University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

The Sellers ' knowledge of the marketing Extension of the local honey shopping function and its relationship with social variables in Sulaimaniyah governorate

Shanya A. Ahmad , Dara A. Salih

[1,2] Dept. of Agribusiness and Rural Development, College of Agriculture Engg.Sciences, University of Sulaimani, Kurdistan Region, Iraq

Email: shanyarahman280@gmail.com
Email: dara.abdulrahman@univsul.edu.iq

Abstract

The research aimed to determine the level of sellers' knowledge of the marketing extension of the local honey marketing function and its relationship to some variables. This research was conducted in Sulaymaniyah governorate on a simple random sample of 313sellers, representing 30% of the research community of 939 sellers. The data was collected by personal interview through a questionnaire form prepared for this purpose, and after testing and confirming its suitability for data collection, the data were collected, then processed and analyzed by SPSS Version 22 Software.

The results found that the level of knowledge of the respondents in the marketing extension of local honey in general was average, tending to rise, and the percentage of respondents in the middle and high categories was 71.57%. Additionally, the results showed that there is a significant correlation between the level of knowledge of the respondents in the marketing extension and variables: age, educational level, and use of information sources of marketing, while there is no correlation between the level of knowledge of the respondents in the marketing extension and participation in social organization variable. The researcher recommends that the development of specialized training and extension programs designed for different ages and education levels for honey sellers by the Ministry of Agriculture to maximize learning outcomes for honey sellers.

Keywords: Knowledge level, Seller, Marketing extension, Local honey, Shopping.

I. Introduction

Recently, agricultural marketing methods have developed significantly with the advancement of technology and the increase in market competitiveness. Iraq has become dependent on modern marketing strategies and methods to improve marketing efficiency and effectiveness, and agricultural marketing is a vital component of ensuring the sustainability of the agricultural sector and achieving food security (Jawad, 2025). Agricultural marketing is an integrated system aimed at managing and marketing agricultural products from production until reaching the final consumer with quality assurance and appropriate prices, and cannot be done without distribution channels or intermediaries (AERI, 2025).

In the Kurdistan region, the process of marketing bee products is carried out by various methods and channels, and among the channels are direct sales from beekeepers to local consumers and the use of social media and participation in exhibitions and food festivals, all of which help in delivering natural honey to consumers and maintain its quality and customer confidence in shopping (Osman, 2025). The implementation of marketing guidance practices in local honey markets, such as exhibitions, festivals, popular markets, and the use of digital channels, are considered crucial to expand the reach of consumers. Their application depends on the ability of sellers to engage in such practices is highly dependent on their marketing knowledge and cognitive awareness (Ghazali et al., 2017).

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

Despite keeping up with the developments of agricultural marketing methods, but not at the required level in this area, and this development does not stop at increasing its rates only, but is associated with the existence of an efficient marketing apparatus that provides services and marketing outlets for honey production that facilitates the flow of bee products from the producer to consumers (Hanoosh, 2010), as well as a marketing process that requires multiple procedures, including shopping, transportation, storage, packaging, and most importantly, the presence of guidance devices that work to deepen and expand the knowledge of those related to the marketing of local honey and increase their information in general.

In addition, knowledge means all the means used by the institution to discover the possible chain of behavior, which will actually follow (Al-Salem, 2002). Knowledge is also considered one of the branches of psychology that specializes in the study of cognitive processes that include the reception of information that it brings, organizes, and stores for the time of need or guidance in the direct response of individuals (al-Afifi, 2024). As well as the level of knowledge of sellers plays an important role in motivating them to engage in marketing guidance activities, especially in local honey markets. Cognitive ability refers to the ability of people to process, systematize and use marketing knowledge in practice. More knowledgeable and experienced sellers are able to assess customer needs and take advantage of diverse marketing channels more effectively than less experienced sellers (Al-Suwaidi et al., 2014). This suggests that knowledge of sellers is crucial in influencing their marketing behavior.

The lack of interest in sellers' knowledge of the recommendations of marketing extension is due to several reasons, including structural problems such as weak market links, poor infrastructure, and the absence of appropriate branding strategies often prevent the marketing of honey, especially within developing economies (Krell, 1996; Wubie, 2021).

In the Kurdistan region, (Majid, 2023) pointed out many problems in the annual report of the Beekeepers Association, including the problem of the lack of organized markets for bee products, lack of advertising and promotion, high transportation costs and inadequate means of delivery, the existence of intense competition from counterfeit honey with low prices, monopoly of traders for bee products and price control, and lack of marketing awareness with lack of experience in promotion and innovation of effective marketing methods. So, in light of this, the researcher decided to carry out this study and its importance in identifying the gap in the knowledge level of marketing extension related to the local honey shopping function marketing of local honey in Sulaymaniyah governorate between the current reality and the optimal level desired to reach. Therefore, the research problem is eliminated by the following research questions:

What is the sellers' knowledge of the marketing extension of the local honey shopping function in the Sulaymaniyah governorate?

