hajong D. Farmers Producer Company - An Innovative Farmers' Institution. *Environ Ecol*. 2012;30(2):427-430.
- Agriculture Census 2015-16. Retrieved from <https://agcensus.nic.in/>
- <https://pib.gov.in>
- <https://newsonair.com/2022/05/07/govt-promotes-forming-fpos-know-how-it-will-double-farmers-income/>