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Socio-Economic Profile of Beekeepers in Jammu Division: A Demographic and Economic Assessment

Geetanjali Gupta[1], Dr. Anil Bhat[2], and Dr. Surinder Kumar Gupta[3]

[1]Ph.D Scholar, Sher-e-Kashmir University of Agricultural Science and Technology, Jammu, Jammu and Kashmir, India
[2]Assoc. Director Research, Sher-e-Kashmir University of Agricultural Science and Technology, Jammu, Jammu and Kashmir, India
[3]Retd. Director Extension Education, Sher-e-Kashmir University of Agricultural Science and Technology, Jammu, Jammu and Kashmir, India

Abstract
This study analyzes the socio-economic characteristics of beekeepers in the Jammu Division of the Union Territory of Jammu & Kashmir. Based on primary data collected from 200 respondents selected across three districts viz. Ramban (high-density), Kathua (medium-density) and Jammu (low-density)the paper provides insights into demographic variables such as age, education, occupation, family size and income levels. Findings reveal that beekeeping in the region is dominated by middle-aged individuals often with limited formal education who engage in both farming and apiculture. Income levels vary by district with Ramban exhibiting a higher proportion of full-time beekeepers and higher annual returns. The study concludes that socio-economic background plays a vital role in shaping participation and success in beekeeping activities and should inform future interventions and training efforts.

Keywords
Beekeeping, Socio-economic profile, Rural livelihoods, Income, Education, Occupation, Jammu Division

I. INTRODUCTION

Beekeeping, as an allied agricultural activity supports rural income and food security by offering employment opportunities, enhancing pollination services and producing valuable hive products. Socio-economic parameters such as education, age, income, and occupation are fundamental in determining the adoption and success of beekeeping among rural populations. In Jammu Division where beekeeping has gained traction under government-promoted apiculture initiatives, understanding the socio-economic conditions of practicing beekeepers is crucial for developing relevant support programs. This paper focuses solely on the demographic and economic profile of beekeepers across three different density districts in Jammu Division.

II. LOCALE OF STUDY

The study was conducted in the districts of Ramban, Kathua and Jammu. Ramban represents a high-density beekeeping area, Kathua is categorized as medium-density and Jammu as low-density. A total of 200 beekeepers were selected for the study using proportional stratified random sampling.

III. SAMPLING DESIGN

Respondents were proportionally drawn as follows: Ramban (140 beekeepers), Kathua (31) and Jammu (29). The selection was based on official records of beekeeper distribution and colony numbers. The primary data was collected using structured interviews and pre-tested questionnaires.

IV. SOCIO-ECONOMIC PROFILE OF BEEKEEPERS

Table: Demographic Distribution and Economic Status of Study Participants.

Factors	Variables	Frequency	Percent %
Sex	Male	192	96 %
	Female	8	4 %
Age (yrs)	18-35 (Young)	13	6.5%
	35-50 (Middle)	131	65.5%
	>50 (Old)	26	13%
Qualification	Up to Primary	72	36%
	Matric	75	37.5%
	Sen. Secondary	20	10%
	Graduate	26	13%
	PG	7	3.5%
Occupation	Agriculture	126	63%
	Beekeeping only	64	32%
	Service	0	0%
	Housewife	8	4%
	Student	2	1%
Annual income	Upto 1 Lakhs	7	3.5%
	1-5 Lakhs	141	70.5%
	> 5 Lakhs	52	26%
Agriculture land holdings	Marginal	74	37%
	Small	46	23%
	Large	42	21%
	Landless	38	19%

1. Gender Distribution

The surveyed population was overwhelmingly male, with 96% (n = 192) of the respondents being male and only 4% (n = 8) female. This indicates a significant gender imbalance, possibly reflective of male dominance in the surveyed occupational sectors such as agriculture and beekeeping.

2. Age Distribution

The majority of respondents belonged to the middle age group (35–50 years), comprising 65.5% (n = 131) of the total sample. The older age group (>50 years) accounted for 13% (n = 26), while the young age group (18–35 years) represented only 6.5% (n = 13). This suggests that middle-aged individuals are most actively engaged in the occupations under study.

3. Educational Qualification

A large proportion of respondents had basic education. 37.5% (n = 75) were educated up to the matric level, and 36% (n = 72) had primary education. Only 13% (n = 26) were graduates and 3.5% (n = 7) postgraduates, indicating limited access to higher education among the surveyed population.

4. Occupational Pattern

The majority of respondents were engaged in agriculture (63%, n = 126), followed by beekeeping only (32%, n = 64). A small proportion included housewives (4%, n = 8) and students (1%, n = 2), with no respondents involved in service-related occupations. This highlights the rural and agrarian nature of the population.

5. Annual Income

The income distribution revealed that most respondents (70.5%, n = 141) had an annual income between ₹1–5 Lakhs, while 26% (n = 52) earned more than ₹5 Lakhs. Only 3.5% (n = 7) reported earnings below ₹1 Lakh, suggesting a modest but stable income level for the majority.

6. Agricultural Land Holdings

In terms of land ownership, 37% (n = 74) of respondents were marginal landholders, followed by small landholders (23%, n = 46) and large landholders (21%, n = 42). Notably, 19% (n = 38) of the population were landless, indicating potential challenges related to land access and ownership.

VII. CONCLUSION

The study highlights the significant role that socio-economic factors play in shaping the beekeeping landscape of the Jammu Division. Predominantly practiced by middle-aged males with limited formal education, beekeeping in this region is largely integrated with agriculture and serves as a supplementary source of income. The majority of beekeepers operate with modest earnings and marginal landholdings, underscoring the rural and subsistence nature of the activity. These findings suggest that targeted

interventions such as skill-based training, educational outreach, and inclusive development programs are essential to enhance productivity and economic returns. Furthermore, promoting scientific beekeeping practices and improving access to land and resources, especially for landless and female participants could strengthen the viability and inclusiveness of apiculture as a sustainable rural livelihood.

VIII. FUTURE SCOPE

Future studies could investigate how socio-economic variables influence the adoption of scientific beekeeping practices and participation in value addition activities. There is also scope for exploring the impact of digital literacy and training programs on productivity and income enhancement among beekeepers.

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