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Socio-economic and psychological profile of farmer producer organisation members in Kashmir valley

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Abstract

This study examined the socio-economic and psychological profile of Farmer Producer Organisation (FPO) members in the Kashmir Valley. A total of 404 respondents were selected from 13 purposively chosen FPOs using proportionate random sampling. Data was collected through face-to-face interviews using a structured interview schedule. The findings revealed that respondents were evenly distributed across age groups, with 37.40 per cent belonging to 38-52 years and 37.10 per cent to 19-37 years, indicating a predominantly economically active membership base. The educational status showed considerable diversity, with 23.00 per cent being illiterate, while others ranged from basic literacy to postgraduate level (4.20%). Nearly half of the respondents (49.00%) belonged to small family sizes (2-5 members), and a majority (50.40%) possessed small landholdings (2-7 Kanals), reflecting the dominance of marginal farmers within FPOs. In terms of economic characteristics, 46.50 per cent of respondents fell under the below 1.84 lakh annual income category, and farming experience of up to 18 years was observed for 37.90 per cent of the respondents. More than half of the respondents (52.70%) had membership duration of up to four years, indicating relatively recent participation in FPOs. Agriculture was the primary occupation for 80.19 per cent of respondents, highlighting their strong dependence on farming. In terms of behavioural characteristics, most respondents exhibited medium levels of information source utilization (43.30%), innovativeness (47.30%), economic motivation (54.70%), and decision-making ability (45.30%). A majority (65.60%) had received training through FPOs, reflecting active capacity-building efforts. The study concludes that FPO membership in the region is largely dominated by small and marginal farmers with moderate behavioural traits, suggesting significant potential for strengthening FPO effectiveness through targeted interventions in training, information access, and entrepreneurial development.

Keywords: Farmer producer organisations, socio-economic profile, Kashmir valley, innovativeness, economic motivation, decision-making ability

1. Introduction

Agriculture remains the cornerstone of India's economy, engaging approximately 42 per cent of the nation's workforce and contributing around 18 per cent to the country's Gross Domestic Product (Ministry of Agriculture & Farmers' Welfare, 2023). The sector, however, is characterized by fragmented landholdings, with over 86 per cent of farmers classified as small and marginal, operating on less than two hectares of land (Agricultural Census, 2015-16) ^[1]. These structural constraints expose smallholder farmers to significant vulnerabilities, including limited bargaining power, high transaction costs, inadequate access to quality inputs, exploitation by market intermediaries, and restricted market linkages (Kumar *et al.*, 2020; Singh and Hansra, 2021) ^[14, 35]. In recognition of these challenges, the Government of India launched the Central Sector Scheme for the "Formation and Promotion of Farmer Producer

Organisations (FPOs)" in 2020, with a committed budgetary outlay of ₹6,865 crores to establish 10,000 new FPOs by 2027 (Ministry of Agriculture & Farmers' Welfare, 2020). FPOs are envisaged as collective institutional mechanisms that enable farmers to achieve economies of scale in input procurement, production, processing, and marketing, thereby enhancing their income and livelihood security (Mukherjee *et al.*, 2018; Nikam *et al.*, 2019) ^[23, 26].

The effectiveness of FPOs as vehicles for agricultural transformation is contingent upon the human capital endowments of their members. Understanding the socio-economic characteristics, psychological attributes, and communication behaviour of FPO members is essential for designing targeted capacity-building interventions and strengthening institutional support systems (Mahesh Babu *et al.*, 2021; Arvind *et al.*, 2025) ^[19, 2]. Member profiling provides a critical baseline for assessing the readiness of

farmers to engage with FPO activities, adopt innovative practices, and participate in value chain governance. Several studies have examined the profile characteristics of FPO members across different regions of India. Mahesh Babu *et al.* (2021) ^[19] profiled members in the Rayalaseema region of Andhra Pradesh, reporting middle-aged farmers with high school education and small landholdings as the dominant profile. Revanth and Kote (2024) ^[32] examined members in Kurnool district, finding moderate levels across most personal, socio-economic, and behavioural characteristics. Arvind *et al.* (2025) ^[2] conducted a comparative analysis in Karnataka, revealing inter-district variations in education, landholding, and extension contact. Banik *et al.* (2024) ^[3] investigated members in northern Bihar, highlighting the predominance of small and marginal farmers with diverse educational backgrounds. Dhayal *et al.* (2023) ^[7] studied stakeholders in Rajasthan, identifying income enhancement and input cost reduction as primary motivations for membership. Kolekar *et al.* (2024) ^[13] extended the profiling framework to examine the effect of socio-economic characteristics on pomegranate productivity among FPO members in Maharashtra.

Against this backdrop, the present study was undertaken to examine the socio-economic and psychological profile of FPO members in Kashmir Valley. The specific objective of the study is to analyse the distribution of respondents according to their age, education, family size, landholding, annual income, farming experience, membership duration, occupation, sources of information, innovativeness, economic motivation, training received, and decision-making ability.

2. Materials and Methods

2.1 Selection of FPOs and Respondents

Kashmir Valley had 51 registered FPOs across 10 districts as of 2023, of which 34 were actively functional. For the present study, 13 FPOs having a membership of at least 200 were purposively selected from these 34 functional FPOs, comprising 5 fruit-based, 4 vegetable-based, 2 honey-based,

1 paddy (Mushqbudji)-based, and 1 saffron-based FPO. The total population in the 13 selected FPOs was 4,038 members. The sample size was determined at 10 per cent of the population ($n = 404$). The number of respondents from each FPO was allocated using the proportionate allocation method, and individual members were selected through simple random sampling from each FPO.

2.2 Measurement of Variables

The variables selected for the study included age, education, family size, landholding, annual income, farming experience, membership duration, occupation, sources of information, innovativeness, economic motivation, training received, and decision-making ability. Innovativeness, economic motivation, and decision-making ability were measured using established scales of Moulik (1965) ^[22], Supe (1969) ^[37] and Nandapurkar (1981) ^[25] respectively. Categorization of respondents into low, medium, and high groups was done using the cumulative square root frequency method (Dalenius and Hodges, 1957) ^[6]. This method is used to derive objective class intervals based on the distribution of scores.

The procedure involves the following steps:

1. Construction of frequency distribution of observed scores
2. Calculation of square root of each class frequency, i.e. $\sqrt{f}$
3. Computation of cumulative square root frequencies
4. Division of the total cumulative square root frequency into three equal parts

Identification of cut-off points corresponding to these cumulative values to form low, medium and high categories

3. Results and Discussion

3.1 Age

The results showed that the respondents were distributed across three age categories (Table 1 and Fig. 1).

