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Besha Teresa Borena

M.Sc., Lecturer at Department of Agribusiness and value Chain Management, School of Business and Economics in Waliso Campus, Ambo University, Ethiopia

Key constraints and opportunities facing honey value chain actors: producer household evidence from Abuna Gindeberet district of west Shewa zone in Oromia, Ethiopia

Besha Teresa Borena

Abstract

There are different constraints and opportunities facing honey value chain in Ethiopia even if the country is well known by its high production of honey. This study was conducted in Abuna Gindeberet district with an objective of identifying main constraints and opportunities exist along honey value chain. To overcome this objective data were collected from both primary and secondary sources. A total of 150 honey producer households were selected using three stage random sampling from households that produces honey and generated by individual interview using pre-tested structured questionnaire: key informant interview, Traders, Consumers and focus group discussion. Different published and unpublished sources are secondary data sources and it was analyzed using descriptive and inferential statistics and STATA Version 14. The overall honey value chain was constrained by different factors: for instance at farm level, at traders' level, and consumers' level constraint. In other case, there are a number of producers' major production and marketing opportunity as well as traders and consumer opportunities to be used. Therefore, modern beekeeping production system as well as good market access should be introduced to producers in order to help them improve the quantity and quality of honey production and improve their marketing ability as well as to enhancing constraints hindering along honey value chain was policy recommendation of the finding.

Keywords: Honey, opportunity, constrains, honey value chain

1. Introduction

One of the agricultural sub-sectors that most suits with rural poor households' is beekeeping. Since it requires a very low level of inputs such as labor, capital, space (in terms of soil) and knowledge, it is simple and somewhat cheap to start. The sector of beekeeping has a lot benefits for enhancement of the livelihood of communities as it generates job for many people who involve in the production, trading and processing of bee products at different levels of market linkage and industry cottages (Gemechis *et al.*, 2012 and Tsegay *et al.*, 2017) ^[12, 17]. Beekeeping needs small land and therefore is a perfect activity for small scale resource-poor producers (Arage *et al.*, 2018) ^[4] and it is appreciated environment approachable activity in agriculture. Furthermore, beekeeping has assistances in sustainability and harmonizing the natural resources by supporting plants pollination and in turn, the activity has no influence on the environment, rather it alleviates breakable areas and helps in retrieving ruined lands and increases biodiversity equilibrium (Gemechis *et al.*, 2012) ^[12].

Ethiopia has a huge potential in beekeeping and it is amongst the main producer of honey both in Africa and in the world. For example, the country produced around 45,000 tons which accounted for about 27% and 3% of African and world production of honey, respectively, which make the country the biggest producer in Africa and 10th in the world in 2013 (FAOSTAT, 2015) ^[11]. Honey produces primarily natural honey and its allied by-products - Beeswax, pollen and royal jelly. For instance, Ethiopia total honey production is around 47.71 million kg of which the superior share of honey (90%) is reaped from traditional hives; where about 95% of hives are traditional (CSA, 2017) ^[8].

Due to limitations of skillful manpower and teaching institutions, small level of using technology, poor harvesting and handling of honey reaping, absconding, drought, poor society responsiveness about beekeeping exercise, shortage of bee flora, herbicide and pesticides poisoning, diseases of honeybee, scarcity of bee colonies and modern hives, and marketing difficulties; productivity of honey has been very little from the predictable potential (Tsegay *et al.*, 2017; Abadi *et al.*, 2016; and Nebiyu and Messele, 2013) ^[17, 1, 15].

Correspondence Author:

Besha Teresa Borena

MSc, Lecturer at Department of Agribusiness and value Chain Management, School of Business and Economics in Waliso Campus, Ambo University, Ethiopia

This has directed to small deployment of hive products domestically and comparatively short export earnings. Thus, the producers less profited and the role of beekeeping sub-sector to the state GDP has been limited. To alleviate such delaying factors and to enhances honey production and to rise household livelihoods with modern beekeeping, and honey production, technical training and equipment to native bee keepers have to be delivered to support their change from traditional to modern techniques of beekeeping (Eugenia, 2016) ^[10]. Considering the movement of materials via a value chain is significant in understanding opportunities and constraints along the chain, while accepting the movement and distribution of incentives is a key in understanding how to cope risks (FAOSTAT, 2015) ^[11].

