

## HONEY MARKETING AND DISTRIBUTION CHANNELS AMONG RURAL BEEKEEPERS IN OYO STATE, NIGERIA

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### ABSTRACT

The study assessed honey marketing and distribution channels among rural beekeepers in Oyo, State, Nigeria. A two-stage sampling procedure was used to select 235 respondents for the study. The primary data was obtained through interview schedule. The obtained data were analysed using descriptive statistics frequency counts, means and percentages. The results revealed that the mean age of the respondents was 55.8 years. Most (58.7%) of the respondents had formal education of 16 years and above. The average household size was 5 persons. It was further revealed that the main source of marketing information was fellow beekeepers (49.4%), followed by association (45.5%). Also, 98.3% of the respondents sold their honey to the consumer while 66.0% do not package the honey before selling. Respondents (100.0%) expressed their willingness to embrace honey value addition. It is therefore concluded that most of the beekeepers sold their honey directly to the consumers at the farm gate, and the main source of marketing information is through other beekeepers. Training of beekeepers on value addition by extension agents and other stakeholders was recommended.

**Keywords:** Honey, farm gate, channel, value-addition, economic-diversification,

### INTRODUCTION

Beekeeping is an age-long practice known in many areas of the world. It started in the Middle East and today, many farmers in urban and rural areas practice beekeeping alongside their farming and non-farming occupations. There are diverse reasons for keeping bees; one of the main reasons is an economic diversification strategy (Ibrahim *et al.*, 2021 and Patel *et al.*, 2021). Thus, it contributes to the livelihoods and economic sustainability of the practitioners. Beekeeping is a very profitable and viable enterprise (Ugbe *et al.*, 2024). Honey production is the main reason why most farmers keep bees in Nigeria (Feketéné *et al.*, 2024). Alabi and Anekwe (2023) stated that honey production is still at its developmental stage in Nigeria, though its awareness dates to early 1950s.

Honey is the natural sweet substance produced by honeybees through the conversion of nectar collected from plants. Bees collect, process, deposit, and stock the produced honey in the cell of honeycombs to mature (Yang *et al.*, 2025). It contains sucrose (fructose and glucose), vitamins, minerals and pollen, together with small amounts of miscellaneous compounds. The composition varies; it is a subject of which plant the bees collected the nectar from. It is worth knowing that honey is being produced through regurgitation process by the worker division of the bees. Other products of bees are propolis, royal jelly, bee wax, pollen grain, bee venom among others.

Typically, marketing and distribution of agricultural produce follow different channels depending on the nature of the produce. The channels are the established paths that produce follows from the producers to the end-users. Mostly, there are three possible paths between producers and the end-users (producers – end-users, producers – wholesalers, and producers – retailers). This distribution channel is significant due to its roles in

the smallholders entering or remaining in the production system (Villacis *et al.*, 2024).

As earlier established, involvement of farmers in beekeeping is mostly based on economic interest, however, marketing channels play a pivotal role in the realisation of this interest. It significantly affects income of the farmers (Mmbando *et al.* 2015). Hence, careful selection is being made in the choice of the channel. There are different factors that determine the choice of channel to be used by farmers. These include – characteristics of the markets, channels' ability to reach wider end-users, cost of transportation, proximity, availability of off-takers, trustworthiness of the actors and market familiarity. Other factors include farmers' level of education and market related information (Magesa *et al.*, 2014; Mmbando *et al.*, 2015; Romero and Wollni, 2018; Pham *et al.*, 2019; Mgale and Yunxian, 2020).