Table 1: Distribution of respondents according to their age: (N=404)

Categories	Frequency	Percentage
19-37 years	150	37.10
38-52 years	151	37.40
53-80 years	103	25.50

The largest proportion of respondents belonged to the 38-52 years age group (37.40%), closely followed by the 19-37 years group (37.10%). The least proportion of respondents fell in the 53-80 years category (25.50%). Overall, the

distribution indicated that a majority of FPO members were concentrated in the economically active middle-aged group, with a relatively balanced representation of younger members.

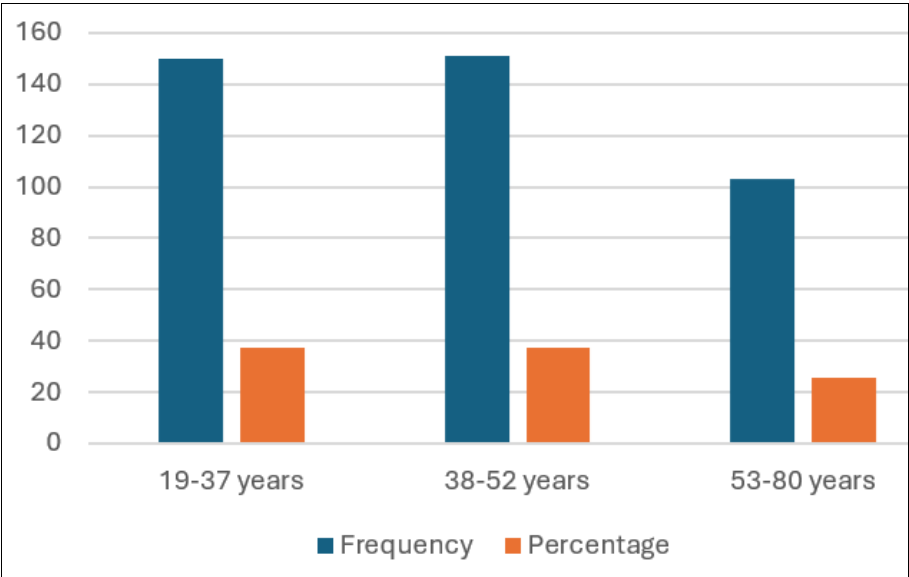


Fig 1: Age-wise distribution of respondents

This pattern suggests that FPO membership in the Kashmir Valley is primarily driven by individuals in their productive and decision-making phase of life. The near-equal representation of young and middle-aged farmers indicates potential continuity in participation, knowledge exchange, and adoption of innovations within FPOs. However, the comparatively lower proportion of older farmers may reflect reduced engagement of elderly farmers, possibly due to physical limitations or lesser inclination toward organized group-based farming structures. These findings align with previous studies showing that FPO participation is more common among younger and middle-aged farmers, while older farmers are relatively less likely to join such organizations (Saikia *et al.*, 2024) ^[33].

3.2 Education

The educational profile of the respondents (Table 2 and Fig. 2) revealed considerable variation in literacy and formal education levels among FPO members.

Table 2: Distribution of respondents according to the level of education: (N=404)

Categories	Frequency	Percentage
Cannot read and write	93	23.00
Can read and write	32	7.90
Middle	41	10.10
High school	89	22.00
Higher secondary	60	14.90
Graduate	72	17.80
Post graduate	17	4.20

The highest proportion of respondents were illiterate (cannot read and write) (23.00%), followed closely by those educated up to high school level (22.00%). A notable proportion of respondents were graduates (17.80%) and higher secondary educated (14.90%), while a smaller share had middle school education (10.10%). Only 7.90 per cent could read and write without formal schooling, and the least proportion of respondents were postgraduates (4.20%).

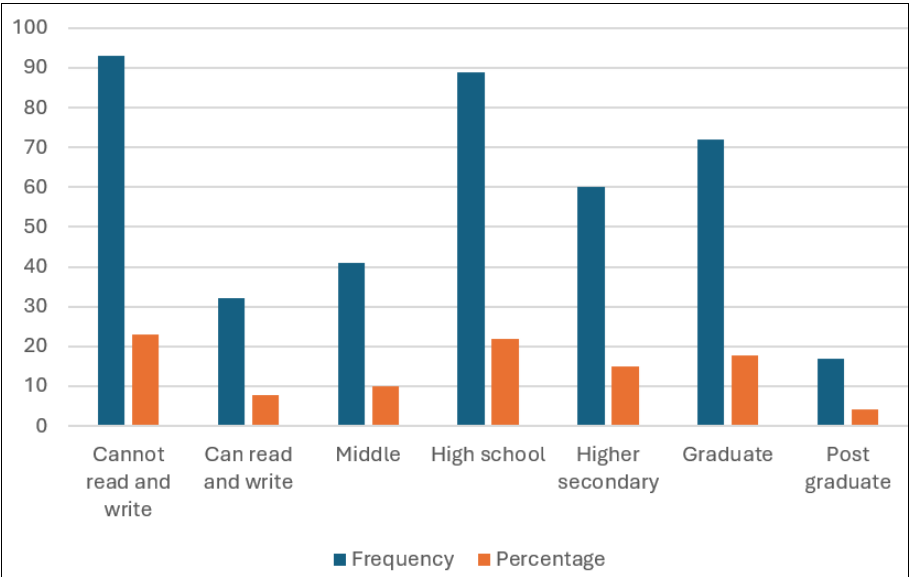


Fig 2: Educational profile of respondents

Overall, the findings indicated a heterogeneous educational background among FPO members in the Kashmir Valley, with a substantial proportion still lacking formal education beyond basic literacy. However, the presence of a considerable number of graduates and higher secondary educated farmers suggests a growing acceptance of formal knowledge systems within FPO structures. The findings are consistent with earlier studies reporting that FPOs attract members from diverse educational backgrounds, although better-educated farmers are generally more likely to participate actively in such organizations. Previous research also emphasizes that education enhances farmers' ability to access market information, adopt innovations, and engage effectively in institutional processes (Jaacks *et al.*, 2025; Kumar *et al.*, 2023) ^[11, 15].

3.3 Family size

The distribution of respondents according to family size (Table 3 and Fig. 3) revealed that nearly half of the FPO members (49.00%) belonged to small families comprising 2-5 members. This was followed by 40.09 per cent of respondents having medium-sized families (6-8 members), while only a small proportion (10.91%) belonged to large families (9-20 members).

