



SOCIO-ECONOMIC PROFILE OF THE MUSHROOM GROWERS IN PRAYAGRAJ DISTRICT OF UTTAR PRADESH

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<https://doie.org/10.0512/AE.2024929452>

Abstract

This study examines the socio-demographic, educational, and occupational characteristics of 110 individuals to analyse the underlying patterns that define their economic and social behaviour. The age distribution among respondents highlights a predominant presence of middle-aged individuals, crucial for understanding workforce dynamics and generational impacts on community culture and economy. Family size analysis reveals that most households consist of four to six members, indicating potential economic dependencies and social structures that influence daily living and societal norms. Educational attainment among the surveyed individuals is relatively high, with a significant number emphasizing the importance of formal education in enhancing career opportunities and societal integration. The research also explores the extent of experience in mushroom production, identifying a substantial number of individuals with less than five years in the field, suggesting a growing interest or emerging market in this sector. Additionally, landholding data show a predominance of irrigated land, reflecting advanced agricultural practices likely contributing to agricultural productivity. Occupational diversity is marked by a significant proportion of individuals engaged in multiple job roles, illustrating adaptive economic strategies in a changing economic landscape. The findings from this study provide critical insights for developing targeted interventions to support community development and economic sustainability.

Keywords: Occupation, Predominant, Culture, Economy, Sustainability

INTRODUCTION

The agricultural practices of India have seen considerable transformations, transitioning from their traditional practices to a more commercial approach. The patterns of consumer behaviour that are now in place are driving a rise in the demand for specialised items and services that are of very high quality. The agricultural industry

needs to look at agribusiness alternatives that are possible from a commercial, technological, and economic standpoint. (2016) According to Shirur *et al.* The reproductive structures of some organisms that belong to the lower plant group known as fungus are referred to as fruits and mushrooms. A fleshy fungus is another name that is frequently used to refer to mushrooms. The pigment chlorophyll,

which accounts for the green hue of plants, is absent in fungi and mushrooms. However, since mushrooms do not have chlorophyll, they are unable to make their own food and must instead get their nutrition from other sources. As a result of their ability to grow either saprophytically on dead organic matter or parasitically on other living things, mushrooms are common. In natural environments, mycelium is often buried under the ground, and mushrooms are the reproductive structures that develop from mycelium. Johnston, E., & Brewer, G. (2023).

The cultivation of mushrooms has the potential to be a lucrative small-scale enterprise for those living in poor rural areas of developing countries. Both full-time and part-time employment options may be available to those who participate in this hobby, which demands a great amount of labour. There is a little financial commitment required to establish a small mushroom manufacturing firm, and the space and equipment requirements are also rather low. It is essential for every business, including mushroom growing, to have access to inputs such as agricultural wastes, straw, and manure, as well as markets itself. Moreover, training and a source of spawn are things that are very necessary. (Geng et al., 2014)

In this region, there has been a rise in the number of opportunities for business and investment. As a result of the therapeutic and nutritional advantages that mushrooms provide, they are now being considered as a possible vegetable of the future in today's culture, which is more concerned with health. In recent years, there has been a tremendous rise in the demand for mushrooms. (El-Ramady et al., 2022) In order to transform lignocellulosic material into high-quality protein meals, mushroom

farming is a technique that is both extremely efficient and valuable from a commercial standpoint. It is estimated that mushroom cultivation provides financial benefits to millions of farmers. Producing mushrooms and cultivating new types of mushrooms for commercial reasons, both edible and non-edible kinds, have both contributed to the expansion of the mushroom industry. (Abdel-Azeem et al., 2019)

RESEARCH METHODOLOGY

Sampling design

The current research used a multistage stratified random sampling approach to pick the final unit of the sample.

1. First stage - Selection of District
2. Second stage - Selection of Block
3. Third stage - Selection of Village
4. Fourth stage - Selection of Respondent
5. Fifth Stage- Selection of Market and Market Functionaries

Selection of District: Uttar Pradesh state has 75 districts. Prayagraj district in Uttar Pradesh was chosen from these options. The research focused on the Prayagraj area and was picked purposefully.

