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An Economic Study on Financial and Marketing Aspects of successful FPOs in Pauri Garhwal Region of Uttarakhand

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Abstract—*This research examines the business performance and marketing efficiency of selected Farmer Producer Organizations (FPOs) in the Garhwal division of Uttarakhand, India. Through financial ratio analysis and marketing efficiency calculations, the study reveals that certain FPOs, notably Shilgur Bizat Swayat Sahkarita (SBSS) and Balajee Doon Farmer Producer Company Limited (BDFPCL), have displayed commendable financial viability and effective marketing efficiency. These findings underscore the potential of FPOs in enhancing the economic prospects of small and marginal farmers and reducing the dominance of intermediaries in the agricultural value chain. The study emphasizes the importance of policy support to promote FPOs' formation, capacity building, and streamlining of marketing channels for the benefit of the agricultural sector.*

Keywords: *Farmer Producer Organizations (FPOs), business performance, marketing efficiency, financial ratios, agricultural value chain, small and marginal farmers, policy support, rural development.*

1. INTRODUCTION

India, a developing nation where agriculture contributes approximately 19.9% of GDP annually, where agriculture is vital to its growth (Economic Survey, 2020–21). According to the Economic Survey 2020, 58% of India's workforce is employed either directly or indirectly in the agriculture industry. Small and marginal farms account for over 86% of all farmers in the nation, with average land holdings of less than 1.1 hectares. The primary driver of the country's GDP and employment prospects, farming accounts for a sizable amount of the GDP and capital of the nation. Rural residents lack adequate access to non-food commodities and food because of inadequate infrastructure and employment opportunities. Numerous strategies have surfaced in response to the problems small and marginal farmers confront. Contract farming is being used to encourage private involvement at the market end of the agricultural value chain, especially since the Agricultural Produce Marketing Committee (APMC) Act was amended in 2003. Contract farming is the production of agricultural commodities in accordance with a contract between a farmer and an organization for the supply of predetermined quantities of agricultural products that satisfy predetermined quality requirements (FAO, 2014).

Agricultural cooperatives, formed under the Co-operative Credit Societies Act, 1904, are dominant form of farmer collectives. However, the experience with cooperative point to several limitation that prevent effective collective action. Indian government has been promoting a new type of collectives called Farmer Producer Organization (FPOs) to dealwith the challenges faced by the small and marginal farmers, particularly those to try anddo with enhanced access to investments, technological advancements, and effective inputs and markets.“Department of Agriculture and Cooperation”, Ministry of Agriculture, Govt. of India” hasacknowledged “Farmer Producer Organization” as the most relevant institutional form around which to mobilize farmers and courage their strength to collectively leverage their production and marketing dimensions. The approach is demonstrating the potential to be more efficient in break out producer’s dependency on middle men, and access better markets for inputs and output (Khanna and Ghatak,2015). More than 69% of people in Uttarakhand make their living from agriculture. There are 0.535 million main cultivators and 1.046 million marginal cultivators, respectively. The state's average land holding size is approximately 0.89 hectares, which is smaller than the 1.15-hectare national average. In plains, the average land holding is 1.77 hectares, and in hills, it is approximately 0.68 hectares. In the state, the proportion of small and marginal farmers to all farmers has grown. The agricultural landscapes of the plains

and hills are different; plains farmers primarily engage in subsistence farming, whereas hill farmers primarily pursue commercial agriculture. (State-Specific Methods for Increasing Farmers' Revenue by 2022).

The average land holding size in Uttarakhand is 0.89 hectares, which is smaller than the 1.15-hectare national average. Bringing together small and marginal farmers to help them integrate with the agricultural market is one of the main issues. Produce thus cultivated on these holdings makes up a tiny, marketable excess. Small farmers lack the volume necessary to take advantage of economies of scale. So, in the present, Farmer Producer Organizations have the potential to be a game changer. NABARD offers financial assistance to Farmer Producer Organizations (FPOs) so they can operate profitably for up to three years. However, many FPOs still struggle to establish themselves after this time, which leaves most of them with shaky balance sheets, unable to generate more cash. The absence of a business strategy presents numerous obstacles for FPOs as they expand and manage their operations. Their lengthy chain of middlemen in the marketing process frequently operate in a transparent manner, leaving the producer with little of the value that the final customer pays. These middlemen are increasing their income during this process, which has an effect on FPO's business results. FPOs need a professional team with strong marketing skills to run a profitable business. However, in certain cases, a lack of funding and training causes unprofessionalism in FPOs, which lowers marketing efficiencies. These teams can decide on product, price, place, and promotion while taking the state of the market into consideration. Given this context, the study was undertaken with the objectives:

1. To examine the business performance of selected Farmer producer Organizations.
2. To analyze the marketing cost and marketing efficiency of selected Farmer Producer Organizations.

