



International Journal of Agriculture Extension and Social Development

ISSN Print: 2618-0723
ISSN Online: 2618-0731
NAAS Rating (2026): 5.04
IJAESD 2026; 9(9): 957-960
www.extensionjournal.com
Received: 09-06-2026
Accepted: 04-08-2026
Published: 25-09-2026

P Pratihari

MSc. Scholar, Department of
Agricultural Extension
Education, PGI, MPKV, Rahuri,
Maharashtra, India

BA Deshmukh

Assistant Professor,
Department of Agricultural
Extension Education, PGI,
MPKV, Rahuri, Maharashtra,
India

SS Sadaphal

Assistant Professor,
Department of Agricultural
Extension Education, PGI,
MPKV, Rahuri, Maharashtra,
India

SD Shinde

Assistant Professor,
Department of Statistics, PGI,
MPKV, Rahuri, Maharashtra,
India

Socio-economic status, entrepreneurial characteristics and enterprise performance of dal mill entrepreneurs in Solapur district of Maharashtra

P Pratihari¹, BA Deshmukh², SS Sadaphal³, SD Shinde⁴

DOI: <https://www.doi.org/10.33545/26180723.2026.v9.i9.m.4298>

ABSTRACT

Dal milling represents an important agro-processing activity in which agricultural produce is converted into a value-added food product. The socio-economic position of dal mill entrepreneurs is shaped not only by income and material resources but also by education, entrepreneurial experience, training, marketing practices, scientific orientation, information-seeking behaviour and social participation. The present study integrates these dimensions to examine the socio-economic status and enterprise-related characteristics of dal mill entrepreneurs in Solapur district of Maharashtra. An ex-post-facto research design was adopted. All eleven tahsils of Solapur district were purposively selected and 94 dal mill entrepreneurs were studied through a pre-tested personal interview schedule. Socio-economic status was measured using the modified Thakare and Ingale (2007) scale. Frequency, percentage, mean, standard deviation and correlation coefficient were used for analysis. More than half of the respondents (56.38%) belonged to the medium socio-economic status category, while 32.97 per cent belonged to the low category and 10.63 per cent to the high category. The mean socio-economic status score was 33.44 with a standard deviation of 1.72. The majority of respondents were middle-aged (53.19%), had medium information-seeking behaviour (56.38%), medium social participation (56.38%) and medium scientific orientation (51.06%). The dominant marketing channel was dal processor–retailer–consumer (42.55%). Education, entrepreneurial experience, training, marketing channels, scientific orientation and information-seeking behaviour showed positive and significant relationships with socio-economic status, whereas age showed a negative and non-significant relationship and social participation a positive and non-significant relationship. Major operational constraints were shortage of skilled labour during the milling season, inadequate storage, additional labour requirements for oiling and drying, irregular electricity supply and sieve breakage. The integrated findings indicate that improvement in human capital, technical capacity, information access, marketing efficiency and processing infrastructure is important for strengthening the socio-economic position of dal mill entrepreneurs.

Keywords: Socio-economic status, Dal mill entrepreneurs, Entrepreneurship, Marketing channels, Training, Scientific orientation, Information seeking, Solapur

1. Introduction

Pulses are an important component of the Indian food system, and dal milling provides an important link between agricultural production and food processing. The uploaded thesis identifies dal milling as an agro-processing enterprise involving cleaning, grading, conditioning, dehulling, splitting, separation, polishing and packing. Such activities provide opportunities for value addition and entrepreneurship.

The study was undertaken in Solapur district, Maharashtra, and was designed to examine the personal, social, extension and psychological characteristics of dal mill entrepreneurs, their marketing channels, socio-economic status, relationships between dependent and independent variables, and operational constraints with suggestions for overcoming them. The thesis explicitly proposed that there was a connection between respondents' personal, social, extension and psychological characteristics and their socio-economic status. Socio-economic status in the study was considered in relation to annual income, occupation, educational level, social participation, family size, house type and material possession. The modified Thakare and Ingale scale was used to measure the construct.