By African standards the Ethiopian annual production of honey and beeswax is huge. Main producing regions in Ethiopia are Oromia (48.4%), Amhara (23.25%), SNNPR (17.45%) and Tigray (4.64%) and also as overall 6.19 million hives is projected to be found in the rural sitting parts of the country where 95.37% traditional, 1.31% transitional and 3.33% modern beehives. From Oromia, West Shewa ranks 4th by having 8.42% hive numbers next to Illubabor 16.45%, West Wellega 13.19 and Jimma 11.99%, whereas West Shewa ranks 3rd by producing 10.19% of honey following Illubabor 16.02% and Jimma 10.32% (CSA, 2017) ^[8].

The district of Abuna Gindeberet is amongst the highest possible honey producer from zone of west shewa. As showed in the report of West Showa Livestock and Fishery Development Office (2017/18), from entire honey produced (2,231,266 kg) in the production year, the district lines 3rd by producing 7.39% following to Danno (11.03%) and Dandi (8%). Rendering to the report of district Office (2017/18), the district has 14,569 honey bee colony where 299 modern hives, 1,114 transitional hives and 13,156 traditional hives with dawn October to start of December top honey production and reaping season. Therefore, grounding on the concept of production potential, this study has been conducted in the manner that reveals the existing Abuna Gindeberet districts honey value chain constraints and opportunities by using sampled respondents.

2. Methodology

2.1 Study area Description

Abuna Gindeberet district is situated at around 170 km from Addis Ababa to the west and 128km from Ambo town of the zone. It is characterized by means of midland (32%) and lowland (68%). The district has 44 *kebeles* as a total with 181,853 populations where 49.93% were male and 50.07 female. Practice of beekeeping was having near 14,569 honey bee colony where 299 was Modern hive, 1114 Transitional hive and 13,156 Traditional hives in the study district (AGDLFDO, 2018). The area is apt for honey production owing promising agro ecology and beekeeping activities as it houses for honeybee forage. Honey making is normally practiced during two production rounds in the district, but extra intensively used among the two production cycles in which more of the farmers are engaged is from September to November that is at blossoming season. The first season turns from September - November and the second season runs from April - May and top honey gathering months is at the close of October and opening of November.

2.2 Types and Source of Data Collection

Quantitative and qualitative data were used for explanation of the study outcome. Both primary and secondary data source were used using survey questionnaires, and Secondary data were from Abuna Gindeberet district offices and NGOs working on honey in the study area and also other published and unpublished sources and websites.

2.3 Sampling Procedures and Sample Size

Midland and lowland was agro ecological classification of the *kebeles*; because the study area has around 13 midland and 28 lowland *kebeles* and entirely all *kebeles* were producer of honey. A three-stage sampling technique was employed where at the first phase, two *kebeles* among all agro ecology selected randomly; namely Kolu and Goro jalate from lowland and Yagot and Irjajo from midland. At the second stage, honey producers and non-producers recognized and at the third stage the sampled producers were randomly carefully chosen from honey producers by means of probability proportional to sample size.

In sample size calculation, if there is no previous related work, pilot survey was suggested and would offer necessary evidence to fix the value of P (proportion of population). Nevertheless, for this study, the investigator couldn't carryout pilot survey due to budget and time constraint. So, the next assumption is used concerning the P value. While calculating sample size for proportion, there are two circumstances to reflect. First, if some estimate the value of P is known (example, from an earlier study), that value can be used in the formula. Second, if no approximation of P is identified, one should use P = 0.5. Consequently due to heterogeneity of the residents (midland and lowland) the sample size would be determined by the formula advanced by Cochran's (1997) and the value of P was in use as 0.5. Hereafter, depending on the evidence from the study area; 150 was the sample size that would be determined from four randomly chosen *kebeles*. The amount of honey producer household was 536, where 282 were from midland and 254 were from lowland among the sampled *kebeles*. The formula for sample size determination for heterogeneous residents is set by Cochran's (1997).