2. MATERIALS AND METHODS

The study was conducted in Garhwal division of Uttarakhand. In the study, multistage sampling was used. From Garhwal division, two districts namely (Dehradun and Pauri Garhwal) were taken on the basis of maximum number of FPOs. From each district, three FPOs were selected randomly. Further, ten FPOs member were selected randomly and five non FPOs member from the same area were taken. Thus, making a sample size of 90 respondents.

3. ANALYTICAL FRAMEWORK

To examine the business performance of selected Farmer Producer Organizations

Financial ratio is measure of how well an organization has managed certain tradeoffs in the use of its financial resources. Financial ratio of farmer producer organization was calculated with the help of appropriate ratios of period of successive three years**.**

$$\text{Operating ratio} = \frac{\text{Total operating cost}}{\text{Gross income}}$$

$$\text{Fixed ratio} = \frac{\text{Total fixed cost}}{\text{Gross income}}$$

$$\text{Gross ratio} = \frac{\text{Total expenses}}{\text{Gross income}}$$

Total expenses= Total fixed cost + Total operating cost

All the above ratios if less than 1, indicate that organization is able to meet out its expenses.

$$\text{Capital turnover ratio} = \frac{\text{Gross income}}{\text{Average capital investment}}$$

If capital turnover ratio is greater than 1, this will indicate that organization is able to generate profit.On the basis of data availability, various financial ratio like liquidity ratio and solvency ratio were also worked out from the balance sheet of respective farmer producer organizations.

To analyse the marketing efficiency of Farmer Producer Organizations

The marketing efficiency of different marketing channels considered under the study was estimated by Acharya and Agarwal's Approach.

i. Marketing Cost

$$C = CF + Cm1 + Cm2 + Cm3 + \ldots\ldots + Cmi$$

Where,

C= Total cost of marketing (Rs/Qn)

CF= Cost paid by the producer (Rs/Qn)

Cmi= Cost incurred by ith middle in the process of marketing (Rs/Qn)

ii. Marketing Margin

MM = Sale Price – (Purchase Price + Per Unit Marketing Cost)

iii. Marketing Efficiency

$$ME = \frac{FP}{(MC+MM)}$$

Where, ME = Index of marketing efficiency

FP = Price received by the farmer

MC = Total marketing cost

MM = Net marketing margins

iv. Producer Share in consumer's rupee

$$Ps = \frac{Pf}{Pr} \text{ X } 100$$

Where,

Ps = Producers' share in consumers' rupee

Pf = Price received by the producer

Pr = Price paid by the consumer

4. RESULTS AND DISCUSSION

The income statement was used to calculate the financial ratio. The financial ratio evaluates the efficiency with which a company's available resources are put towork. An efficiency ratio measures the effectiveness of the organizations that manage the company's assets and the rates at which those assets are converted into product. The financial ratios of selected FPOs are represented in Table 1. The operating ratio for SBSS was found to be the lowest (0.50), followed by (0.51), (0.53), (0.56), and (0.60) for BDFPC, BBSS, and KUSSS, respectively. All FPO had operating ratio of less than one. As a result, a lower ratio implies that companies spend less than they make in carrying out their operations. SBSS had the lowest fixed ratio followed by BDFPC, BBSS, and KUSSS with 0.64, 0.65, and 0.67 ratios respectively. FPOSBSS performed better than others. SBSS had a highest gross ratio of 0.83. The higher gross ratio indicates that the company is in profit.

Table 1: Financial Ratios of selected Farmer Producer Organizations

Shilgur Bizat Swayat Sahkarita (SBSS)			
Years	**Operating Ratios**	**FixedRatios**	**GrossRatios**
2019-20	0.50	0.62	0.83
2018-19	0.41	0.56	0.67
2017-18	0.32	0.41	0.53
Balajee Doon Farmer Producer Company Limited (BDFPCL)			
2019-20	0.51	0.64	0.80
2018-19	0.45	0.58	0.62
2017-18	0.39	0.47	0.51
Bagwan Bahuuddeshiya Swayat Sahkarita (BBSS)			
2019-20	0.53	0.65	0.78
2018-19	0.49	0.59	0.57
2017-18	0.40	0.46	0.48
Hariyali Krishak Sawayat Sahkarita (HKSS)			
2019-20	0.61	0.72	0.69
2018-19	0.52	0.61	0.61
2017-18	0.41	0.50	0.53
Kisan Utpadan Sangh Swayat Sahkarita (KUSSS)			
2019-20	0.56	0.67	0.72
2018-19	0.49	0.58	0.63
2017-18	0.40	0.49	0.52
Paryas Sawayat Sahkarita (PSS)			
2019-20	0.60	0.69	0.70
2018-19	0.52	0.54	0.62
2017-18	0.41	0.43	0.55