An integrated analysis is useful because the enterprise does not operate independently of the entrepreneur's social and economic environment. Education can influence information access; training can improve technical capacity; scientific orientation can support adoption of improved practices; marketing channels can influence enterprise opportunities; and information-seeking can support business decisions. The results therefore provide an opportunity to examine socio-economic status as the central outcome while considering the other dimensions studied in the thesis.

Corresponding Author: BA Deshmukh

Assistant Professor,
Department of Agricultural
Extension Education, PGI,
MPKV, Rahuri,
Maharashtra, India

2. Objectives

1. To assess the personal, extension and psychological characteristics of dal mill entrepreneurs.
2. To assess the marketing channels used by dal mill entrepreneurs.
3. To determine the socio-economic status of dal mill entrepreneurs.
4. To examine the relationship between selected independent variables and socio-economic status.

3. Materials and methods

3.1 Research design

An ex-post-facto research design was adopted. The study examined characteristics and conditions that already existed among the respondents rather than manipulating the independent variables.

3.2 Study area and sample

Solapur district was selected for the study. The eleven tahsils included Mohol, Madha, Pandharpur, Barshi, North Solapur, South Solapur, Malshiras, Akkalkot, Karmala, Sangola and Mangalwedha. A total of 94 dal mill entrepreneurs constituted the sample. The tahsil-wise respondent distribution was Mohol 7, Madha 8, Pandharpur 8, Barshi 11, North Solapur 5, South Solapur 20, Malshiras 6, Akkalkot 9, Karmala 7, Sangola 6 and Mangalwedha 7.

3.3 Data collection and measurement

A pre-tested interview schedule was used for personal data collection. The schedule covered personal variables (age, education and entrepreneurial experience), extension variables (training and marketing channels), psychological variables (scientific orientation, information-seeking behaviour and social participation), socio-economic status, constraints and suggestions. The schedule was pre-tested with five dal mill owners. Scientific orientation was measured using a modified Supe (2007) scale, information-seeking behaviour using a modified Rao (1985) scale, and socio-economic status using the modified Thakare and Ingale (2007) scale. Socio-economic status was classified as low up to 32, medium from 33 to 35 and high at 36 and above.

3.4 Statistical analysis

Frequency and percentage were used for distributional analysis, mean and standard deviation for score-based variables, and correlation coefficient for examining the relationship between independent variables

and socio-economic status.

4. Results and discussion

4.1 Personal and entrepreneurial profile

The respondents were predominantly middle-aged. Of the 94 entrepreneurs, 53.19 per cent belonged to the 36–55 year age group, 39.36 per cent were up to 35 years and 7.44 per cent were 56 years and above. The age structure suggests that the enterprise population contained a substantial proportion of entrepreneurs in the middle stage of working life. Within the thesis interpretation, this group was considered capable of taking independent decisions concerning enterprise management and technology.

4.2 Training, scientific orientation and information seeking

Training exposure was limited. The results reported that 43.61 per cent of respondents had undergone a low number of trainings and 40.42 per cent had never received training. The thesis associated the limited exposure with inadequate availability of training institutes and limited attention to training programmes for dal mill entrepreneurs. Scientific orientation was medium for 51.06 per cent, high for 26.59 per cent and low for 22.34 per cent of respondents. The mean score was 21.10 with a standard deviation of 3.26. Thus, 77.65 per cent had medium-to-high scientific orientation. Information-seeking behaviour was medium for 56.38 per cent, high for 32.97 per cent and low for 10.63 per cent, with a mean score of 7.68 and standard deviation of 1.93. Progressive and experienced entrepreneurs were the most frequently reported regular source, followed by mobile applications and marketing officers.

4.3 Social participation

Social participation was medium for 56.38 per cent of entrepreneurs, high for 26.59 per cent and low for 17.02 per cent. The mean score was 2.09 with a standard deviation of 1.07. The thesis suggests that the medium level may be associated with entrepreneurs having limited time for participation because of business-related activities.

4.4 Marketing channels

Three marketing channels were reported. The most widely used was dal processor–retailer–consumer, used by 42.55 per cent of respondents. The wholesaler–retailer route was used by 37.23 per cent and direct processor-to-consumer marketing by 20.21 per cent.

33.44 and the standard deviation was 1.72.