Table 3: Distribution of respondents according to the family size: (N=404)

Categories	Frequency	Percentage
2-5 members	198	49.00
6-8 members	162	40.09
9- 20 members	44	10.91

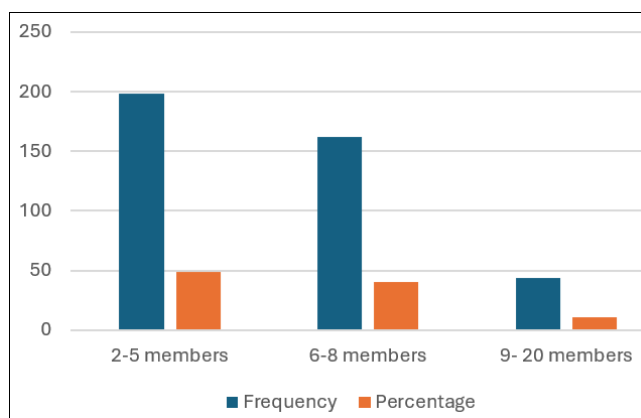


Fig 3: Family size distribution of respondents

Overall, these findings indicate that FPO participation in the Kashmir Valley is predominantly driven by nuclear or small-to-medium family systems, which likely facilitate efficient resource management, rapid decision-making, and higher adaptability to institutional innovations. The underrepresentation of large families may reflect a broader rural transition away from traditional joint family structures, potentially influencing labor availability and intra-household farm dynamics, though it also suggests sufficient household workforce for sustained FPO engagement without excessive coordination demands (Patil *et al.*, 2025; Purushothaman, 2023; Gurung & Choubey, 2022) ^[29, 31, 10].

3.4 Land holding: The data on land holding (Table 4 and

Fig. 4) showed that half of the respondents (50.40%) possessed small land holdings ranging from 2-7 kanals. This was followed by 32.00 percent of respondents with medium land holdings (8-19 kanals), while only 17.60 per cent had relatively larger land holdings (20-60 kanals).

Table 4: Distribution of respondents according to the land holding: (N=404)

Categories	Frequency	Percentage
2-7 kanals	204	50.40
8-19 kanals	129	32.00
20-60 kanals	71	17.60

(Note: 1 kanal $\approx$ 0.125 acres)

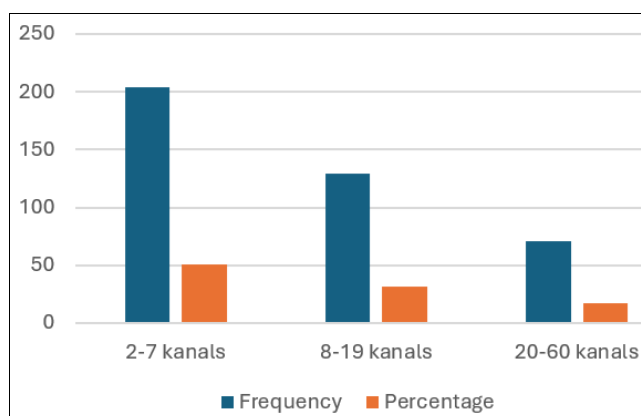


Fig 4: Landholding profile of respondents

The results clearly indicate that the majority of FPO members were small and marginal landholders. This pattern highlights the strong presence of smallholder farmers within FPO structures in the Kashmir Valley, reinforcing the role of FPOs as inclusive institutions catering primarily to resource-constrained farmers. The predominance of small landholdings also suggests that collective action through FPOs may be particularly important for achieving economies of scale, improving market access, and enhancing bargaining power among these farmers. The findings are consistent with earlier studies reporting that fragmented and small landholdings often encourage farmers to participate in collective institutions such as FPOs to overcome production and marketing constraints (Latif, 2020) [18].

3.5 Annual income

The distribution of respondents according to annual income (Table 5 and Fig. 5) revealed that nearly half of the FPO members (46.50%) belonged to the lowest income category (below ₹1,84,000). This was followed by 36.10 per cent of respondents falling in the middle-income group (₹1,84,000-₹3,38,000), while only 17.40 per cent of respondents reported annual income above ₹3,38,000.

Table 5: Distribution of respondents according to the annual income: (N=404)

Categories	Frequency	Percentage
Below Rs.1,84,000	188	46.50
Rs. 1,84,000 - Rs. 3,38,000	146	36.10
Above Rs. 3,38,000	69	17.40

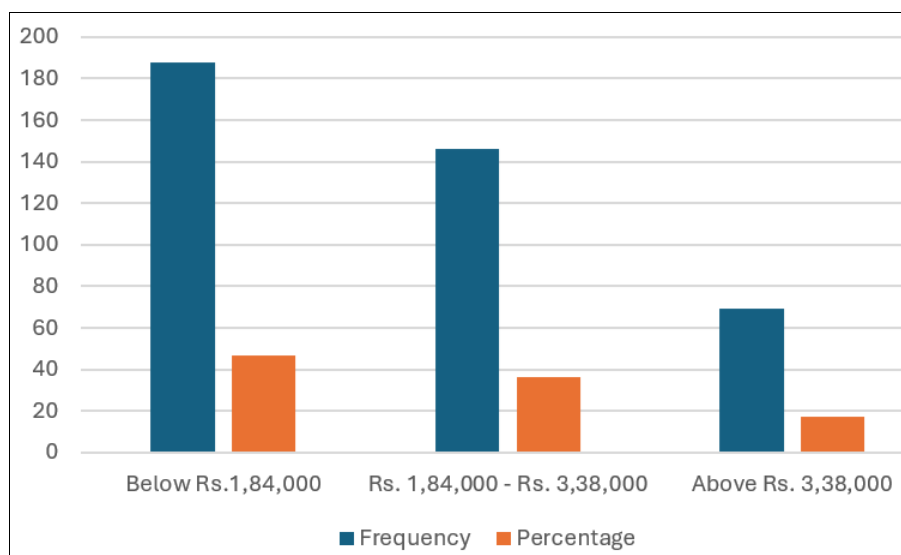


Fig 5: Income profile of respondents

The findings indicate that a majority of FPO members in the Kashmir Valley belonged to low-income households, suggesting that FPO membership is largely concentrated among economically weaker and marginal farming families. This pattern highlights the importance of FPOs as collective institutions that can enhance farmers' income through improved market access, collective marketing, reduced transaction costs, and better bargaining power. At the same time, the relatively smaller proportion of higher-income members may reflect limited diversification opportunities and restricted market-linked profitability among most respondents. These findings emphasize the need for strengthening income-enhancing interventions, value addition activities, and market integration within FPO frameworks.

The results are consistent with earlier studies showing that small and marginal farmers with lower income levels are more likely to participate in FPOs and producer collectives to overcome market and resource constraints. Previous research has also reported that FPO membership contributes

to improved income, consumption, and economic stability through collective action and enhanced market participation (Singh & Vatta, 2019; Lalitha *et al.*, 2022; Pasupuleti *et al.*, 2025) [34, 17, 28].

3.6 Farming experience

The data on farming experience (Table 6 and Fig. 6) showed that 37.90 per cent of respondents had up to 18 years of farming experience, closely followed by 37.10 per cent having 19-34 years of experience. A smaller proportion of respondents (25.00%) reported more than 34 years of farming experience.