What is the relationship of correlation between sellers' knowledge of the marketing extension of the local honey shopping function with the following variables: Age, Level of education, Participation in social organizations, Use of information source of marketing?

Research Objectives

1. To identify sellers' knowledge of the marketing extension of the local honey shopping function in the Sulaymaniyah governorate.

2. To determine the relationship between sellers' knowledge of the marketing extension of the local honey shopping function with the following factors: (Age, Level of education, Participation in social organizations, Use of information source of marketing).

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

II. Materials and Methods

Research methodology:

A descriptive research study was conducted in Sulaymaniyah governorate, Kurdistan region, Iraq. This method is helpful for obtaining comprehensive and trustworthy information from social realities, identifying traditions, and understanding the attitudes, ideas, and opinions of both individuals and communities as well as their developmental and evolutionary patterns (Verma et al., 2024).

Research Area: The study area includes Sulaymaniyah governorate in the Kurdistan region of Iraq, and all districts, sub-districts and villages of this area.

Research community and sample:

The research community includes all local honey sellers registered in the Planning Department of the General Directorate of Agriculture in Sulaymaniyah, consisting of 939 sellers. Then the sample was determined using a relative random sample method from the research community and by 30%, and 313 sellers became a sample for the current research.

Data collection and Methodology of research tools:

A questionnaire form and face-to-face interviews were conducted in order to achieve the objectives of the research (Melhem, 2010). The questionnaire is an essential tool and powerful tool to gather information, data, and facts, which aids the researcher in gathering pertinent information on the study's subject (Taherdoost, H, 2022). The research tool was prepared after reviewing books, scientific and literary sources and consulting specialists related to the research topic, and the form consists of two parts:

The first part includes independent factors (Age, Level of education, Participation in social organizations, Use of information source of marketing).

The second part concerns the dependent variable related to determining the level of knowledge of sellers by marketing extension for local honey shopping in Sulaymaniyah governorate. Which consisted of 24 items related to the dependent variable by using multiple choices test methods.

Quantification of the research Factors:

First: Dependent variable:

The level of knowledge of the vendors was measured by the marketing extension for the local honey shopping function in Sulaimaniyah governorate by giving 40 degrees to those who respond to multiple selection items, and zero degrees in case of non-response to these items, and the total scores for the knowledge level of (Zero to 40) degrees for 24 items of the studied paragraph.

Second: Independence variables:

1. **Age:** It was measured by the number of years of age of the respondent until the period of data collection, and it was divided into age groups.
2. **Educational level:** It was measured through the following alternatives: (Primary and Lower, Secondary, High school, Agricultural Institute and above) and numerical values (1, 2, 3, 4) respectively.

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

3. **Participation of in social organizations:** This variable was measured with (9) items according to a quadruple scale (Don't participate, Sometimes, participate constantly) and weights (1,2,3) were assigned to it, respectively.
4. **Use of Information Source of marketing**: This variable was measured with (10) items according to a quadruple scale (Don't used, Sometimes, use it constantly) and weights (1,2,3) were assigned to it, respectively.

Validity and Reliability of research tools:

A. Scale validity:

In order to verify the test validity, the questionnaires were presented to 15 specialists in the agricultural extension and extension marketing at the University of Sulaimani and University of (Duhok, Tikrit, Bakrajo Technical Institute and Kirkuk), and made some modifications to some of its items and fields after pre-test of 30 sellers of local honey. Pre-test was conducted on an exploratory sample of 30 producers of local honey and local honey retailers from outside the research sample.

B. Scale Reliability:

What is meant by reliability is the level of reliability in the scores achieved on the measurement tool over time (the reliability of the results if the measurement was repeated on the same group of individuals after some time) (Al-Abbasi, 2018). Also, the reliability of the tool means that the tool gives the same results if it is repeated on the same individuals under the same conditions (Al-Dulaimi and Adnan, 2005). To measure the reliability, a pre-test was conducted on 20 January (2025) on a sample of (30) beekeepers, producers, sellers of local honey who were chosen randomly from among the sellers in the districts (Ranya, Qaladze, Sharbazher, Dukan, Center of Slimani). The aim of conducting this test was to verify the clarity of the items and questions. The reliability was measured by statistically analyzing the initial test data, and the reliability of the items of the questionnaire was confirmed in the first part of the questionnaire. The researcher used the method to measure the level of knowledge in the instructions of marketing extension for those related to the marketing of local honey in Sulaymaniyah Governorate. This equation is used to measure tests, especially knowledge.