4.5 Socio-economic status

The central finding of the study was that 56.38 per cent of dal mill entrepreneurs had medium socio-economic status, 32.97 per cent had low status and 10.63 per cent had high status. The mean score was

Sr. No.	Marketing channel	Frequency	Percentage	Rank
1	Dal processor – Retailer – Consumer	40	42.55	I
2	Dal processor – Wholesaler – Retailer – Consumer	35	37.23	II
3	Dal processor – Consumer	19	20.21	III
	Total	94	100.00	

Sr. No.	Socio-economic status	Frequency (n = 94)	Percentage
1	Low Up to 32	31	32.97
2	Medium 33–35	53	56.38
3	High 36 and above	10	10.63
	Total	94	100.00
Mean	33.44	S.D.	1.72

The predominance of the medium category indicates that most respondents occupied an intermediate socio-economic position accord-

ing to the scale used. However, the proportion in the low category (32.97%) is substantial, indicating that a sizeable group may require

support to improve economic resources, enterprise facilities and associated social dimensions.

4.6 Enterprise assets and material resources

The material-possession results demonstrate that socio-economic status was reflected in a broad set of enterprise and household resources. Nearly all respondents possessed weighing balances (98.93%), while 78.72 per cent possessed dryers and 57.44 per cent possessed generators. All respondents possessed bags and polishers, whereas only 37.23 per cent possessed packing machines and 45.74 per cent possessed suction fans or blowers. Enterprise structure was predominantly primary dal milling (62.76%), followed by household dal mills (25.53%) and fully automated dal mills (11.70%). Motorcycles were possessed by 91.48 per cent of respondents. Television and social media were used as information sources by all respondents.

Household facilities were also generally favourable in selected dimensions: all respondents had toilet/soak-pit and electricity facilities, 91.48 per cent had neat and well-kept houses with courtyards, and 57.44 per cent had a storage house.

4.7 Other socio-economic and financial characteristics

The study reported that 65.95 per cent of entrepreneurs had borrowed loans, while 34.04 per cent had not borrowed. Regarding repayment behaviour, 93.61 per cent were non-defaulters and 6.38 per cent were defaulters. About 34.04 per cent were identified as progressive farmers and 18.08 per cent had received prizes at village, tahsil or district level. Landholding also showed that 37.23 per cent had marginal holdings, 32.97 per cent small holdings, 22.34 per cent semi-medium holdings and 7.44 per cent medium holdings; no respondent was in the large category. Irrigated cultivation was reported by 54.25 per cent and rainfed cultivation by 45.74 per cent.

4.8 Relationship of independent variables with socio-economic status

Correlation analysis showed that education, entrepreneurial experience, training, marketing channels, scientific orientation and information-seeking behaviour were positively and significantly associated with socio-economic status. Age had a negative and non-significant association, while social participation had a positive and non-significant association.

Sr.No.	Independent variables	Dependent variable
i)	Age	-0.0692NS
ii)	Education	0.23852*
iii)	Experience as an entrepreneur	0.21345*
iv)	Training received	0.26787**
v)	Marketing channels	0.28188**
vi)	Scientific orientation	0.23096*
vii)	Information seeking behavior	0.21735*
viii)	Social participation	0.1800NS

0.05 per cent level of significance = * 0.01 per cent level of significance = ** Non-significant = NS

The strongest reported association was with marketing channels ($r = 0.28188$), followed by training ($r = 0.26757$) and information-seeking behaviour ($r = 0.2735$). The positive relationships indicate that respondents with greater exposure or higher scores on these characteristics tended to have higher socio-economic status scores. Because the study used correlation, these relationships should be interpreted as associations rather than proof of causation.

The positive association of education is consistent with the review literature, which reported positive relationships between education and socio-economic status in studies of other agricultural groups. The review also documented negative relationships between age and socio-economic status in several studies.

4.9 Constraints affecting socio-economic and enterprise performance

The operational constraints provide an important explanation of the conditions under which the entrepreneurs operate. The leading constraint was lack of skilled labour during the dal-milling season (55.31%), followed by lack of proper storage facilities (46.80%), need for additional labour for oiling and drying pulses (38.29%), irregular electricity supply (30.85%), sieve breakage during processing (26.59%) and high expenditure on oil (12.76%).