Selection of Block: All 23 blocks in the designated Prayagraj district were listed, and the Phulpur block was chosen for its high mushroom output.

Selection of the villages: Out of the 151 villages in Phulpur block, 15 villages were randomly chosen for the research, which represents 10% of the total villages.

Selection of Respondents: A comprehensive list of all the mushroom cultivators in the area has been compiled. 10% of mushroom producers were randomly chosen based on their production and experience.

RESULTS AND DISCUSSION

Table 1: AGE OF SAMPLE RESPONDENTS WHERE N=110

AGE OF SAMPLE RESPONDENTS			
S.NO	PARTICULARS	NUMBER	PERCENTAGE
1.	Young age (<35 years)	33	30.00
2.	Middle age (36- 50 years)	51	46.00
3.	Old age (> 50 years)	26	24.00
TOTAL		110	100.00

Discussion: The table presents the age distribution of the sample respondents, segmented into three age groups. Individuals under 35 years constitute 30% of the sample, totalling 33 respondents. Those aged between 36 and 50 years form the largest group, representing 46% with 51 respondents. Lastly, participants over 50 years account for 24%, comprising 26 individuals. Overall, the sample includes 110 respondents, ensuring a comprehensive representation of different age demographics.

Table 2: FAMILY SIZE (NO. / HOUSEHOLD) WHERE N=110

FAMILY SIZE OF SAMPLE RESPONDENTS			
S.NO	PARTICULARS	NUMBER	PERCENTAGE
1.	Less than four members	40	36.64
2.	Four to six members	48	43.36
3.	More than six members	22	20.00
TOTAL		110	100.00

Discussion: The table outlines the family size distribution among the sampled respondents. It shows that families with fewer than four members account for 36.64% of the sample, translating to 40 individuals. The most common family size, ranging from four to six members, comprises 43.36% of the sample, with 48 respondents. Larger families, consisting of more than six members, makeup 20% of the population, represented by 22 individuals. In total, the study includes 110 respondents, providing a diverse overview of family sizes.

Table 3: LITERACY LEVEL (PER CENT TO TOTAL), WHERE N=110

LITERACY LEVEL OF THE SAMPLE RESPONDENTS			
S.NO	PARTICULARS	NUMBER	PERCENTAGE
1.	PRIMARY	7	6.66
2.	SECONDARY SCHOOL CERTIFICATE	15	13.34
3.	INTERMEDIATE	40	36.66
4.	GRADUATION AND ABOVE	48	43.34
TOTAL		110	100.00

Discussion: The literacy levels among the respondents are varied, as depicted in the table. A small segment, 6.66% or 7 individuals, have education up to the primary level. Those with a Secondary School Certificate represent 13.34% of the sample, totalling 15 respondents. A larger portion, 36.66% or 40 respondents, have completed their intermediate education. The highest educational attainment, graduation and above, is observed in 43.34% of the participants, amounting to 48 individuals. Overall, the data comprises 110 respondents, reflecting a broad spectrum of educational backgrounds.

Table 4: EXPERIENCE IN MUSHROOM PRODUCTION WHERE N=110

EXPERIENCE IN MUSHROOM PRODUCTION			
S.NO	PARTICULAR	NUMBER	PERCENTAGE
1.	< 2 years	59	53.34
2.	2 – 5 years	51	46.66
TOTAL		110	100.00

Discussion: The table provides insights into the experience levels in mushroom production among the sampled respondents. The majority, 53.34% or 59 individuals, have less than two years of experience in this field. Those with experience ranging from two to five years make up the remaining 46.66%, which includes 51 respondents. The total count of participants surveyed is 110, highlighting a significant representation of both newer and somewhat experienced individuals in mushroom cultivation.