Table:1: The values of the reliability coefficient for aux and items In research tools.

Part scale	No. items	persons	Sperman brown	validity
Knowledge level of shopping local honey	24	0.65	0.78	0.88
Participation in social organization	9	0.74	0.85	0.92
Used of source information in agricultural marketing	10	0.63	0.77	0.88

Data collection:

Data was collected in a questionnaire form from April 1 (2025) to July 1 (2025), and personal interviews. After unloading and classifying the data, the SPSS program "Statistical analysis was conducted using SPSS version 22, a widely-used statistical software package for social science research (IBM Corp., 2013)." A number of statistical tools were used to analyze the data, such as (percentage, arithmetic mean, Pearson's and Spearman correlation, Range, The standard deviation (SD), frequency, t-test, z-test).

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

III. RESULT AND DISCUSSIONS

First: Identify Sellers ' knowledge of the marketing Extension of the local honey shopping function in the Sulaimaniyah governorate:

The results showed that the highest numerical values obtained by the respondents are 40 degrees, and the lowest is 8 degrees, with an arithmetic mean of 25.06, and the raw scores were distributed to the standard scores using the Z-scale and the consumer ratings scores were distributed into three categories: Low, Medium and High. As shown in Table 2.

Table 2: Distribution of the respondents according to the knowledge levels of the marketing extension

Sellers ' knowledge Categories	**F**	**%**	**Arithmetic Mean**	**Not**
Low: 8-18	89	28.43	14.48	$\bar{X}$ = 25.06
Medium: 9-29	105	33.54	24.85	
High: 30-40	119	38.03	33.16	SD= 8.064
Total	313	100		

In Table 2, the results showed that the majority of sellers' knowledge of the marketing extension of the local honey shopping is medium, which tends to high, representing 71.57% of the total respondents. This result is due to the fact that the majority of respondents have an average level of knowledge in the field of marketing exchanges of local honey to customers or consumers. This may be due to the information and experience accumulated by them as a result of their participation in celebrations, agricultural exhibitions and religious events, which are sold directly in the markets during the production season in the study area.

Second: To determining the relationship between Sellers ' knowledge of the marketing Extension of the local honey shopping function with the following variables:

1 Age: This variable was divided into a group of categories according to the results obtained by the respondents, and the knowledge level of each category and the numbers and percentages of the respondents in them were determined, as shown in the table 3:

Table 3: Distribution of the age and its relationship to Sellers ' knowledge of the marketing Extension

Age /Year	**F**	**%**	**Arithmetic Mean**	**Not**	
20-34 Y	149	47.60	45.23	Correlation coefficient: **0.925****	
35-49 Y	89	28.43	71.57	$\bar{X}$= 39.45	S.d = 9.85
50-64 Y	75	23.97	87.12		
Total	313	100			

(**) significant at the level (0.01)

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

Table 3 indicates that the highest age of respondents is 64 years and the lowest age is 20 years, and it was also found that more than three quarters of respondents were located within the age groups (20-34) and (35-49), which make up a percentage (76.03%). To find out if there is an associative relationship between the two variables, the simple correlation coefficient (Pearson) was used and its value was 0.925 degrees. To determine the significance of this relationship, the t-test was used, its value was more than the tabular value at the level of (0.01), so this relationship is significant. This result is due to the fact that whenever the age of the respondents has increased, the cognitive ability and the level of information in the marketing guidelines about marketing exchanges and the way of dealing with customers about the trading of this commodity in the local and regional markets. This increase in knowledge is the result of the accumulation of experience and years of continuous work in the markets and dealing directly with wholesalers and local consumers in the study area.

2 Educational Levels: This variable was divided into a group of categories according to the results obtained by the respondents, and the knowledge level of each category and the numbers and percentages of the respondents in them were determined as shown in the following table:

Table 4: The distribution of education level and its relationship to Sellers ' knowledge of the marketing Extension

Education Level	**F**	**%**	**Arithmetic Mean**	**Not**	
Primary and below	188	60.06	49.90	Correlation coefficient 0.811 **	
Secondary	52	16.61	75.30		
High school	55	17.57	84.90		
Agricultural institute and above	18	5.76	93.05	X^{-}= 1.690	S. d= 19.525
Total	313	100			

(**) significant at the level (0.01)

The table (4) indicates that the respondents who obtained a higher degree during the study stages (Primary and Lower) make up the highest percentage, which is 60.06 %, while the lowest percentage was 5.76 % and falls within the category (Agricultural institute and above). have limited essential information related to marketing extension for the local honey shopping compering the other sellers in the study area.