$$n = \frac{pq(Z)^2}{e^2} \quad (1)$$

Where, n = sample size; p = 0.5; q = 1-p and e = (8%) allowable error. Z = the value of standard variate at a given confidence level and to be worked out from table showing area under normal curve is 95% $z_{\alpha/2} = 1.96$

$$n = \frac{0.5 \times 0.5 (1.96)^2}{0.08^2} = 150$$

Concerning honey wholesalers, collectors as well as consumers; there were around 13 certified honey wholesalers (all taken) and different unrestricted collectors (Near 12 collectors were designated by random sampling from market at marketplace) that take part on marketing in the study area and bout 10 consumers were chosen randomly.

2.4 Method of Data Collection and Analysis

The researcher interacts directly with the participants. Using structured questionnaire primary data were collected from

honey producer, and also from KII, FGD, Traders and consumers using checklists. Enumerators who are working in the selected *kebeles* as DAs would be selected and trained earlier to data collection. KII were conducted with selected eight (8) experts of the study area. 8-12 member of FGD were held in selected *kebeles* to collect the applicable data for the study. The collected data were coded and serving to Microsoft excels 2010 and assembled for analysis based on the type of variable and evidence obtained. Descriptive statistics, inferential statistics and STATA version 14 were used for data analysis.

3. Result and Discussion

3.1 Sampled producers socio-economic and demographic characteristics

Household size

As depicted from table 1 below, the average family size of the sampled household heads in man equivalent unit was 6.47 persons per household. Since honey is not labour demanding agricultural activity, the bulky number of household size is not as much vital because it rises level of consumption at home. For this reason, family size of sampled household heads in the study area was converted into man equivalent unit.

Sex of the household head

According to survey output of table 2; from the total sampled household interviewed in the survey period about 90.67% was male headed and 9.33% was female headed household. This indicates that most of the sampled households' of honey producers were male headed household. This might show females are majorly responsible for reproductive and home activities than honey production.

Household head education level

Learning allows the person with the capability to do basic communications for business resolutions as well as production practices. According to survey result in table 2; the average years of schooling of the sampled households was 4.7 years ranging between 0 up to 15 years of schooling. This indicates some sampled producers didn't attending proper education while other attended formal schooling from up to 15 years in the study area.

Distance to the nearest market

Average distance from farmers to adjacent market in the study area was 1.5 walking hours per trip. This creates difference among the sampled households to secure inputs required and to sell their yield at required time period and at reasonable price.

Beekeeping experience

The average years of experience of the household head in beekeeping in the study district were 9.7 (table 2). This infers that there were household that are very experienced in honey production and selling in the study area due to favorable environmental condition (honey bee flora, water, temperature and other).

Number of beehive (colony) owned

As depicted from table 2 below; the average number of colony each household owned was 7.7 which varies from 1 up to 64. This great variation between honey producers

infers that there were producers those taking huge number of colony to produce sufficient volume of honey for selling as well as to inspire his/her economic growth.

Volume of honey supplied

There were about 3kg minimum and 780 kg maximum of honey marketed in the study area of sampled household in which the average was 72.8 (table 2). This might be due to the difference in number of having colony owned per individual household which creates variation in production and volume of honey marketed in the district.

Frequency of extension contact

The average frequency of extension contact by extension service provider was 1.84. This indicates some sampled producers were visited seven times per year while others have no chance to be visited. This describes variation in amount of honey produced among sampled households in the study area due to difference in service offered for farmers.

Agro ecology

As depicted in table 2 below, from 150 sampled producer interviewed about 79 (52.67%) household was from midland and 71 (47.33%) household was from lowland. This implies that the sampled households interviewed from midland and lowland agro ecology were almost similar to have the chance of equal opportunity.

Market information

The survey result in table 2 below revealed that, about 60.67% of the producer sampled has accessed market information and 39.33% have not accessed. This result revealed that, the majority of honey value chain actors (producers to consumers) had market information access although timeliness and quality of information is uncertain at local near friends, customer traders, personal call (visit) of the market and nearby growers served as the springs of market information for the sampled respondents.