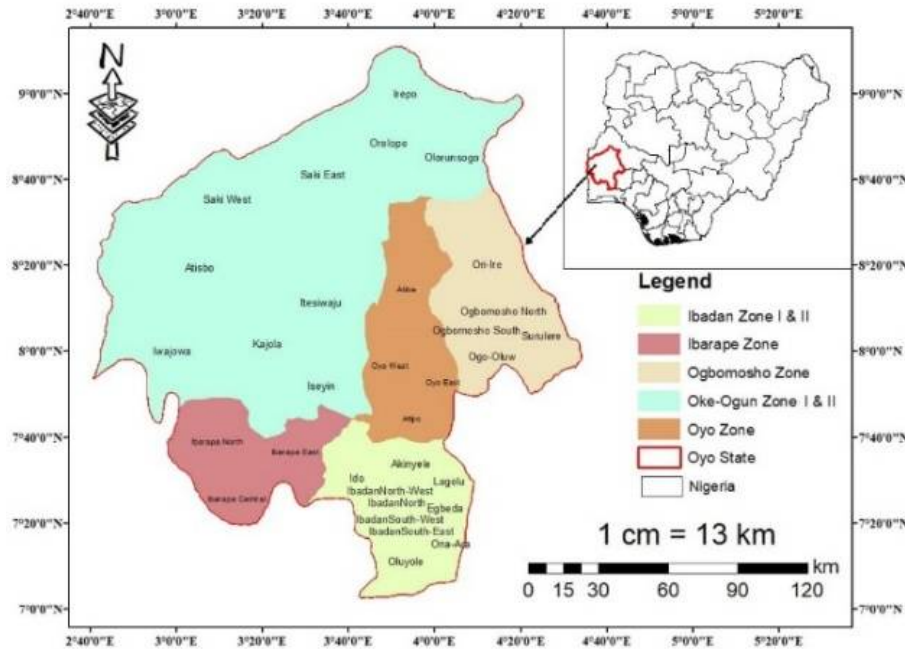
Although, honey production is known to the country for long period of time, data relating to the quantity, methods of production, quality of the honey and distribution channels are still scanty. Also, there is glaring fact that there is a lack of confidence in the quality of honey being circulated and marketed in the country. Thus, it on this basis that this work assessed the distribution of honey from the production angle. Therefore, the study identified the socio-economic characteristics of beekeepers and the sources of marketing information. Also, the marketing and distribution channels utilised among the respondents and the practices of value addition were examined.

### METHODOLOGY

The research was conducted in Oyo State, Nigeria. The State is one of the six states in southwest Nigeria. It is situated on the longitude 6.5<sup>o</sup> and 9<sup>o</sup>N, and between latitude 3<sup>o</sup> and 5<sup>o</sup>. The State estimated population is around 8 million (National

Population Commission, NPC, n.d.). It has its capital at Ibadan. The State experiences rainy and dry seasons with relative humidity that favours agricultural activities. The wet season is usually between April and October while the dry season is between November and March. The State has

average daily temperature between 25<sup>0</sup> C and 35<sup>0</sup>C. Oyo State is one of the major producers of honeybee in Nigeria alongside other agricultural activities. Beekeepers in the state usually keep *Apis Mellifer* species (Azeez, 2022).



**Figure 1: Map of Oyo state showing the beekeepers' zones**

**Sampling procedure and sample size**

The population of the study comprised all the active members of the Federation of Beekeepers' Association of Nigeria (FEBKAN), Oyo State. Two-stage sampling procedure was used in the selection of the respondents. The first stage involved purposive selection of all the seven zones of FEBKAN because of the presence of active beekeepers in all the zones, while the second stage involved random selection of 50% of registered active members from each zone. Thus, 235 beekeepers were selected across the zones (Oke-Ogun I = 48, Oke-Ogun II = 42, Ibarapa = 25, Oyo = 47, Ibadan I = 23, Ibadan II = 25 and Ogbomoso= 25). Data were elicited through interview schedule and analysed using descriptive statistics – frequency counts, percentages, mean. Respondents' honey marketing information sources were obtained with three (3) possible sources with responses of selected/yes = 1 and not selected/no = 0. The frequency and percentage of sources selected by the respondents were computed. The approach was used for the marketing and distribution channels as well; Yes = 1 and No = 0.

**RESULTS AND DISCUSSION**  
**Socioeconomic characteristics**

The results revealed that the mean age of respondents was 55.8years. Table 1 reveals that most (34.5%) of the respondents were within 46 – 55 years age group. The age distribution suggests that the respondents were still in their middle age and capable of active participation in beekeeping activities. This is in line with the findings of Kareem (2016) and Usman *et al.* (2016) where it was observed that the respondents were within the middle ages. Similarly, this is corroborated by the view of Kamau *et al.* (2018), where it was revealed that majority of the respondents were middle aged. The results established that 76.6% of beekeepers in the study area were male while 23.4% were female. The observation is in line with the findings of Famuyide *et.al.* (2014), Usman *et. al.* (2016) and Kareem (2016) where it was observed that male dominated beekeeping activities. It can be deduced that the nature of the beekeeping activity informed the gender disparity. Furthermore, 88.9% of the beekeepers were married. This is inconsonant with the findings of Kareem (2016) and Usman *et.al.* (2016) where many of the respondents were married. More so, it was revealed that most (58.7%) of the respondents had tertiary education, while only 1.7% had no formal education. Majority (46.8 %) of the respondents practiced beekeeping for health and

social reason, while 41.7 practiced it for economic reason.