Table 6: Distribution of respondents according to the farming experience: (N=404)

Categories	Frequency	Percentage
Up to 18 years	153	37.90
19-34 years	150	37.10
Above 34 years	101	25.00

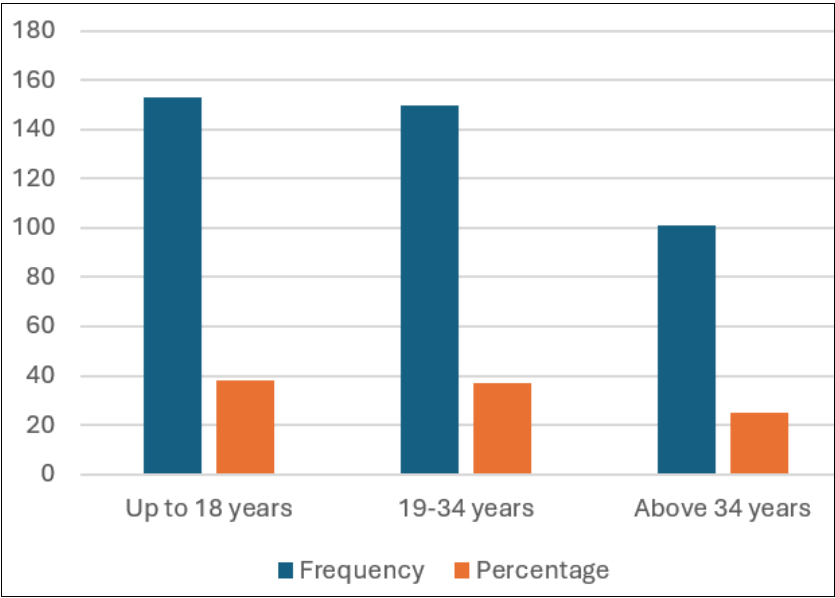


Fig 6: Farming experience profile of respondents

Overall, the results indicated that most FPO members had moderate to moderately high levels of farming experience. This suggests that FPOs in the Kashmir Valley are primarily composed of experienced farmers who possess substantial practical knowledge of agricultural practices. Such experience can positively contribute to better decision-making, adoption of improved technologies, and peer-to-peer learning within FPOs. However, the presence of a quarter of respondents with very long farming experience also indicates a segment that may be more traditional in their practices, potentially requiring targeted efforts to enhance adoption of modern innovations. The findings are consistent with previous studies indicating that farming experience plays an important role in shaping farmers’ participation in collective organizations and adoption of improved agricultural practices. Experienced farmers often possess greater practical knowledge, stronger social networks, and better understanding of farming systems, which can support effective participation in FPO

activities and collective decision-making. However, studies also note that highly experienced farmers may sometimes be less inclined to adopt new technologies due to stronger attachment to conventional practices (Chowdhury *et al.*, 2024; Singh & Vatta, 2019) ^[5, 34].

3.7 Membership duration

The distribution of respondents according to membership duration (Table 7 and Fig. 7) revealed that a majority of the respondents (52.70%) had been associated with their respective FPOs for up to 4 years, whereas 47.30 per cent had membership duration of more than 4 years.

Table 7: Distribution of respondents according to the membership duration: (N=404)

Categories	Frequency	Percentage
Up to 4 years	213	52.70
More than 4 years	191	47.30

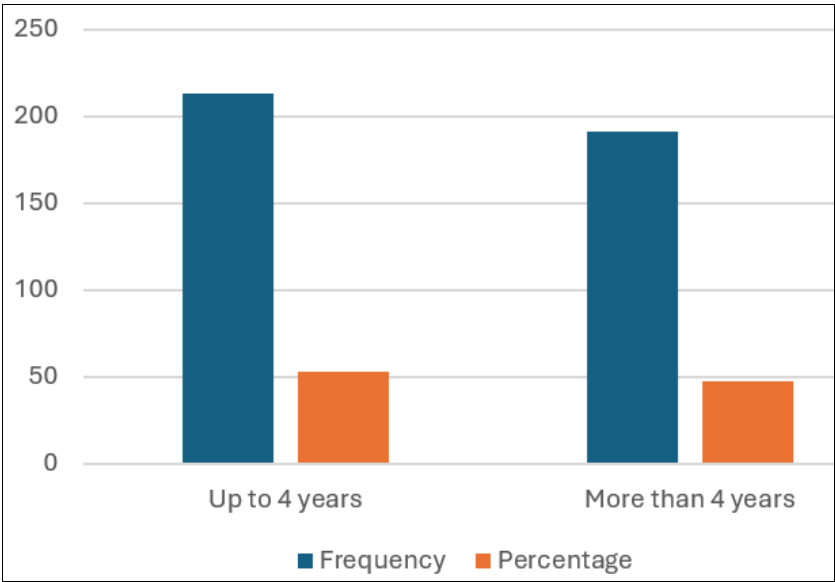


Fig 7: Membership duration profile of respondents

The findings indicated that most respondents were relatively recent members of FPOs, although a considerable proportion had longer association with these organizations. This trend may reflect the recent expansion and increasing acceptance of FPOs in the Kashmir Valley. The higher proportion of newer members suggests growing awareness among farmers regarding the benefits of collective action, market access, and institutional support offered through FPOs. At the same time, the substantial presence of long-term members may contribute to organizational stability, continuity in functioning, and peer learning within FPOs. Experienced members can play an important role in strengthening group cohesion, facilitating knowledge sharing, and encouraging the participation of newly enrolled farmers.

These findings are consistent with earlier studies reporting rapid growth in FPO membership in recent years due to increasing policy support, market-oriented interventions, and farmers' recognition of the economic advantages of collective organizations. Previous research also highlights

that longer membership duration often strengthens trust, participation, and commitment among members, thereby improving the overall functioning and sustainability of FPOs (Trebbin, 2014; Singh & Vatta, 2019) [38, 34].

3.8 Occupation

The occupational profile of respondents (Table 8 and Fig. 8) showed that the vast majority of respondents (80.19%) depended solely on agriculture for their livelihood. In contrast, 11.15 per cent combined agriculture with service-related activities, while 8.66 per cent were engaged in agriculture along with business activities.

