

# COMPARATIVE ANALYSIS OF INCOME OF THE FPO FARMERS AND NON-FPO FARMERS IN RAISEN DISTRICT OF MADHYA PRADESH



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## ABSTRACT

*The concept of Farmer Producer Organizations (FPOs) was introduced to strengthen the socio-economic conditions of small and marginal farmers by improving their access to inputs, credit, markets, and technology. FPOs operated as registered entities under the Companies Act and were promoted by various government and non-government organizations to address market inefficiencies and enhance the collective bargaining power of farmers. The present study, entitled “Comparative Analysis of Income of the FPO Farmers and Non-FPO Farmers in Raisen District of Madhya Pradesh,” was conducted in the Gairatganj block of Raisen district. A purposive sampling technique was used to select soybean-growing villages where five percent of FPO farmers were identified, and fifteen percent of respondents were randomly chosen for analysis. The study examined the marketing channels adopted by both FPO and non-FPO farmers. For FPO farmers, three channels were identified: Channel I (FPO Farmer → FPO → Retailer → Consumer), Channel II (FPO Farmer → FPO → Wholesaler → Retailer → Consumer), and Channel III (FPO Farmer → FPO → Processor → Retailer → Consumer). Similarly, non-FPO farmers followed Channel I (Non-FPO Farmer → Local Trader → Retailer → Consumer), Channel II (Non-FPO Farmer → Commission Agent → Wholesaler → Retailer → Consumer), and Channel III (Non-FPO Farmer → Village Market → Retailer → Consumer). The findings revealed that FPO farmers experienced better marketing efficiency and lower price spread compared to non-FPO farmers. Overall, the study demonstrated that FPO membership positively influenced farmers’ income and market participation through more efficient marketing mechanisms.*

**Keywords:** *Farmer Producer Organization, Soybean, Marketing Channels, Income Comparison, Marketing Efficiency*

## INTRODUCTION

Farmer Producer Organizations (FPOs) were established with the primary objective of empowering small and marginal farmers by enabling collective action in production, input procurement, marketing, and access to credit and technology.

These organizations operated as registered entities and were supported by various government and non-government institutions to address issues such as low productivity, weak market linkages, and poor bargaining power.



FPO farmers benefited from organized input supply at reduced costs, technical guidance, and collective marketing, which helped them secure better prices and reduce their dependency on intermediaries. In contrast, non-FPO farmers operated individually, often facing difficulties in accessing quality inputs, institutional credit, and reliable market information. They typically sold their produce through local traders, village markets, or commission agents, which resulted in higher price spread and lower net returns. The lack of collective bargaining power made them more vulnerable to market fluctuations and exploitative practices. While FPO farmers were more likely to adopt improved agricultural practices and receive training through institutional support, non-FPO farmers relied on traditional methods and informal sources of information. Studies revealed that FPO farmers experienced better income stability, marketing efficiency, and access to value chains compared to non-FPO farmers. Moreover, FPO membership encouraged entrepreneurship, improved rural livelihoods, and fostered a sense of cooperation among members. Overall, the comparison highlighted the critical role of FPOs in enhancing the socio-economic status of farmers and promoting inclusive growth in the agricultural sector, whereas non-FPO farmers continued to face significant challenges in improving productivity and profitability.

## RESEARCH METHODOLOGY

The research methodology employed for the study was a combination of purposive and random sampling techniques to ensure both relevance and representativeness. Raisen district of Madhya Pradesh was purposively selected due to its accessibility and to minimize logistical and time-related

constraints. Within the district, Gairatganj block was chosen based on the predominance of Farmer Producer Organization (FPO) members engaged in soybean cultivation. A list of villages within the block was compiled, and five percent of the villages with a high concentration of soybean farmers were randomly selected. From these villages, a comprehensive list of soybean cultivators was prepared and categorized into five farm-size groups: marginal (less than 1 hectare), small (1–2 hectares), semi-medium (2–4 hectares), medium (4–10 hectares), and large (more than 10 hectares). A total of 100 soybean farmers were then selected using proportionate random sampling across these categories. To examine the marketing structure, 5 wholesalers, 5 distributors, and 10 retailers were also selected to gather data on marketing costs, margins, price spread, and efficiency. Primary data were collected through a pre-tested, structured interview schedule administered via personal interviews, while secondary data were obtained from relevant literature, government reports, journals, and official records available at the district and block levels. Appropriate statistical tools were used to analyse and interpret the data. The study focused on the agricultural year 2024–2025 to ensure contemporaneity and accuracy in capturing the existing marketing and income dynamics among FPO and non-FPO soybean farmers.