Rank	Constraint	Percentage
1	Lack of skilled labour during dal-milling season	55.31
2	Non-availability of proper storage facility	46.80
3	Requirement of extra labour for oiling and drying pulses	38.29
4	Irregular electricity supply	30.85
5	Breakage of sieves during processing	26.59
6	High expenditure on oil	12.76

4.10 Suggestions for enterprise improvement

The entrepreneurs suggested practical solutions corresponding to the constraints. The most frequently reported suggestion was use of new technologies and machines to overcome labour problems (54.25%), followed by proper storage facilities (45.74%), use of dryers (41.48%), use of generators to overcome electricity problems (36.17%), utilization of processing breakages as poultry feed (23.40%) and use of lower-priced oil for oiling (14.89%).

Rank	Suggestion	Percentage
1	Use new technologies and machines to overcome labour problems	54.25
2	Provide proper storage facility	45.74
3	Use dryers	41.48
4	Use generators to overcome electricity problem	36.17
5	Use processing breakages as poultry feed	23.40
6	Use low-price oil for oiling	14.89

7. Conclusion

The study provides an integrated picture of dal mill entrepreneurship in Solapur district. More than half of the respondents had medium socio-economic status, while nearly one-third had low status. The enterprise population was largely middle-aged, and medium levels of information seeking, social participation and scientific orientation were common.

Education, entrepreneurial experience, training, marketing channels, scientific orientation and information-seeking behaviour were positively and significantly related to socio-economic status. Age was negatively and non-significantly related, while social participation was positively but non-significantly related. These results support the thesis hypothesis that personal, extension and psychological characteristics are connected with the socio-economic status of dal mill entrepreneurs.

At the enterprise level, skilled labour shortages, inadequate storage, additional labour requirements for oiling and drying, irregular electricity, sieve breakage and oil expenditure were the main constraints. Entrepreneurs themselves emphasized technology, storage, dryers and backup power as major solutions. The overall evidence supports an integrated strategy combining human-capital development, technology, information, marketing and infrastructure support.

57.
10(10):2802-2806.

References

1. Bhagwat KD, Shelke RD. Constraints faced by the dal mill owners in Marathwada region of Maharashtra state. *Agriculture Update*. 2013;8(1&2):35–57.
2. Deshmukh BA. Knowledge and Adoption of Plant Protection Measures by Pomegranate Growers in Western Maharashtra. Ph.D. (Agri.) Thesis, (Unpub.), MPKV, Rahuri (M.S.). 2013.
3. Bhagwat KD, Shelke RD. Constraints faced by the dal mill owners in Marathwada region of Maharashtra state. *Agriculture update*. 2013;8(1&2):35.
4. Maida. A Study on Knowledge and Attitude of Small and Marginal Farmers Towards High Yielding Varieties of Chickpea in Piploda Block of Ratlam District in Madhya Pradesh. M.Sc. (Agri.) Thesis, (Unpub.), R.A.K. College of Agriculture, Sehore (M.P.). 2015.
5. Masudkar DD, Kamble VB, Anarase MS. Socio-Economic Status of the Farmers in Adopted Village. *Journal of Pharmacognosy and Phytochemistry*. 2017;1:1117-1119.
6. Mungase SS. Socio-economic Status of Pomegranate Growers. M.Sc. (Agri.) Thesis, (Unpub.), M.P.K.V., Rahuri. (M.S.). 2019.
7. Pagar VD. Socio-economic Status of Small Farmers in Konkan Region M.Sc (Agri.) Thesis, (Unpub.), Dr. Balasaheb Sawant Kokan Krushi Vidyapeeth, Dapoli (M.S.). 2013.
8. Pimpalkar RD, Katole RT, Todasam P, Chavan PD. Impact of PKV mini dal mill on its owners: A case study. *International Journal of Current Microbiology and Applied Sciences*. 2021.

How to cite this article: Pratihari P, Deshmukh B, Sadaphal S, Shinde S. Socio-economic status, entrepreneurial characteristics and enterprise performance of dal mill entrepreneurs in Solapur district of Maharashtra. *International Journal of Agriculture Extension and Social Development*. 2026;9(9):957-960. doi: <https://www.doi.org/10.33545/26180723.2026.v9.i9.m.4298>