Table 8: Distribution of respondents according to their occupation: (N=404)

Categories	Frequency	Percentage
Agriculture	324	80.19
Agriculture + Business	35	8.66
Agriculture + Service	45	11.15

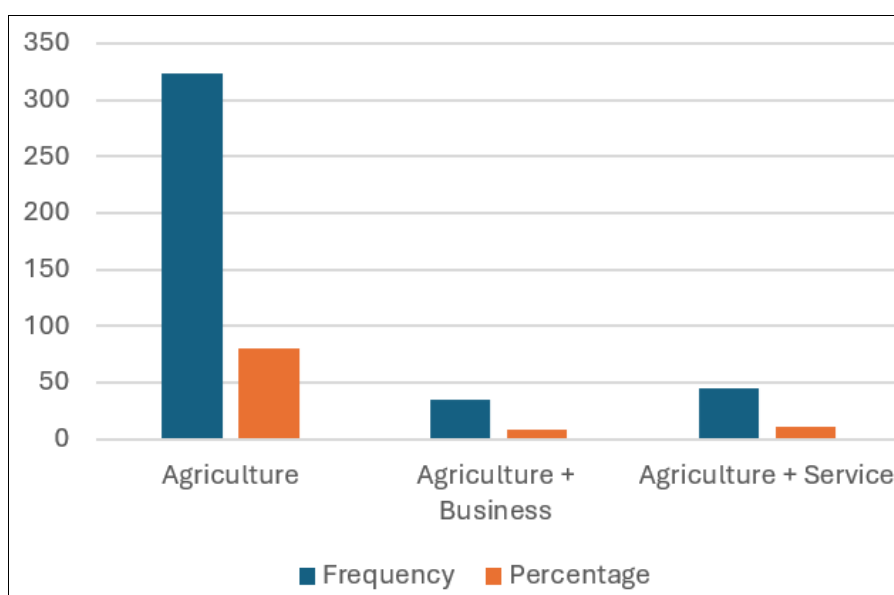


Fig 8: Occupational profile of respondents

Overall, the results indicated that agriculture remained the principal occupation of most FPO members in the Kashmir Valley. The predominance of agriculture-based livelihoods highlights the continued dependence of rural households on farming activities and emphasizes the relevance of FPOs as farmer-centric institutions. The comparatively smaller proportion of respondents engaged in supplementary occupations such as business and service suggests limited livelihood diversification among members. This underlines the importance of strengthening FPO-led entrepreneurial activities, value addition, and market-oriented interventions to enhance income opportunities beyond conventional farming.

These findings are consistent with earlier studies showing that smallholder farmers associated with FPOs primarily rely on agriculture as their main source of livelihood, while diversification into business and service sectors remains comparatively limited in rural areas. Previous research has emphasized that FPOs strengthen farmers' market participation, bargaining power, and access to value chains,

thereby creating opportunities for entrepreneurship and income enhancement beyond conventional farming practices (Trebbin, 2014; Kumar *et al.*, 2023) [38, 15].

3.9 Sources of information

The distribution of respondents according to their sources of information (Table 9 and Fig. 9) revealed that the highest proportion of respondents (43.30%) possessed a medium level of information source utilization. This was followed by 32.20 per cent of respondents having low utilization of information sources, whereas only 25.50 per cent fell under the high category.

Table 9: Distribution of respondents according to the sources of information: (N=404)

Categories	Frequency	Percentage
Low (< 11.55)	130	32.20
Medium (11.55-19.80)	171	43.30
High (>19.80)	103	25.50

Overall, the findings indicated that most FPO members had moderate exposure to communication channels, extension

personnel, and information networks related to agriculture and FPO activities.

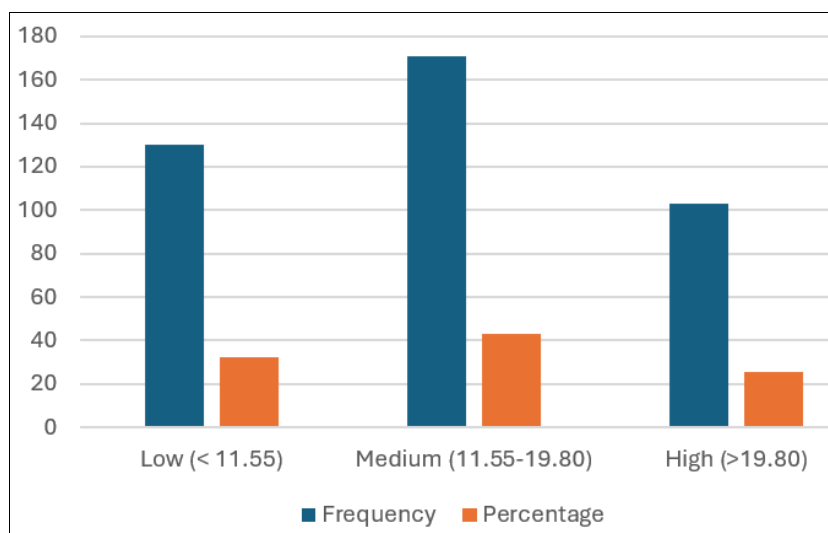


Fig 9: Sources of information profile of respondents

This suggests that although respondents had some level of access to agricultural information, a substantial proportion remained inadequately connected to diverse and reliable information sources. Moderate information exposure may influence the pace of technology adoption, market awareness, and participation in institutional activities. Therefore, strengthening extension contact, digital outreach, and farmer-to-farmer communication within FPOs could enhance the dissemination of timely and relevant information among members.

These findings are consistent with earlier studies highlighting the important role of information access, extension contact, and communication networks in enhancing farmers' participation in collective organizations and adoption of improved agricultural practices. Previous research has shown that farmers with greater exposure to communication channels, training programmes, extension systems, ICTs, and interpersonal networks are more likely to access timely agricultural information, adopt innovations, and participate actively in FPO activities and other

institutional support mechanisms. Conversely, inadequate access to reliable information sources can restrict awareness, technology uptake, and market participation among smallholder farmers (Trebbin, 2014; Glendenning *et al.*, 2012; Chandrakumar *et al.*, 2023) ^[38, 9, 4].

3.10 Innovativeness

The distribution of respondents according to innovativeness (Table 10 and Fig. 10) showed that nearly half of the respondents (47.30%) possessed a medium level of innovativeness. This was followed by 27.00 per cent of respondents with high innovativeness, while 25.70 per cent exhibited low innovativeness.