To find the correlation relationship between the degree of cognitive levels of the marketing Extension instructions and educational level, a coefficient correlation ranking (Spearman Brown) has been used, and its value reached at (0.811), It shows an inverse relationship between the two variables ،which is more than tabular value at the level of (0.01), have limited essential information related to marketing extension for the local honey shopping compering the other sellers in the area study.

3 **Participation of in Social Organization:** The results showed that the highest numerical values obtained by the respondents are 14 degrees, and the lowest is 7 degrees, with an arithmetic mean of (9), and the raw scores were distributed to the standard scores using the Z- scale and the consumer ratings scores were distributed into three categories: Don't participate, Sometimes and Participate constantly. As showed in Table 5

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

Table5: Distribution of respondents according participation of in social organization and its relationship to the knowledge levels

Participation of in Social Organization/ Degree	**F**	**%**	**Arithmetic Mean**	**Not**	
Don't participate: 11 and more than	45	14.37	58.91	Correlation coefficient - 0.027 N.Sig	
Sometimes: 9-10	133	42.49	65.36		
Participate constantly: 7- 8	135	43.13	61.48	S.d= 1.526	X - = 9
Total	313	100			

In Table 5, the results showed that the highest percentage of respondents and the highest average cognitive level were within the category (sometimes) and constituted 43.13%, while the lowest percentage and average cognitive level were within the category (Don't participate) and constituted 14.37% of the total respondents

To find the correlation relationship between the two variables of the level of knowledge and participation in social organizations, a simple correlation coefficient (person) was used, the value of which was at (- 0.027), which indicates the lack of relationship between the two variables, a non-significant relationship at the level of (0.05), This result may be attributed to the participation of respondents in social organizations has negatively affected the level of their knowledge in the field of marketing extension, in addition, the goals of those organizations that are trying to achieve are far from meeting the cognitive needs of respondents in the study area.

4. **Use of Information Source of marketing**: The results showed that the highest value obtained by the respondents is 30 degrees and the lowest is 10 degrees and the arithmetic mean is 22.31 degrees, then the respondents were divided into three categories for the knowledge level, as shown in table 6:

Table 6: Distribution of respondents according participation of in Use of Information Source of marketing and its relationship to the knowledge levels

Used of Information Source of marketing/ Degree	**F**	**%**	**Arithmetic Mean**	**Not**	
Use it constantly (24-30)	126	40.27	67.22	Correlation coefficient 0.197 *	
Sometimes: (17-23)	157	50.15	60.08		
Don't used (10- 16)	30	9.58	52.76	X-= 22.31	SD= 4.170
Total	313	100			

* Significant at the level (0.05)

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

The table (4.9) indicates that the highest percentage and the highest rate of cognitive level were for the respondents who are located within the category (Sometimes), while the lowest are located Within (Use it constantly). To find the correlation relationship between the two variables of the level of knowledge and degree of Use of marketing Information Source, a simple correlation coefficient (person) was used, the value of which was at (0.197), which is have a significant effect on the application knowledge of seller's local honey in the study area.

IV. Conclusion

1. The results showed that the majority of sellers have medium level tending towards high in the knowledge of marketing extension on local honey shopping and marketing exchanges with this commodity. We conclude that the majority of them need to improve their knowledge level in a scientific way about the content and steps of applying the purchasing function, especially about the type of marketing channels and their workers in order to distinguish between marketers of local honey and sellers of honey of various types in terms of origin or production sources in the markets. This is an important indicator that calls for intensifying marketing guidance activities in order to improve the knowledge and skill level of sellers in the study area.

2. The study concludes that age and educational level have greater influence on the level of local honey sellers' knowledge of marketing extension. This indicator indicates that the increase in cognitive ability depends on the extent of continuity of the respondents in completing the academic study and on the years of experience and continuity of work in the field of marketing local honey in the study area.

3. The study concludes that the participation of sellers in social organizations will not affect the level of knowledge and application of guidance recommendations for the marketing of local honey and other marketing practices by sellers in general.

4. The study concludes that the provision of indicative information sources to sellers, especially in their workplace, and its use pushes them to develop their cognitive and skill abilities in the field of marketing, and among the most important and influential sources is the availability of internet networks in their areas of residence, which come in first order in terms of utilization and use of those sources.