Access to training

Out of the sampled households about 103 household had access to training service but 47 honey producers were unable to get training which accounts 68.67% and 31.33% for trained and non-trained respectively (table 2). This indicates that majority of the respondent had training access from NGO particularly mention for mention only, but this organization needs preconditions to give training among the requirements preconditions; interest of household to work as they direct and capable of paying the price of modern and transitional hives provided through them. Training is expected to have direct impact on the production and marketing movement of the honey producing farmers.

Access to credit

According to the survey results in table 2 below, from the total sample producers about 18.67% needs credit and the remaining 81.33% of the sample households were not need credit. Microfinance Institutions, Oromia Credit and Saving Institution and individual money lenders have been identified as a potential source for credit both in kind or on a cash basis. With regard to credit source out of 28 sampled respondents who need credit; 12 producers took credit from relatives and the remaining are from more than one source.

Types of bee hive used

From sampled producer there were about 72.00% of respondents owned only traditional hives which account 107 household heads whereas 16.67% owned Combination

(traditional transitional and modern) of all hives in the study district. However, only 8.67% owned both traditional and modern hives while 3.33% had traditional and transitional hives

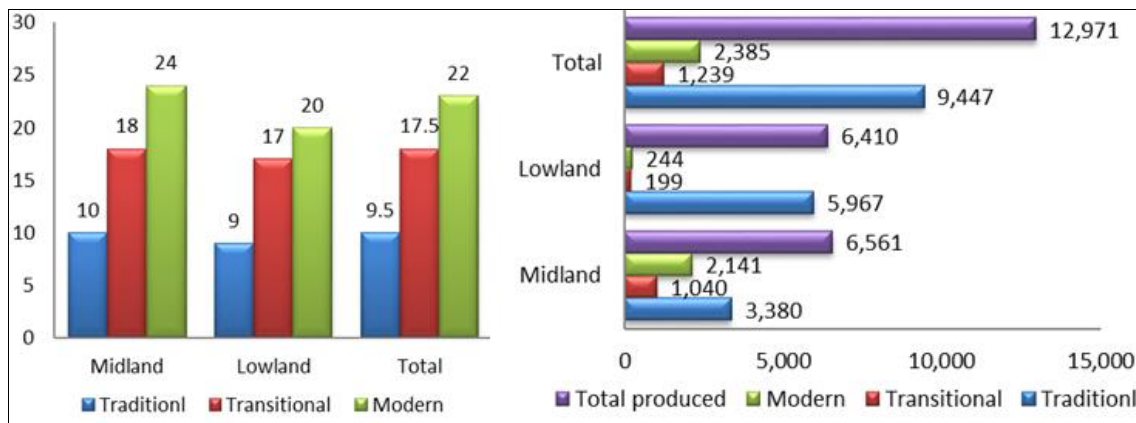
Table 1: Socioeconomic characteristics of variables used in the analysis

Variables (Continuous)	Min	Max	Mean (N= 150)	Strd. Dev.	Variables (Dummy & categorical)	Category	Frequency	Percent (%)
Household size (Adult Eqvt)	1	13.4	6.473	2.722	Sex	Male	136	90.67
Education level of HH head	0	15	4.7	3.218		Female	14	9.33
Distance to nearest market	0.16	3.33	1.49	0.912	Agro ecology	Midland	79	52.67
Beekeeping experience	2	30	9.7	6.980		Lowland	71	47.33
Number of beehive owned	1	64	7.707	7.644	Market information	Yes	91	60.67
Volume of honey supplied	3	780	72.807	87.788		No	59	39.33
Frequency of extension contact	0	6	1.84	1.424	Trained	Yes	103	68.67
						No	47	31.33
					Access to credit	Yes	28	18.67
						No	122	81.33
					Types of Beehives	Traditional only	107	72.00
					Used	Traditional & Transitional	5	3.33
						Traditional & Modern	13	8.67
						Combination of all	25	16.67