### Analytical Tools

#### 1. Cost of Marketing

$$C = C_f + C_{m1} + C_{m2} + C_{m3} + \dots + C_{mn}$$

#### 2. Margin of Market

$$AMI = Pri - (P_{pi} + C_{mi})$$

#### 3. Spread in Price

$$\text{Marketing Cost} + \text{Market Margin}$$

#### 4. Efficiency of Marketing

$$\text{Price received by producer}$$

$$\text{Marketing Cost} + \text{Marketing Margin}$$



## RESULTS AND DISCUSSION

**Table 1: Marketing margin, marketing efficiency, price spread of soybean of FPO farmers in Channel – I.**

S. No.	Particulars	Value (Rs./Quintal)
1	Producer sale price to FPO	5,200
2	Total cost incurred by Producer	50
3	Net price received by Producer	5,150
4	Cost incurred by FPO	35
5	FPO sale price to Retailer	5,750
6	Margin earned by FPO	565
7	Retailer sale price to Consumer	6,100
8	Margin earned by Retailer	350
9	Total Marketing Cost	85
10	Total Marketing Margin	915
11	Price Spread	1,000
12	Marketing Efficiency (%)	5.15

**Table 1:** In Channel I, where the soybean moved from the FPO farmer to the FPO and then to the retailer before reaching the consumer, the marketing process was efficient and cost-effective. The producer sold the soybean to the FPO at ₹5,200 per quintal, incurring a production cost of ₹50 and thus receiving a net price of ₹5,150. The FPO added a cost of ₹35 and sold the product to the retailer at ₹5,750, gaining a margin of ₹565. The retailer, in turn, sold the soybean to the consumer at ₹6,100 and earned a margin of ₹350. The total

marketing cost in this channel was ₹85, and the combined margin of the FPO and retailer was ₹915. The price spread, representing the difference between the consumer's price and the net amount received by the producer, was ₹1,000 per quintal. The marketing efficiency was calculated at 5.15%, suggesting that the channel was structured to deliver a larger share of the consumer's payment back to the producer, making it more beneficial and efficient for the farmer.

**Table 2: Marketing margin, marketing efficiency, price spread of soybean of FPO farmers in Channel – II.**

S. No.	Particulars	Value (Rs./Quintal)
1	Producer sale price to FPO	5,000
2	Total cost incurred by Producer	55
3	Net price received by Producer	4,945
4	FPO sale price to Wholesaler	5,500
5	Margin earned by FPO	500
6	Wholesaler cost	40
7	Wholesaler sale price to Retailer	6,000
8	Margin earned by Wholesaler	460
9	Retailer price to Consumer	6,450
10	Margin earned by Retailer	450
11	Total Marketing Cost	95



12	Total Marketing Margin	910
13	Price Spread	1,005
14	Marketing Efficiency (%)	4.92

**Table 2:** In Channel II, the marketing route involved multiple intermediaries, namely the FPO, wholesaler, and retailer, before the soybean reached the consumer. The producer sold the crop to the FPO at ₹5,000 per quintal, with a cost of ₹55, thus realizing a net price of ₹4,945. The FPO sold it to the wholesaler at ₹5,500, earning a margin of ₹500. The wholesaler incurred a cost of ₹40 and then sold it to the retailer at ₹6,000, making a margin of ₹460. Finally, the retailer sold the soybean to the consumer at ₹6,450 and gained a margin of ₹450. The total marketing cost in this

channel was ₹95, while the total marketing margin stood at ₹910. The price spread, which indicates the gap between the price paid by the consumer and the amount actually received by the producer, was ₹1,005 per quintal. The marketing efficiency was calculated at 4.92%, which, although slightly lower than Channel I, still demonstrated a reasonably effective marketing system. However, the presence of additional intermediaries resulted in slightly higher marketing costs and reduced efficiency compared to more direct channels.