The capital turnover ratio for SBSS was found to be (0.73), followed by (0.71) and (0.70) for BDFPCL and BBSS, respectively. In compared to other FPOs, we may infer that SBSS is profitable. The values of capital turnover ratio are presented in Table 2.

Table 2: Capital Turnover Ratio of Farmer Producer Organizations

Shilgur Bizat Swayat Sahkarita (SBSS)	
Years	**CapitalTurnoverRatio**
2019-20	0.73
2018-19	0.60
2017-18	0.49
Balajee Doon Farmer Producer Company Limited (BDFPCL)	
2019-20	0.71
2018-19	0.60
2017-18	0.48
Bagwan Bahuuddeshiya Swayat Sahkarita (BBSS)	
2019-20	0.70
2018-19	0.57
2017-18	0.48
Hariyali Krishak Sawayat Sahkarita (HKSS)	
2019-20	0.66
2018-19	0.52
2017-18	0.43
Kisan Utpadan Sangh Swayat Sahkarita (KUSSS)	
2019-20	0.69

2018-19	0.57
2017-18	0.47
Paryas Sawayat Sahkarita (PSS)	
2019-20	0.67
2018-19	0.53
2017-18	0.41

The study used three liquidity and solvency ratios to evaluate the long-term solvency of the selected FPOs. These are represented in Table 3 and Table 4. All six FPOs' acid test ratios were found to be greater than one, indicatingthat they all have enough capital to satisfy their immediate responsibilities, such as short-term indebtedness. The debt-to asset ratio of all six FPOs was good enough that, in the event of liquidation, the debts could be paid off by selling the assets.

Table 3: Liquidity Ratios of selected Farmer Producer Organizations

Shilgur Bizat Swayat Shakarita (SBSS)			
Years	**CurrentRatio**	**Acid-testRatio**	**Intermediate Ratio**
2019-20	1.21	1.09	1.01
2018-19	1.06	0.65	0.78
2017-18	1.01	0.51	0.59
Balajee Doon Farmer Producer Company Limited (BDFPCL)			
2019-20	1.08	1.07	0.76
2018-19	1.03	0.98	0.89
2017-18	0.96	0.43	0.48
Bagwan Bahuuddeshiya Swayat Sahkarita (BBSS)			
2019-20	1.06	1.05	0.71
2018-19	1.02	0.77	0.59
2017-18	0.89	0.53	0.41
Hariyali Krishak Sawayat Sahkarita (HKSS)			
2019-20	1.00	0.89	0.60
2018-19	0.71	0.79	0.51
2017-18	0.52	0.67	0.35
Kisan Utpadan Sangh Swayat Sahkarita (KUSSS)			
2019-20	1.03	1.01	0.70
2018-19	0.99	0.83	0.61
2017-18	0.88	0.68	0.49
Paryas Sawayat Sahkarita (PSS)			
2019-20	1.01	0.99	0.68
2018-19	0.78	0.73	0.61
2017-18	0.65	0.62	0.51

The debt-to asset ratio of all six FPOs was good enough that, in the event of liquidation, the debts could be paid off by selling the assets. All six FPOs have a net capital ratio greater than one, indicating that thefund of lenders is secure. The net capital ratio assesses a company's ability to meet long-term obligations. The equity to asset value ratio of all six FPOs was found to be greater than one, indicating that the organization is profitable. The increasing strength in the financial structure of the FPO firm is evident from the improvement in the ratio over the year.