Source: Computed from survey data, 2019

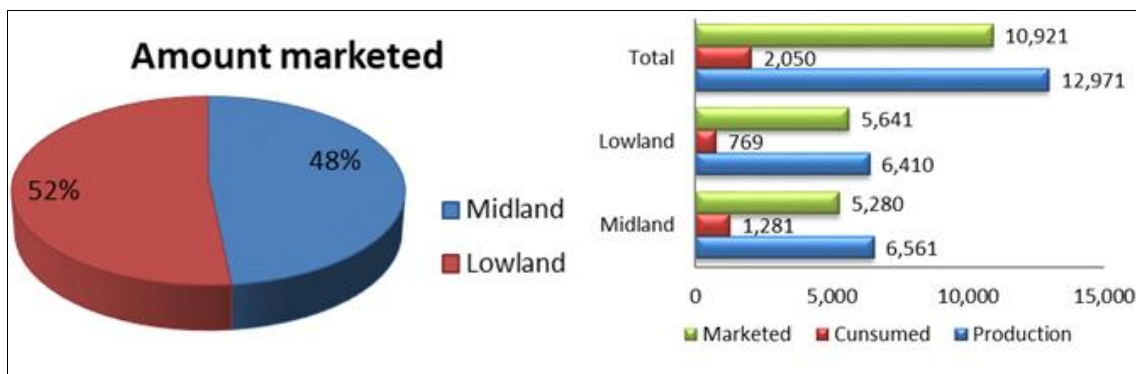
Honey is produced mainly for the market and consumption in the study district. The survey result from sampled producers and Focus group discussion revealed that all honey producers in the 2017/2018 production year have supplied to the market. According to the survey result, honey production is different depending on types of the hive and agro ecology (Figure 1). Midland honey production was 10 kg, 18 kg and 24 kg per hive; whereas in lowland agro ecology was 9 kg, 17 kg and 20 kg per hive for traditional, transitional and modern hives, respectively. The overall

productions per hive were 9.5 kg (traditional), 17.5kg (transitional) and 22kg (modern hive) (Fig. 1). Similarly, from the produced, about 50.58% was in midland and 49.42% was in the lowland. As per the data gathered from sampled producers, out of 12,971kg made in the 2017/2018 production year; around 84.20% of honey was marketed and the other was used up at home in different means. About 48% of total honey marketed was from midland and about 52% were from lowland agro ecology (Fig.2).



Source: Computed from survey data output, 2019

Fig 1: Production per hive and total honey production based on agro ecology



Source: Computed from survey data, 2019

Fig 2: Total amount of honey produced and marketed based on agro ecology

3.2 Constraint and Opportunity of Actors along Honey Value Chain

One advantages of value chain analysis is that it supports to identify limitations to the progress of the chain starting from input supply up to level of consumption. From analysis results, main constraints which were currently hindering the growth of honey VC can be categorized as: input supply, production, marketing, processing and consumer stage (table 2).

At production level key constraints facing sampled household were lack of modern beehive, absence of beekeeping equipment's, honeybee colony shortage, diseases, herbicides, swarming, Drought (lack of rainfall and water), pests and predators, colony death, lack of business support and training. Among major production constraints; pest and predator, disease and herbicide ranks 1st, 2nd and 3rd respectively (table 4). According to traders' responses, absence of linkage between producers and traders, lack of packing material, competition with unlicensed traders, poor transport facilities and poor government control was the major constraints on honey trading (table 6). Poor product handling after harvest, high price of the product, presence of honey at market only in production season and shortage of income were challenging at consumption states; whereas absence of cooperatives, seasonal existence of honey at market and poor processing activity due to lack of material as required were the major constraints at processing stage.

Almost all of the beekeeper households and FGD pointed out that beekeeping is profitable in the district due to availability of different bee forage species, good market price and market demand for honey. Producers' major production opportunity was self-interests to be engaged in honey production, availability of eager beekeepers and increasing request of honey in the market were the major one. However the sampled producers' major marketing opportunity was increasing demand of honey in the market, selling their honey everywhere they want and existence of traders (table 5).