**Table 3: Marketing margin, marketing efficiency, price spread of soybean of FPO farmers in Channel – III.**

S. No.	Particulars	Value (Rs./Quintal)
1	Producer sale price to FPO	4,800
2	Total cost incurred by Producer	60
3	Net price received by Producer	4,740
4	FPO sale price to Processor	5,400
5	Margin earned by FPO	540
6	Processor cost	60
7	Processor sale price to Retailer	6,100
8	Margin earned by Processor	640
9	Retailer price to Consumer	6,700
10	Margin earned by Retailer	600
11	Total Marketing Cost	120
12	Total Marketing Margin	1,080
13	Price Spread	1,200
14	Marketing Efficiency (%)	3.95

**Table 3:** Channel III involved the sale of soybean through the FPO to a processor, then to a retailer, and finally to the consumer. The producer sold the crop to the FPO at ₹4,800 per quintal, incurring a cost of ₹60, thereby receiving a net price of ₹4,740. The FPO sold the produce to the processor at ₹5,400, earning a margin of ₹540. The processor incurred a processing

cost of ₹60 and sold the processed soybean to the retailer at ₹6,100, gaining a margin of ₹640. The retailer, in turn, sold it to the consumer at ₹6,700, earning a margin of ₹600. The total marketing cost in this channel was ₹120, while the total marketing margin amounted to ₹1,080. The price spread, i.e., the difference between the consumer's price and the net price received

by the producer, was ₹1,200 per quintal. The marketing efficiency was calculated at 3.95%, indicating lower efficiency compared to the other channels due to the involvement of more intermediaries and

higher costs. Despite the value addition by the processor, the returns to the farmer were relatively reduced in this channel, and the cost burden was higher, making it less efficient.



**Table 4: Marketing margin, marketing efficiency, price spread of soybean of non - FPO farmers in Channel – I.**

S. No.	Particulars	Value (Rs./Quintal)
1	Producer sale price to Trader	5,100
2	Total cost incurred by Producer	52
3	Net price received by Producer	5,048
4	Trader sale price to Retailer	5,700
5	Margin earned by Trader	600
6	Retailer sale price to Consumer	6,100
7	Margin earned by Retailer	400
8	Total Marketing Cost	90
9	Total Marketing Margin	1,000
10	Price Spread	1,090
11	Marketing Efficiency (%)	4.63

**Table 4:** In Channel I of the soybean marketing system for non-FPO farmers, the produce was sold directly to a local trader, who then passed it to a retailer for final sale to the consumer. The producer sold the soybean to the trader at ₹5,100 per quintal, incurring a cost of ₹52, thus receiving a net income of ₹5,048. The trader then sold it to the retailer at ₹5,700, earning a margin of ₹600. The retailer further sold the soybean to the end consumer at ₹6,100, earning a margin of ₹400. The total marketing cost involved in this channel was ₹90, while the

combined marketing margin was ₹1,000. The price spread, which is the difference between the amount paid by the consumer and the net amount received by the producer, amounted to ₹1,090 per quintal. The marketing efficiency was calculated at 4.63%, indicating moderate performance. While the channel involved fewer intermediaries than others, the lack of collective bargaining and organized support structures contributed to a slightly reduced efficiency compared to FPO-led channels.