Table 5: LANDHOLDING OF SAMPLE RESPONDENTS, WHERE N = 110

LANDHOLDING			
S.NO	PARTICULAR	NUMBER	PERCENTAGE
1.	Rainfed	33	30.43
2.	Irrigated	77	69.57
TOTAL		110	100.00

Discussion: The table categorizes the landholding types among the surveyed respondents into two groups. Rainfed landholders, who rely on rainfall for their agricultural needs, constitute 30.43% of the sample, totaling 33 individuals. In contrast, those with irrigated lands, which benefit from artificial water supply methods, represent a larger share at 69.57%, amounting to 77 respondents. Altogether, the survey includes 110 participants, effectively showcasing the distribution between rainfed and irrigated landholding practices.

Table 6: OCCUPATIONAL DISTRIBUTION OF SAMPLE RESPONDENTS, WHERE N = 110

OCCUPATIONAL DISTRIBUTION:			
S.NO	PARTICULARS	NUMBER	PERCENTAGE
1.	One occupation (Primary occupation)	46	41.67
2.	Two occupations (Secondary occupation)	29	26.67
3.	Three occupations (Tertiary occupation)	35	31.66
TOTAL		110	100

Discussion: The table illustrates the occupational diversity among the respondents. A significant portion, 41.67% or 46 individuals, are engaged in one primary occupation. Meanwhile, 26.67% of the sample, consisting of 29 respondents, have diversified into a secondary occupation. A further 31.66%, or 35 individuals, are involved in three different occupations, indicating a tertiary level of occupational engagement. Overall, the data encompasses 110 respondents, highlighting a range of single to multiple occupational involvements.

CONCLUSION

This research paper provides a comprehensive analysis of various demographic, educational, and occupational characteristics among a sample of 110 respondents, highlighting critical aspects that contribute to understanding their socio-economic environments. The findings reveal a diverse age distribution, with a significant presence of middle-aged individuals, which could influence the community's work capacity and social dynamics. Family sizes predominantly range from four to six members, suggesting a moderate to high dependency ratio which impacts household economics and lifestyle choices. Notably, the literacy levels are considerably high, with most respondents having attained intermediate education or higher, potentially leading to better job opportunities and improved quality of life. The mushroom production sector is experiencing a growing interest or transitional workforce, with irrigated lands and versatile job roles. This information is crucial for policymakers, educators, and economic planners to enhance community support and development strategies.

REFERENCE

Abdel-Azeem, A. M., Ganeshpurkar, A., Rai, V., & Yuan, H. (2019). *Fungal mushrooms: A natural compound with therapeutic applications.* *Frontiers in Pharmacology.* Retrieved from

<https://www.frontiersin.org/articles/10.3389/fphar.2019.00112/full>

El-Ramady, H., Domokos-Szabolcsy, É., Abdalla, N. A., Alshaal, T., & Prokisch, J. (2022). *Sustainability perspectives for future continuity of mushroom production: The bright and dark sides.* *Frontiers in Sustainability.* Retrieved from <https://www.frontiersin.org/articles/10.3389/fsufs.2022.00000/full>

Geng, W., Shen, Y., Wang, Y., & Dai, Y.-C. (2014). *Edible Mushroom Cultivation for Food Security and Rural Development in China: Bio-Innovation, Technological Dissemination and Marketing.* *Sustainability, 6(5), 2961-2973.* <https://doi.org/10.3390/su6052961>

Johnston, E., & Brewer, G. (2023). *Mycelium: Exploring the hidden dimension of fungi.* *Kew Royal Botanic Gardens.* Retrieved from <https://www.kew.org/read-and-watch/mycelium-hidden-dimension-fungi>

SHIRUR, M., SHIVALINGEGOWDA, N. S., CHANDREGOWDA, M. J. AND RAJESH, K. R., 2016, *Technological adoption and constraint analysis of mushroom entrepreneurship in Karnataka.* *Economic Affairs, 61(3): 427-436.*