According to table 7 below result Pests and predators, lack of modern bee hive, beekeeping equipment's or materials, shortage of colony, death of colony and lack of training were statistically significant on the chi-squared outputs at 1% significant level. This infers that there was a significant difference in having honey production constraints of sampled producers between midland and lowland.

Deficiency of market evidence, Absence of proper transportation, Individual marketing (absence of cooperative) and Low quality of product (honey) were statistically significant on the chi-squared results at 1% significant level (table 6). This revealed that there was a significant difference in having honey marketing constraints of sampled households between the two agro ecology. Price fluctuations of honey were statistically significant on the chi-squared results at 10% significant level (table 6). This shows that there is significant difference in pricing honey depending on agro ecology (midland and lowland).

Table 2: Summary of constraint and opportunity along honey VC in the study area

VC stages	Opportunities	Constraints	Intervention needed
Input supply	<ul style="list-style-type: none"> High demand to purchase beekeeping equipment 	<ul style="list-style-type: none"> Lack of modern bee hive Beekeeping equipment's Lack of business support services 	<ul style="list-style-type: none"> Government provision for calm access to inputs Supporting linkage of input suppliers and producers
Production	<ul style="list-style-type: none"> Availability of eager beekeepers to accept technology Increasing honey demand in market and Self interest Increment of support of Govt. and NGO to honey production Improvement of extension 	<ul style="list-style-type: none"> Lack of modern bee hive Beekeeping equipment's Shortage and death of colony Diseases and Drought Chemical(Herbicides) Swarming, Pests and predators Absence of business support 	<ul style="list-style-type: none"> Concerned body should give care to production Trainings to enhanced production & postharvest Strengthen business support provider institutions Training honey producers on disease/pest control, swarming control and method Improve production (traditional to modern hive)
Marketing	<ul style="list-style-type: none"> High market demand for honey Existence of traders Selling everywhere Availability of man power 	<ul style="list-style-type: none"> Lack of organized market (Poor linkage), market information, proper transportation and low quality of honey & market distance Intermediaries & Price fluctuation Lack of material for storing, transporting and marketing 	<ul style="list-style-type: none"> Control uninhibited traders Rise credibility and market relations of honey value chain actors Encouraging domestic and export market Improving producers bargaining power by supporting agriculturalists cooperatives
Processor	<ul style="list-style-type: none"> Active private producer involvement in the industry 	<ul style="list-style-type: none"> Lack of processing facility and cost of materials 	<ul style="list-style-type: none"> Encouraging private sector to invest on the sector
Consumer	<ul style="list-style-type: none"> Used as consumption, income source and medicine 	<ul style="list-style-type: none"> Income scarcity, absence of cooperatives, High cost of product 	<ul style="list-style-type: none"> Improving consuming habits of society with purpose of honey consumption

Source: Own computation based on survey data, 2019

Table 3: Production and marketing constraints of honey producer sampled households

Production constraint (producers)	Rank	Percent	Marketing constraint (producers)	Rank	%
Pests and predators	1 st	88.67	Lack of prearranged market	1 st	88.67
Disease	2 nd	86.67	Deficiency of market info	2 nd	80.67
Chemical(Herbicides)	3 rd	85.33	Various intermediaries	3 rd	78.00
Lack of modern bee hive	4 th	76.00	Absence of proper transportation	4 th	70.67
Swarming	5 th	74.00	Individual marketing(no cooperative)	5 th	69.33
Beekeeping equipment's / materials	6 th	69.33	Deprived connection with value chain actors	6 th	65.33
Shortage of Honeybee colony	7 th	54.00	Little quality of product(honey)	7 th	60.00
Drought (lack of rainfall and water)	8 th	47.33	Price fluctuation of honey and honey product	8 th	59.33
Death of colony	9 th	46.67	Market distance	9 th	54.67
Lack of training	10 th	46.67	Lack of Containers for transporting, storing and marketing	10 th	51.33
Lack of business support services	11 th	27.33			