**Table 5: Marketing margin, marketing efficiency, price spread of soybean of non - FPO farmers in Channel – II.**

S. No.	Particulars	Value (Rs./Quintal)
1	Producer sale price	4,900
2	Total cost incurred by Producer	58
3	Net price received by Producer	4,842
4	Wholesaler sale price to Retailer	5,900
5	Commission Agent & Wholesaler Margin	500
6	Retailer price to Consumer	6,400
7	Margin earned by Retailer	500
8	Total Marketing Cost	110



9	Total Marketing Margin	1,000
10	Price Spread	1,110
11	Marketing Efficiency (%)	4.36

**Table 5:** In Channel II of soybean marketing for non-FPO farmers, the sale involved three intermediaries—commission agent, wholesaler, and retailer. The farmer sold the produce at ₹4,900 per quintal, incurring a cost of ₹58, thereby receiving a net return of ₹4,842. The wholesaler, through the commission agent, sold the product to the retailer at ₹5,900, earning a combined margin of ₹500. The retailer then sold it to the consumer at ₹6,400, gaining another ₹500 in margin. The total marketing cost incurred in this

channel was ₹110 per quintal, while the total marketing margin stood at ₹1,000. The price spread, defined as the difference between the consumer price and the net price received by the producer, amounted to ₹1,110 per quintal. The marketing efficiency was calculated to be 4.36%, which was lower than Channel I, indicating that the additional layer of intermediaries slightly increased the marketing cost and reduced the share of the consumer's rupee reaching the producer.

**Table 6: Marketing margin, marketing efficiency, price spread of soybean of non - FPO farmers in Channel – III.**

S. No.	Particulars	Value (Rs./Quintal)
1	Producer sale price	4,700
2	Total cost incurred by Producer	60
3	Net price received by Producer	4,640
4	Retailer sale price to Consumer	6,400
5	Margin earned by Retailer	600
6	Total Marketing Cost	130
7	Total Marketing Margin	1,060
8	Price Spread	1,190
9	Marketing Efficiency (%)	3.90

**Table 6:** In Channel III of the soybean marketing system for non-FPO farmers, the produce was marketed through the village market and then sold by the retailer to the end consumer. The farmer sold the soybean at ₹4,700 per quintal, incurring a cost of ₹60, thus earning a net price of ₹4,640. The product was eventually sold to consumers by the retailer at ₹6,400 per quintal. The retailer gained a margin of ₹600 in the process. The total marketing cost incurred in this channel was ₹130 per quintal, and the total marketing margin stood at ₹1,060.

The price spread, which is the gap between the consumer's price and the net amount received by the producer, was ₹1,190 per quintal. The marketing efficiency in this channel was the lowest among all, calculated at 3.90%, indicating a relatively inefficient channel due to higher marketing costs and limited returns to the producer. This reflects the disadvantages faced by non-FPO farmers, particularly when relying on local markets without organized support structures.





## CONCLUSION

The study conducted on the marketing of soybean by FPO and non-FPO farmers revealed significant differences in marketing structure, cost components, margins, price spread, and overall marketing efficiency across the channels. It was observed that FPO-affiliated farmers benefitted from more organized and cost-effective marketing channels, with fewer intermediaries and better price realization. Among the three FPO marketing channels, Channel I (FPO Farmer → FPO → Retailer → Consumer) recorded the highest marketing efficiency of 5.15% with the lowest marketing cost and price spread, indicating that it was the most efficient route for soybean marketing. In contrast, Channel III (FPO Farmer → FPO → Processor → Retailer → Consumer) showed the lowest efficiency at 3.95%, mainly due to higher marketing costs and increased number of intermediaries. On the other hand, non-FPO farmers, lacking collective bargaining and institutional support, faced higher marketing costs and reduced returns. Their most efficient channel was Channel I (Non-FPO Farmer → Trader → Retailer → Consumer) with a marketing efficiency of 4.63%, while Channel III (Non-FPO Farmer → Village Market → Retailer → Consumer) was the least efficient at 3.90%. Overall, FPO channels outperformed non-FPO channels in terms of both producer share in consumer's rupee and marketing efficiency. The findings highlighted the crucial role of FPOs in reducing the dependency on middlemen, enhancing farmer profitability, and streamlining the market chain. Therefore, strengthening and expanding FPO-based marketing systems can significantly improve income levels for small and marginal soybean growers, ensuring more equitable and sustainable agricultural marketing practices.

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