V. Recommendation

1. The study recommends the need to establish special associations for producers and sellers of local honey in all governorates of the Kurdistan region, with the aim of marketing honey or bee products collectively, maintaining the improvement of production quality, reducing the cost of inputs and providing training and extensional services to members belonging to this association continuously throughout the year.

2. The study recommends the need to provide financial and technical support and give long-term loans to local honey producers by the Ministry of Agriculture and water resources, in addition to financial compensation for price and natural risks in the study area.

3. The development of specialized training and guidance programs designed for different ages and education levels for honey sellers by the Ministry of Agriculture to maximize learning outcomes for honey sellers.

4. Reassess and improve the role of social organizations by integrating marketing-focused capacity-building activities to increase their relevance for honey traders.

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

1. References

1. Agribusiness Education and Research International (AERI) (2025) *What is the scope and importance of Agricultural Marketing?* Bangladesh. Available at: https://agribusinessedu.com/what-is-the-scope-and-importance-of-agricultural-marketing/ (Accessed: 19 September 2025).
2. AL-Abbassi, A.F. Khalil., (2018), Methods of Scientific Research and Statistical Analyses in Behavioral Sciences, Noon House for Printing, Publishing and Distribution, University of Mosul-Iraq, p187.
3. Al-Afifi, T. (2024) *Cognitive nephrology, study of scientific research and translation*. Riyadh: Saudi Arabia. Available at: https://drasah.com/Description.aspx?id=8449 (Accessed: 19 September 2025).
4. Al-Dulaimi, I.A. and Al-Mahdawi, A.M. (2005) *Measurement and evaluation in the educational process*. 2nd edn. Baghdad: Iraq.
5. Al-Salem, M.S. (2002) *Organizing organizations-a study in the development of thought during a hundred years*. Amman: Dar Al-Kitab al-Hadith. Available at: http://thesis.univ-biskra.dz/2656/3/pdf (Accessed: 19 September 2025).
6. Al-Swidi, A., Huque, S.M.R., Hafeez, M.H. and Shariff, M.N.M. (2014) 'The role of subjective norms in theory of planned behavior in the context of organic food consumption', *British Food Journal*, 116(10), pp. 1561–1580.
7. Ghazali, E., Mutum, D.S., Chong, J.H. and Nguyen, B. (2016) 'Proposing a social marketing agenda for sustainable consumption behavior in an emerging economy: A case study of Malaysia', *Journal of Services Marketing*, 31(1), pp. 47–59.
8. Ghazali, E., Mutum, D.S., Chong, J.H. and Nguyen, B. (2017) 'Proposing a social marketing agenda for sustainable consumption behaviour in an emerging economy: A case study of Malaysia', *Journal of Services Marketing*, 31(1), pp. 47–59.
9. Hanoosh, L.J.H. (2010) *The level knowledge in the instructions of marketing extension for those having relation with marketing of tomatoes crop in Najaf province*. Unpublished thesis. University of Baghdad.
10. IBM Corp. (2013) *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp.
11. Jawad, Z.K. (2025) *Agricultural Marketing: Its Importance, Challenges, and Solutions to Enhance Its Efficiency*. Available at: https://cohe.uokerbala.edu.iq/wp/en/ (Accessed: 19 September 2025).
12. Krell, R. (1996) *Value-added products from beekeeping*. FAO Agricultural Services Bulletin No. 124. Rome: Food and Agriculture Organization.
13. Majid, I.M. (2023) *Annual report of the Beekeepers Association for the year 2022-2023*. Sulaymaniyah: Beekeepers Association, Kurdistan Region, Iraq.
14. Melhem, S.M. (2010) *Research methods in Education and Psychology*. 6th edn. Amman: Dar Al-Masirah for Publishing and Distribution.
15. Osman, Q. (2023) 'Distribution outlets and marketing of local honey', *Lectures of the training course for producers and beekeepers in Sulaymaniyah governorate*. Expert of breeding and bee production.

University of Thi-Qar Journal of agricultural research

Thi-Qar Journal of agricultural research

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 14, Issue 2 (2025) PP 256-265

https://jam.utq.edu.iq/index.php/main *https://doi.org/10.54174/utjagr.v13i1.323*

16. Taherdoost, H. (2022) 'Designing a questionnaire for a research paper: A comprehensive guide to design and develop an effective questionnaire', *Asian Journal of Managerial Science*, 11(1), pp. 8–16. doi: 10.51983/ajms2022.11.1.3087.

17. Verma, R., Verma, S. and Abhishek, K. (2024) *Research Methodology*. Booksclinic Publishing.

18. Wubie, A.W. (2021) 'Challenges and opportunities of beekeeping in Ethiopia: A review', *Cogent Food & Agriculture*, 7(1), p. 1896879.