Source: own computation based on survey result, 1019

Table 4: Production and marketing opportunity of honey producer household

Marketing Opportunities	Rank	%	Marketing opportunity	Rank	%
Self interest	1 st	90.67	Increasing honey demand in the market	1 st	94.67
Accessibility of eager beekeepers to take new technology	2 nd	82.67	Sales every where	2 nd	90.67
Growing demand of honey in the market	3 rd	78.67	Existence of traders	3 rd	88.00
Improvement of extension	4 th	35.33	Availability of man power	4 th	46.67

Source: own computation based on survey result, 1019

Table 5: Trader constraint (wholesaler and collector)

Constraint	Rank	Percent
Absence of linkage between producers and traders	1 st	88
Lack of packing material	2 nd	84
Existences of unlicensed traders	3 rd	72
Lack of access to products of good quality	4 th	64
Lack of proper transport facility	5 th	60
Different buyers having different quality requirement	6 th	40
Lack of access to or handiness of credit	7 th	12

Table 6: Production and marketing constraint of honey producer household by agro ecology

Production Constraint	Mean/proportion (%)			χ2 value	Marketing constraint (yes only)	Mean/proportion (%)			χ2 value
	Midland	Lowland	Both			Midland	Lowland	Both	
Pests and predators	78.48	100.00	88.67	17.23***	Lack of organized market	84.51	92.41	88.67	2.32
Disease	78.48	95.77	86.67	9.68**	Lack of market information	69.62	92.96	80.67	13.06***
Chemical(Herbicides)	84.81	85.92	85.33	0.04	Various intermediaries	75.95	80.28	78	0.401
Lack of modern bee hive	91.14	59.15	76	20.97***	lack of proper transport	54.93	84.81	70.67	16.11***
Swarming	68.35	80.28	74	2.76	Alone marketing	57.75	79.75	69.33	8.51***
Beekeeping equipment's / materials	93.67	42.25	69.33	46.49***	Poor linkage with value chain actors	63.38	67.09	63.38	0.22
Shortage of honeybee colony	72.15	33.80	54	22.14***	Low quality of honey	36.71	85.92	60	37.73***
Drought (lack of rainfall and water)	46.84	47.89	47.33	0.02	Price fluctuation of the product (honey)	49.30	68.35	59.33	5.63*
Death of colony	32.91	61.97	46.67	12.69***	Market distance	46.84	63.38	54.67	4.13
Lack of training	31.65	63.38	46.67	15.13***	Lack of containers: store, transport, marketing, etc.	49.30	53.16	51.33	0.22
Lack of business support services	22.78	32.39	27.33	1.74					

Note: ***, ** and * level of significance at 1%, 5% and 10%.

Source: Own computation from survey result, 2019

Conclusion and Recommendation

Conclusion

The study focused on analyzing key opportunity and constraint of honey value chain in Abuna Gindeberet district. Objective of the study was identifying key constraints and opportunities facing actors across honey value chain in the study district. In order to address the objectives, both qualitative and quantitative data were used. The data were produced as of both primary and secondary sources. The primary facts were harvested from a total of 193 defendants (150 producers, 25 traders, 8 key informant interview and 10 consumers) as well as focus group discussion using structured questionnaires and checklists. Descriptive statistics, inferential statistics, STATA Software version 14 and excel sheet were used data analyzing.

The overall honey value chain was constrained by different factors. At farm level production constraints were; Lack of modern beehive, beekeeping equipment's, shortage and death of colony, diseases, drought, herbicides, swarming, pests attack and predators. At marketing level; Lack of prearranged market (cooperative), shortage of market information and proper transport, existence of intermediaries, market distance and reduced linkage per value chain actors. Additionally, traders constrained by the absence of linkage between actors, lack of packing material, existences of unlicensed traders, lack of quality product and absence of proper transport. The producers major production opportunity was self-interests, availability of eager beekeepers and increasing demand of honey in the market, and major marketing opportunity was increasing

demand of honey, selling everywhere they want and the existence of traders.