Table 10: Distribution of respondents according to the innovativeness: (N=404)

Categories	Frequency	Percentage
Low (<29.50)	104	25.70
Medium (29.50-34.10)	191	47.30
High (>34.10)	109	27.00

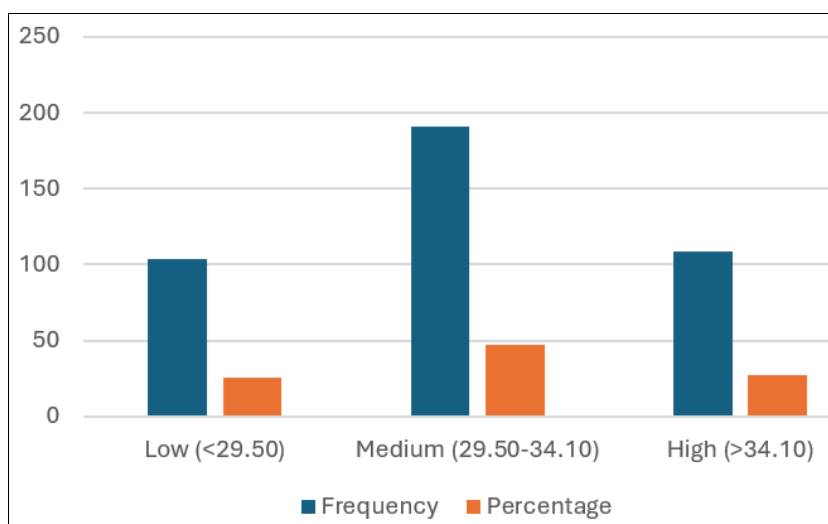


Fig 10: Innovativeness profile of respondents

The results indicated that the majority of FPO members demonstrated a moderate tendency toward accepting and trying new agricultural ideas and practices. This pattern suggests that FPO members in the Kashmir Valley were moderately receptive to change and innovation in farming practices. The presence of a considerable proportion of highly innovative respondents is encouraging for the diffusion of improved technologies and market-oriented practices through FPOs. However, the existence of respondents with low innovativeness indicates that certain farmers may still be hesitant toward adopting new approaches, thereby emphasizing the need for regular demonstrations, training programs, and exposure visits to build confidence and encourage innovation adoption. These findings are consistent with earlier studies highlighting that innovativeness plays a crucial role in farmers' adoption behavior and participation in collective agricultural systems. Research has shown that farmers with higher innovativeness are more likely to adopt improved technologies, engage in extension activities, and participate

effectively in farmer organizations, whereas lower innovativeness can act as a barrier to change and modernization in agriculture (Gao *et al.*, 2024; Vaidya *et al.*, 2023; Nagar *et al.*, 2024) [8, 24].

3.11 Economic motivation

The distribution of respondents according to economic motivation (Table 11 and Fig. 11) revealed that more than half of the respondents (54.70%) possessed a medium level of economic motivation. This was followed by 27.20 per cent of respondents having low economic motivation, while only 18.10 per cent exhibited a high level of economic motivation.

Table 11: Distribution of respondents according to the economic motivation: (N=404)

Categories	Frequency	Percentage
Low (<20.60)	110	27.20
Medium (20.60-23.40)	221	54.70
High (>23.40)	73	18.10

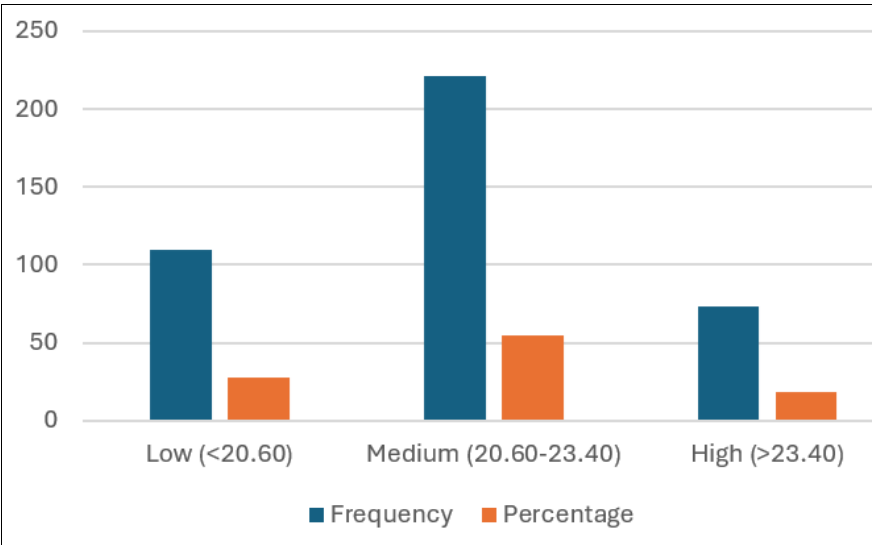


Fig 11: Economic motivation profile of respondents

Overall, the findings indicated that the majority of FPO members had a moderate orientation toward profit maximization and economic advancement through farming activities. This suggests that most respondents were reasonably motivated to improve their economic condition, but only a limited proportion demonstrated a strong entrepreneurial or profit-oriented outlook. Moderate economic motivation among members may influence their willingness to adopt improved practices, participate actively in collective marketing, and undertake risk-oriented ventures. Therefore, FPOs need to strengthen motivational and entrepreneurial development initiatives to encourage greater economic aspiration among members. These findings are consistent with recent studies indicating that farmers' economic motivation significantly influences their participation in Farmer Producer Organizations (FPOs), adoption of improved agricultural practices, and engagement in market-oriented activities. Research shows that economic motivation is a key psychological driver that encourages farmers to adopt innovations, participate in collective institutions, and pursue income-enhancing

opportunities through agriculture. Studies further highlight that farmers with higher economic motivation are more likely to engage in entrepreneurial activities, take calculated risks, and adopt modern technologies to improve productivity and income. However, moderate levels of motivation are often observed among smallholder farmers due to risk constraints, limited resources, and uncertainty in market returns (Pabba *et al.*, 2026; Chowdhury *et al.*, 2024; Jose *et al.*, 2023) [27, 5, 12].

3.12 Training received by respondents

The distribution of respondents according to training received (Table 12 and Fig. 12) showed that a majority of respondents (65.60%) had received training as members of FPOs, whereas 34.40 per cent had not received any training.

Table 12: Distribution of respondents according to training received: (N=404)

Categories	Frequency	Percentage
Training not received	139	34.40
Training received	265	65.60

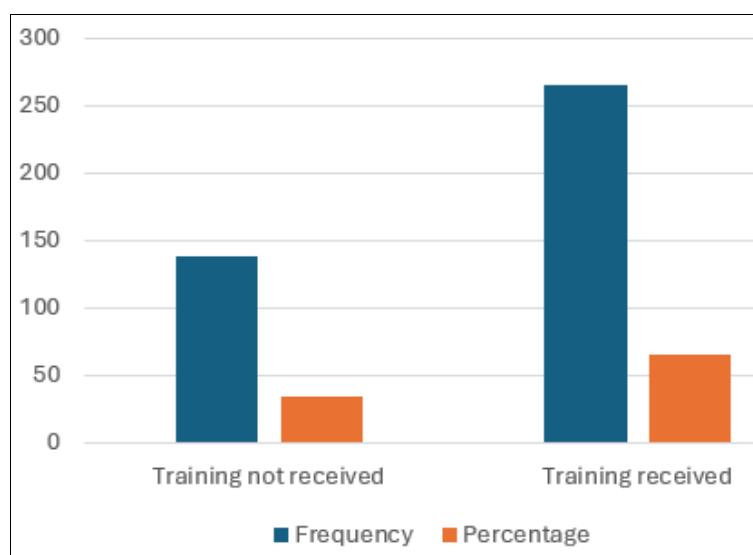


Fig 12: Training profile of respondents

The findings indicated that FPOs had been active in imparting training and capacity-building support to their members. This suggests that a considerable proportion of respondents had exposure to skill development and technical guidance, which may positively influence their knowledge, managerial ability, and adoption of improved agricultural and marketing practices. However, the presence of over one-third of respondents without any training indicates gaps in outreach and inclusiveness, emphasizing the need for wider and more regular training coverage across all member categories.