Table 4: Solvency Ratios of selected Farmer Producer Organizations

Shilgur Bizat Swayat Sahkarita (SBSS)			
Years	**Debt-Equity Ratio**	**Net Capital Ratio**	**Equity to Asset Value Ratio**
2019-20	0.46	1.01	0.67
2018-19	0.39	0.99	0.54
2017-18	0.27	0.81	0.45
Balajee Doon Farmer Producer Company Limited (BDFPCL)			
2019-20	0.31	1.18	0.71
2018-19	0.25	1.09	0.93
2017-18	0.11	1.03	0.40
Bagwan Bahuuddeshiya Swayat Sahkarita (BBSS)			
2019-20	0.39	1.24	1.02
2018-19	0.26	1.18	0.82
2017-18	0.18	1.06	0.73
Hariyali Krishak Sawayat Sahkarita (HKSS)			
2020	0.53	1.12	1.01
2019	0.42	1.03	0.76
2018	0.31	0.97	0.41
Kisan Utpadan Sangh Swayat Sahkarita (KUSSS)			
2019-20	0.59	1.17	1.00

2018-19	0.47	1.03	0.99
2017-18	0.34	0.98	0.87
Paryas Sawayat Sahkarita (PSS)			
2019-20	0.52	1.26	0.91
2018-19	0.33	1.19	0.67
2017-18	0.21	1.06	0.51

For every FPO there exists two marketing channels according to study carried out at Hariyali Krishak Swayat Sahkarita located at Rikhanikhal (Pauri) in the year 2020-21 as represented in Table 5. According to the study, two marketing channels were operating efficiently;

1. Channel I: Farmer – Commission Agent- Processor- Wholesaler- Retailer- Consumer
2. Channel II: FPO -Retailer- Consumer

It is observed that total marketing cost incurred for turmeric in channel I was Rs. (41500 per ton) and channel II was Rs. (40500 per ton). Thus, the cost incurred in marketing of turmeric in channel I Rs. (41500) was higher than channe lII Rs. (40500). The marketing efficiency of channel I was (0.58) and channel II was 0.99. It refers that channel II is more efficient than channel I.

Table 5: Hariyali Krishk Swayat Sahakarita

S. No.	Particulars	Farmer Marketing (Channel-1)	FPO Marketing (Channel-2)
1.	Marketing cost	41500	40500
2.	Produce' net price	50000	
3.	agent's selling price	54000	-
4.	Commission agent's margin	4000	-
5.	Farmer Producer Organization's selling price	-	75000
6.	Processor's selling price	76000	-
7.	Processor's margin	22000	-
8.	Wholesaler's selling price	80000	-
9.	Wholesaler's margin	4000	-
10.	Retailer's selling price	85000	85000
11.	Retailer margin	5000	10000
12.	Producer's share in consumer's rupee (%)	58.82	88.82
13.	Price received by the farmer	45000	50000
14.	Marketing cost + Marketing margin	76500	50500
15.	Index of Marketing Efficiency (MME)	0.58	0.99

Table 6 shows the results of calculating marketing efficiency using Acharya's method. Channel I had a marketing efficiency of 0.81 and channel II had a marketing efficiency of 1.08. It implies that channel II is more productive than channel I. Channel I Rs.268000 per tonnes had a higher overall marketing cost and marketing margin than channel II Rs.184000 per tonnes.

Table 6: Kisan Utpadan Sangh Swayat Sahakarita

S.No.	Particulars	Farmer Marketing (Channel-I)	FPO Marketing (Channel-II)
1.	Marketing cost	162000	104000
2.	Producer' net price	120000	-
3.	Commission agent's selling price	140000	-
4.	Commission agent's margin	20000	-
5.	Farmer Producer Organization's selling price	-	200000
6.	Wholesaler's selling price	240000	-
7.	Wholesaler's margin	100000	-
8.	Retailer's selling price	280000	280000
9.	Retailer margin	40000	80000
10.	Producer's share in consumer's rupee (%)	42.85	71.42
11.	Price received by the farmer	120000	200000
12.	Marketing cost + Marketing margin	268000	184000
13.	Index of Marketing Efficiency (MME)	0.81	1.08

Table 7 represents that Channel I had a marketing efficiency of 0.62 and channel II had a marketing efficiency of 1.06. It implies that channel II is more productive than channel I. Channel I has a total marketing cost and margin of Rs. 210000 per tonnes, which is higher than channel II's Rs.165000 per tonnes.