**Table 1: Socio-economic Characteristics of the Respondents (n = 235)**

Variables	Classification	Means	Frequency	%
<b>Age (Yeas)</b>	35 – 45		46	19.6
	46 – 55		81	34.5
	56 – 65	55.8	69	29.4
	66 – 75		39	16.6
<b>Gender</b>	Male	-	180	76.6
	Female		55	23.4
<b>Marital Status</b>	Married	-	209	88.9
	Unmarried	-	26	11.1
<b>Educational Levels</b>	No formal		4	1.7
	Primary		41	17.4
	Secondary		52	22.1
	Tertiary		138	58.7
<b>Household size</b>	1 – 5	5	151	64.3
	6 – 10		71	30.2
	≥11		13	5.5
<b>Hives owned (Apiary size)</b>	1 – 20	30	113	48.1
	21 – 40		80	34.0
	41 – 60		29	12.3
	61 – 80		10	4.3
	81 – ≥100		13	1.3
<b>Years of Experience</b>	1 – 5	12	37	15.7
	6 – 10		72	30.6
	11 – 15		36	15.3
	16 – 20		86	36.6
	≥ 21		4	1.7
<b>Income (N) from Beekeeping Only</b>	≤50, 000	125,000	115	49.0
	50,001 – 100,000		13	37.9
	100,001 – 150,000		89	5.6
	150,001 – 200,000		7	3.1
	≥200,001		11	4.7
<b>Reason for Keeping Bee</b>	Income	-	98	41.7
	Health/Social		110	46.8
	Hobby		27	11.5

**Sources of marketing information**

Table 2 reveals that the main (49.4%) source of marketing information was fellow beekeepers, followed by association (45.5%). Whereas other sources like Agricultural Development Project (ADP) were not adequately served as sources of information to the respondents. This indicate that most of the information on beekeeping were given

through fellow farmers. Whereas government institution like ADP was not adequately disseminating agricultural information. The finding is in consonant with the findings of Azeez (2022) and Kareem (2016) where it was observed that beekeeper source their information mainly from fellow beekeepers.

**Table 2: Sources of Marketing Information**

Source of Information	Frequency	Percent
Fellow beekeepers	116	49.4
Government	12	5.1
Association	107	45.5
<b>Total</b>	<b>235</b>	<b>100</b>

**Marketing channel utilised**

Table 3 indicate that most of the respondents sold their hives products directly to the consumers while only 1.7% sold to the retailers. There is ready market

for honey products and most customers do not even get enough honey. More so, most of the respondents preferred to sell to consumers because of the quantity produced which is small. The production

rate is minimal, and it can be consumed by people within the locality where it is being produced. Likewise, consumers preferred to buy directly from the beekeepers to ensure the originality of the honey. Furthermore, the Table indicate that all the beekeepers processed their honey and other hives products before selling to the consumers. Honey is sold in semi-refined stage by 89.4% of the respondents, while 10.6% of the respondents sold

their product as packaged honey. This indicates that most of the beekeepers do not add value to their product. Also, 66.0% of the respondents do not package their product while 34.0% of the respondents packaged the product before selling. The Table also show the willingness of the respondents to be involved in value addition, as all the respondents showed their readiness to adopt value addition initiatives.

**Table 3: Marketing and Distribution Channels**

Channels	Frequency	%
Consumers	231	98.3
Retailers	4	1.7
<b>Processing</b>		
Yes	235	100
<b>Selling forms</b>		
Semi-Refined	210	89.4
Packaged honey	25	10.6
<b>Packaging</b>		
Yes	80	34.0
No	155	66.0
<b>Willingness on value addition</b>		
Yes	235	100

### CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, it is concluded that most of the beekeepers were within active ages. The beekeeping is predominantly dominated by male. Most of the beekeepers sold honey and other hives products directly to consumers who were referred by fellow beekeepers. Also, the primary source of honey marketing information is through other beekeepers. Similarly, large proportion of the honey was sold out without value addition or packages. Most of the respondents were willing to learn how to carry out value addition. It is therefore recommended that government institutions should be developed to disseminate timely and credible agricultural information. Likewise, training on value addition and packaging should be organised for the beekeepers in the study area by relevant institutions.

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