These findings align with empirical studies on Farmer Producer Organizations (FPOs) which emphasize that training and capacity-building interventions are central to strengthening farmers' managerial abilities, entrepreneurial skills, and participation in FPO activities. Studies on FPOs in India have reported that structured training programmes provided through implementing agencies, NGOs, and supporting institutions significantly enhance members' understanding of input management, market linkages, value addition, and collective decision-making. Training exposure has also been identified as a key factor improving FPO performance and member participation, as it builds

confidence and enables farmers to engage effectively in collective business activities and agri-entrepreneurship (Venkatesan *et al.*, 2020; Kumar *et al.*, 2023) ^[39, 15].

Further, recent literature highlights that capacity-building support, including training on governance, marketing, and value-chain development, is one of the critical success factors influencing FPO sustainability and member engagement in India (Singh *et al.*, 2026) ^[36].

3.13 Decision-making ability

The distribution of respondents according to decision-making ability (Table 13 and Fig. 13) revealed that the highest proportion of respondents (45.30%) possessed a medium level of decision-making ability. Equal proportions of respondents fell under the low (27.70%) and high (27.00%) categories.

Table 13: Distribution of respondents according to decision making ability: (N=404)

Categories	Frequency	Percentage
Low (<9.80)	112	27.70
Medium (9.80-13.20)	183	45.30
High (>13.20)	109	27.00

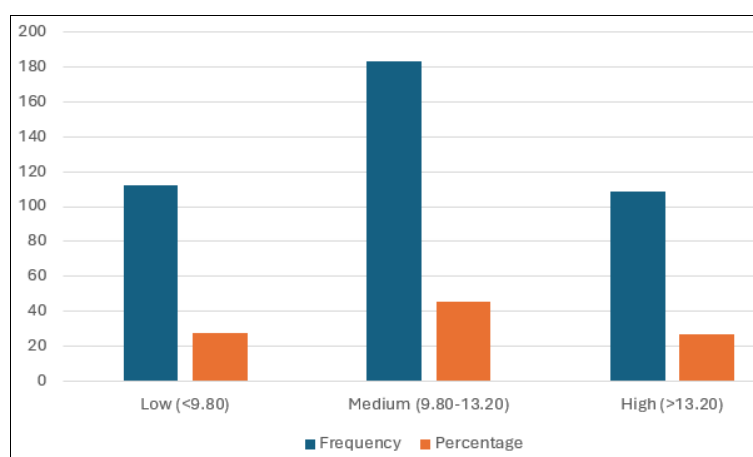


Fig 13: Decision making ability profile of respondents

Overall, the results indicated that the majority of FPO members demonstrated a moderate capacity to evaluate alternatives and make appropriate farming and livelihood decisions. This pattern suggests that most respondents were reasonably capable of making informed decisions regarding agricultural operations and economic activities. The presence of respondents with high decision-making ability is advantageous for effective participation in FPO-related activities and collective planning. However, the sizeable proportion of respondents with low decision-making ability indicates the necessity for continued extension support, training, and exposure to participatory management practices in order to strengthen farmers' confidence and analytical skills.

These findings are consistent with studies indicating that farmers' decision-making ability is influenced by access to information, education, training exposure, and participation in farmer organizations. Research on Farmer Producer Organizations has shown that collective platforms improve farmers' confidence and decision-making capacity by enabling shared learning, peer interaction, and exposure to market and technical knowledge (Chowdhury *et al.*, 2024; Prabhavathi *et al.*, 2023) ^[5, 30].

4. Conclusion

The study highlights that Farmer Producer Organisations (FPOs) in the Kashmir Valley are largely composed of small and marginal farmers who rely heavily on agriculture for their livelihoods and demonstrate moderate levels of awareness, motivation, and participation in institutional activities. The findings reflect the growing acceptance of FPOs among farming communities as collective platforms for improving economic opportunities, strengthening market participation, and enhancing access to information and support services.

At the same time, the study indicates that there remains considerable scope for improving the overall capacity and effectiveness of FPO members through continuous training, stronger extension support, better information dissemination, and promotion of entrepreneurial orientation. Strengthening these aspects can enhance farmers' confidence, participation, and ability to benefit from collective action. Overall, the study underscores the significant role of FPOs in promoting inclusive agricultural development and improving the socio-economic well-being of farming communities in the Kashmir Valley.