Table 7: Payars Swayat Sahakarita

S. No.	Particulars	Farmer Marketing (Channel-I)	FPO Marketing (Channel-II)
1.	Marketing cost	102000	101000
2.	Produce' net price	132000	-
3.	Commission agent's selling price	144000	-
4.	Commission agent's margin	12000	-
6.	Farmer Producer Organization's selling price	-	176000
7.	Wholesaler's selling price	156000	-
8.	Wholesaler's margin	12000	-
9.	Retailer's selling price	240000	240000
10.	Retailer margin	84000	64000
11.	Producer's share in consumer's rupee (%)	55	75
12.	Price received by the farmer	132000	180000
13.	Marketing cost + Marketing margin	210000	165000
14.	Index of Marketing Efficiency (MME)	0.62	1.06

According to Table 8, the total marketing cost for dairy in channel I was Rs.31600 per quintal and channel II was Rs. 28000 per quintal, respectively. As a result, the cost of marketing dairy in channel I was Rs.31600 greater than channel II, which was Rs.28000. Channel I had a marketing efficiency of 0.99 and channel II had a marketing efficiency of 1.41. It implies that channel II is more productive than channel I. Channel I had a higher overall marketing cost and marketing margin (Rs. 46000 per quintal) than channel II (Rs.34000perquintal). This means that the number of intermediaries in an existing channel reduces the marketing efficiency of that channel when compared to a route with fewer intermediaries. As a result, in comparison to channel I, the price obtained by the farmer in channel II is higher.

Table 8: Balajee Doon Farmer Producer Company

S. No.	Particulars	mer Marketing (Channel-I)	PO Marketing (Channel-II)
1.	Marketing cost	31600	28000
2.	Produce' net price	45600	
3.	Farmer Producer Organization's selling price	-	54000
4.	Dairy unit's selling price	54000	-
5.	Dairy unit margin	8400	-
6.	Retailer's selling price	60000	60000
7.	Retailer margin	6000	6000
8.	Producer's share in consumer's rupee (%)	76	80
9.	Price received by the farmer	45600	48000
10.	Marketing cost + Marketing margin	46000	34000
11.	Index of Marketing Efficiency (MME)	0.99	1.41

Table 9 shows the results of calculating marketing efficiency using Acharya's method. Channel I had a marketing efficiency of 0.17 while channel II had a marketing efficiency of 2.71. It implies that channel II is more productive than channel I. Channel I had a higher overall marketing cost and marketing margin (Rs. 125500 per quintal) than channel II (Rs.44360 per quintal). This means that the number of intermediaries in an existing channel reduces the marketing efficiency of that channel when compared to a route with fewer intermediaries. As a result, in comparison to channel I, the price obtained by the farmer in channel II is higher.

Table 9: Silgur Bizat Sawayat Sahakarita

S. No.	Particulars	Farmer Marketing (Channel-I)	FPO Marketing (Channel-II)
1.	Marketing cost	48500	27860
2.	Produce' net price	22000	-
3.	Trader's selling price	27500	-
4.	Trader's margin	5500	-
5.	Farmer Producer Organization's selling price	-	121000
6.	Processor's selling price	66000	-
7.	Processor's margin	38500	-
8.	Wholesaler's selling price	88000	-
9.	Wholesaler's margin	22000	-

10.	Retailer's selling price	137500	137500
11.	Retailer margin	49500	16500
12.	Producer's share in consumer's rupee (%)	16	88
13.	Price received by the farmer	22000	121000
14.	Marketing cost + Marketing margin	125500	44360
15.	Index of Marketing Efficiency (MME)	0.17	2.7

Table 10 represents that Channel I had a marketing efficiency of 0.95 and channel II had a marketing efficiency of 1.11. It implies that channel II is more productive than channel I.

Table 10: Bagwan Bahuudeshiya Sawayat Sahakarita

S. No.	Particulars	Farmer Marketing (Channel-I)	FPO Marketing (Channel-II)
1.	Marketing cost	75000	70000
2.	Produce' net price	95000	-
3.	Farmer Producer Organization's selling price	-	100000
4.	Wholesaler's selling price	115000	-
5.	Wholesaler's margin	20000	-
6.	Retailer's selling price	120000	120000
7.	Retailer margin	5000	20000
8.	Producer's share in consumer's rupee (%)	79.16	83.33
9.	Price received by the farmer	95000	100000
10.	Marketing cost + Marketing margin	100000	90000
11.	Index of Marketing Efficiency (MME)	0.95	1.11

SBSS has the highest marketing efficiency (2.7), followed by BDFPCL, BBSS, KUSSS, PSS, and HKSS with (1.41), (1.11), (1.08), (1.06), and (0.99) for commodity trading in burans juice, dairy, mushroom, ginger, poultry, and turmeric, respectively.