Recommendation

From the outcome of the result, it is greatly recommended to inspire honey value chain actors starting from input supply; consequently honey makers receive the accurate types of production input, quality and quantity vital at the exact time and place. The part of provision services like NGOs, institutes of research and extension workers are essential in enlightening production, productivity per hive and honey marketing. All actors of honey value chain should work in a united way to expand the production scheme and to create maintainable market association. In calculation, unifying traders and producers to launch trustful and solid trade promises between actors is fundamental to minimize unlicensed traders (collectors). Building honey value chain actors capacity on how performing in value chain development is recipient.

References

1. Abadi B, Abebe A, Delenasaw Y. Community Perception on Beekeeping Practices, Management, and Constraints in Termaber and Basona Werena Districts, Central Ethiopia. Hindawi Publishing Corporation. Adv. Agric. Article ID 4106043; c2016. p. 9.
2. AGDLFDO (Abuna Gindeberet District Livestock and Fishery Development Office). Annual report of Abuna Gindeberet District Livestock and Fishery Development Office. Unpublished manuscript; c2018.
3. AGDTMDO (Abuna Gindeberet District Trade and Market Development Office). Socioeconomic profile of Abuna Gideberet District Trade and Market Development Office. Unpublished manuscript; c2018.
4. Arage A, Gemechu A, Ketema M. Honey Value Chain Analysis in Gera District, Jimma Zone of Oromia National Regional State, Ethiopia (Doctoral dissertation, Haramaya University); c2018.
5. Assefa A. Market Chain Analysis of Honey Production in Atsbi Wemberta District, Eastern zone of Tigray, M.Sc. Thesis. Haramaya University, Ethiopia; c2009.
6. Beyene G. Honeybee production systems in Kewet District of Amhara, Ethiopia. *Livest. Res. Rural Dev.* 2015;27:95.
7. Biressaw S, Tessema Z, Mges D, Mohammed A. Beekeeping Practices, Production Potential and Challenges of Bee Keeping among Beekeepers in Haramaya District, Eastern Ethiopia *J Veterinar Sci. Technology.* 2015;6:5
8. CSA (Central Statistics Authority). Agricultural Sample Survey Report on Livestock and Livestock Characteristics. Addis Ababa, Ethiopia, 2017, 2(585).
9. Dayanandan R. Opportunities and challenges of apiculture in Ethiopia, scholars' world; c2015.
10. Eugenia M. Final Report for WEEMA International. SIPA's Economic and Political Development Workshop in Development Practice Improving Household Livelihoods with Modern Beekeeping and Honey Production in Ethiopia. Columbia University; c2016.
11. FAOSTAT (Food and Agriculture Organization of the Nations). FAOSTAT (Database). (Latest update: 07, March 2014); c2015. <http://data.fao.org>
12. Gemechis L, Kibebew W, Amssalu B, Desalegn B, Admassu A. Apiculture Research Achievements in Ethiopia, Oromia Agricultural Research Institute, Holeta Bee Research Center, 2012, Holeta, Ethiopia; c2012.
13. Guyo, Legesse. Review on beekeeping activities, Opportunities, challenges, and marketing in Ethiopia; journal of harmonized research, *Appl. sci.* 2015;3(4):201-214.
14. Mekonene M. Assessment of Honey Market Opportunities and Constraints in Masha District - South West Ethiopia. *International Journal of Management and Social Sciences Research, (IJMSSR) ISSN: 2017;6(8):2319-4421.*
15. Nebiyu Y, Messele T. Honeybee Production in the three Agroecological districts of Gamo Gofa zone of Southern Ethiopia with Emphasis on Constraints and Opportunities. *Agric. Biol. J. N. Am;* c2013. p. 2151-7525.
16. Tezera A. Honey market constraints and opportunities in the case of lasta woreda, North wollo zone, Amhara regional state-Ethiopia, master thesis, Unpublished; c2013.
17. Tsegay L, Gebreegziabher Z, Mesfin T. Opportunities and Constraints of Beekeeping in Wolaita and Dawro Zones, Southern Ethiopia. *African Journal of Agricultural Research.* 2017;12(18):1587-1592.