References

1. Ministry of Agriculture & Farmers' Welfare, Government of India. All India report on agricultural census 2015-16. New Delhi: Ministry of Agriculture & Farmers' Welfare; 2018.
2. Arvind GK, Belli RB, Karuna KM. Socio-economic profile of Farmer Producer Organization members in North Karnataka: An empirical study. *Journal of Scientific Research and Reports*. 2025;31(9):463-472.
3. Banik T, Prakash S, Lal SP, Narendra VN. Socio-economic appraisal of Farmer Producer Organisations (FPOs): Empirical insights from Northern Bihar. *International Journal of Agriculture Extension and Social Development*. 2024;7(6):434-448.
4. Chandrakumar A, Mohana GS, Adiga JD, Raviprasad TN, Manjesh GN. Analysis of information needs and search behaviour of cashew farmers in non-traditional areas of India: A pilot study. *Information Development*. 2023;41(4):493-510.
5. Chowdhury SR, Ghosh D, Rao TJ. Sentiment and success potential of farmers' producer organizations: A systematic literature review. *Local Economy: The Journal of the Local Economy Policy Unit*. 2024;39(1-2):92-104.
6. Dalenius T, Hodges JL. The choice of stratification points. *Scandinavian Actuarial Journal*. 1957;1957(3-4):198-203.
7. Dhayal V, Lal B, Deepshikha KM, Kalla PN. Reasons for joining Farmer Producer Organization by the stakeholders of Nagaur district of Rajasthan. *Indian Journal of Extension Education and Rural Development*. 2023;31:128-132.
8. Gao T, Lu Q, Zhang Y, Feng H. Does farmers' cognition enhance their enthusiasm for adopting sustainable digital agricultural extension services? Evidence from rural China. *Sustainability*. 2024;16(10):3972.
9. Glendenning CJ, Babu SC, Asenso-Okyere K. Information search behaviors of Indian farmers: Implications for extension services. *The Journal of Agricultural Education and Extension*. 2012;18(5):493-507.
10. Gurung R, Choubey M. Determinants of agricultural households to join farmer producer organisations (FPOs) in Northeast India: evidence from Sikkim. *International Journal of Social Economics*. 2022;50(4):465-477.
11. Jaacks LM, Singh N, Veluguri D, Connors K, Sooraj A, Kalra A, *et al.* Association of membership in a farmer producer organization with crop diversity, household income, diet diversity, and women's empowerment in Uttar Pradesh, India. *PLoS ONE*. 2025;20(3):e0319704.
12. Jose AE, Jayalekshmi G, Lade H, Karde R. Entrepreneurial behaviour of farmer producer organization members: An empirical investigation. *Asian Journal of Agricultural Extension, Economics & Sociology*. 2023;41(9):175-189.
13. Kolekar P, Chavan RV, Bharati SV. Effect of socio-economic characteristics on pomegranate productivity of Farmer Producer Organizations member farmers. *International Journal of Environmental and Climate Change*. 2024;14(1):83-90.
14. Kumar S, Rao DUM, Thombare P, Kale P. Small and marginal farmers of Indian agriculture: Prospects and extension strategies. *Indian Research Journal of Extension Education*. 2020;20(1):35-41.
15. Kumar KNR, Reddy MJM, Shafiwi AB, Reddy AA. Impact of farmer producer organizations on price and poverty alleviation of smallholder dry chillies farmers in India. *Research on World Agricultural Economy*. 2023;4(3):46-62.
16. Kumar S, Kumar R, Meena PC, Kumar A. Determinants of performance and constraints faced by farmer producer organizations (FPOs) in India. *Indian Journal of Extension Education*. 2023;59(2):1-5.
17. Lalitha N, Viswanathan PK, Vinayan S. Institutional Strengthening of Farmer Producer Organizations and

- Empowerment of Small Farmers in India: Evidence from a Case Study in Maharashtra. *Millennial Asia*. 2024;15(2):278-299.
18. Latif L. Farmer Producer Organization (FPO) as farmer collectives: A case study from Kashmir Valley [Master's thesis]. Jammu and Kashmir: Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir; 2020.
 19. Mahesh Babu T, Lakshmi T, Prasad SV, Sumathi V, Ramana Murthy B. Profile of farmer producer organization (FPO) members in Rayalaseema region of Andhra Pradesh. *The Pharma Innovation Journal*. 2021;10(4):501-505.
 20. Ministry of Agriculture & Farmers' Welfare, Government of India. The central sector scheme on formation and promotion of 10,000 Farmer Producer Organizations (FPOs): Operational guidelines. New Delhi: Ministry of Agriculture & Farmers' Welfare; 2020.
 21. Ministry of Agriculture & Farmers' Welfare, Government of India. Annual report 2022-23. New Delhi: Ministry of Agriculture & Farmers' Welfare; 2023.
 22. Moulik TK. A study of productive values of some factors of adoption of nitrogenous fertilizers and the influence of sources of information on adoption behaviour [PhD thesis]. New Delhi: Indian Agricultural Research Institute; 1965.
 23. Mukherjee A, Singh P, Ray M, Satyapriya, Burman RR. Enhancing farmers' income through farmers producer companies in India: Status and roadmap. *Indian Journal of Agricultural Sciences*. 2018;88(8):1151-1161.
 24. Nagar A, Nauriyal DK, Singh S. Factors influencing adoption of technical advice from agricultural extension services: Evidence from Western Uttar Pradesh, India. *The Indian Economic Journal*. 2024;72(5):741-754.
 25. Nandapurkar GG. Small farmers: A study on their entrepreneurial behaviour. New Delhi: Metropolitan Book Co. Pvt. Ltd.; 1981.
 26. Nikam V, Singh P, Arathy A, Kumar S. Farmer producer organisations: Innovative institutions for upliftment of small farmers. *Indian Journal of Agricultural Sciences*. 2019;89(5):1383-1392.
 27. Pabba AS, Ponnusamy K, Sankhala G, Niranjana DA. Modeling the behavioural intentions of farmers towards active participation in Farmer Producer Companies (FPCs): An extended Theory of Planned Behaviour. *Humanities and Social Sciences Communications*. 2026;13:384.
 28. Pasupuleti S, Nikam V, Veeram H, Praveen KV. Farmer producer organization-based value chain to leverage the income of small farmers: An empirical evidence from India. *Journal of Asian and African Studies*. 2025;60(1-4):30-33.
 29. Patil S, Mehta M, Pancholi G, Saxena A. Unveiling the dynamics of farmer producer organizations in India: a systematic review of status, challenges, and future directions. *Humanities and Social Sciences Communications*. 2025;12(1):15-28.
 30. Prabhavathi Y, Krishna Kishore NT, Siddayya, Ramachandra CT. Managerial competencies and business performance of Farmer Producer Organizations in India. *Millennial Asia*. 2023;14(1):80-91.
 31. Purushothaman S. Family farms in India and their future. *Small Farm Dynamics*. <https://smallfarmdynamics.wordpress.com/2023/12/17/family-farms-in-india-and-their-future/>
 32. Revanth, Kote P. Profile characteristics of members of farmer producer organizations (FPOs) in Andhra Pradesh. *The Andhra Agricultural Journal*. 2024;71(1):120-124.
 33. Saikia P, Das P, Deka P. Impact of farmer producer organizations on boosting economic empowerment of farmers. *Gujarat Journal of Extension Education*. 2024;38(2):24-31.
 34. Singh G, Vatta K. Assessing the economic impacts of farmer producer organizations: A case study in Gujarat, India. *Agricultural Economics Research Review*. 2019;32:139-148.
 35. Singh S, Hansra BS. Study on profile characteristics of Self-help Group members in Himachal Pradesh. *International Journal of Agriculture, Environment and Biotechnology*. 2021;14(2):223-228.
 36. Singh S, Sharma A, Singh A, Praveen K, Singh H, Kumawat PK, *et al.* What makes Farmer Producer Organizations work? A multi-level analysis of performance determinants in India. *Journal of Rural Studies*. 2026;123:104014.
 37. Supe SV. Factors related to different degrees of rationality in decision making among farmers [PhD thesis]. New Delhi: Indian Agricultural Research Institute; 1969.
 38. Trebbin A. Linking small farmers to modern retail through producer organizations - Experiences with producer companies in India. *Food Policy*. 2014;45:35-44.
 39. Venkatesan P, Sontakki BS, Shenoy S, Sivaramane N. Impact of Farmer Producer Organizations in fostering community entrepreneurship. *Indian Journal of Extension Education*. 2020;56(2):111-117.