5. CONCLUSION AND IMPLICATIONS

In conclusion, the study has provided valuable insights into the business performance and marketing efficiency of selected Farmer Producer Organizations (FPOs) in the Garhwal division of Uttarakhand. The findings suggest that FPOs, such as Shilgur Bizat SwayatSahkarita (SBSS) and Balajee Doon Farmer Producer Company Limited (BDFPCL), have demonstrated financial viability and strong marketing efficiency, making them effective models for small and marginal farmers' collective action. The research highlights the potential of FPOs in improving farmers' income and reducing the dominance of intermediaries in the agricultural value chain. As policy implications, it is crucial for the government and relevant agencies to support and promote the formation and capacity building of FPOs, providing financial and technical assistance to ensure their long-term sustainability. Additionally, efforts should be made to streamline and simplify the marketing channels to reduce costs and enhance the share of producers in the consumer's rupee, ultimately benefiting small and marginal farmers and the overall agricultural sector.

6. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study has limitations even if it provides insight into the marketing effectiveness and business performance of a subset of Farmer Producer Organizations (FPOs) in Uttarakhand's Garhwal division. The study's scope is restricted to a single geographic area and a small number of FPOs, which may limit how broadly the results can be applied. Future investigations could broaden the study's focus to encompass a larger and more varied sample of FPOs from various Indian regions, offering a more thorough comprehension of their performance. Furthermore, the study does not explore the social and environmental effects of FPOs, instead concentrating on financial and marketing issues. Future studies might examine the more comprehensive socio-economic and environmental effects of FPO operations, which would help to provide a more complete evaluation of their contribution to sustainable rural development. Moreover, analyzing the obstacles encountered by FPOs and the particular tactics they utilize to surmount these obstacles will offer significant perspectives for practitioners and policymakers striving to augment the efficiency of these entities.

7. REFERENCES

1) **Babu, C. and Patoju, S.K.S.** 2021 Impact of farmer producer companies on marginal and small farmers: A study of Osmanabad district of Maharashtra. *Grassroots J. Natural Resources*, 4(2): 23-33
2) **Bihsnoi, R.K. and Kumari, S. 2020.** Challenges faced by farmer producer organization and strategies to overcome: a review. *Int. J. adv. Agric. sci. technol.*, 7(6): pg, 25-33
3) **Chauhan, S. 2015**. Producer companies in Madhya Pradesh. *Int. J. Recent Res.*, 2(3): 66-77
4) **Devi, D. R., Kumari, R. V., Lavanya, T., Chary, D. S., & Samul, G. 2021.** Kodangalfarmer service producer company-a constraint analysis. *Part I*: *Plant Sci*, 30.
5) **Dhakshana, J.D. and Rajandran, K.V.R. 2017**. A study on challenges faced by the farmers in direct marketing the rural business series. *Indian J. Sci. Res.*, 14(1):91-97
6) **Dhiman, P. K. and Rani, A. 2018**. A study on marketing strategies of self help groups in Punjab: challenges and constraints. *Int. J. Sales and Marketing*, ISSN (P): 2249-6939

7) **Kavin, A. and Divya, K. 2019.** Performance of farmer producer organization based on socio- economic factors in western region of Tamil Nadu. *Int. J. Chem. Stud.*, 7(3): 4434-4437
8) **Kujur, P. and Gauraha, AK. 2019.** Business performance of farmer producer organization in Chhattisgarh plains. *J. Pharmacogn. Phytochem.* 8(4): 3476-3480
9) **Mondal, A. 2010**. Farmer producer company concept, practices and learning: A case from action for social advancement. *Financing Agric.*, 42(7): 29-33
10) **Mudholkar, G. P. 2019.** Agricultural Marketing using Farmer Producer Organizations(FPO) Model. *Int. J. Adv. Sci. Technol.*, *28*(11): 407 - 412.
11) **Solaman, S. and Veerakumaran, G. 2020.** Problems and constraints Faced by FarmerProducer Company in India with Special Reference to Poultry Sector of Kerala. *Int. J. Innov. Sci. Res. Technol.*, ISSN No: - 2456-2165
12) **Venkattakumar, R**. and Sontakki, S.B. 2012. Producer companies in India: Experience and implications. *Indian J. Ext. Edu.* 1: 154-160
13) https://sfacindia.com.FarmerProducerOrganizationscheme.
14) https://www.nabard.org.HandbookofFarmerProducerOrganization.
15) https://dehradun.nic.in.SankhiyikiPatrika.
16) https://des.uk.gov.in.StatisticalBulletin.
17) https://www.uk.gov.in.Uttarakhandstateprofile.
18) https://www.rkvy.nic.in.Stateagriculturalplan.