

Honey Production and Processing in Sekona Community, Ede South Local Government of Osun State.

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Abstract. This research was conducted to investigate and document bee keeping activities in Sekona community of Ede South Local Government of Osun state. Data was collected with the use of structured questionnaire. The community was purposively selected due to the consistency of bee keeping activities discovered in the area. Results revealed that majority of the beekeepers (70%) are Male and 30% Females. Though there is Male dominance in the trade, data showed involvement of women in beekeeping in the study area. However some challenges to beekeeping in the area were observed, these includes; inadequate knowledge of other bee products apart from honey, lack of access to modern beekeeping equipments, bush burning and other human interfering activities. This calls for government intervention in area of training and extension services.

Keywords: Beekeeping, Honey, Production, Processing, Government Intervention

1. Introduction

Honey, the natural food from the bee has been described many times as man's sweetest food. Honey is a near complete and unique food which can only be produced by bees. Honey is the name given to the sweet, thick liquid substance composed mainly of sugars produced by honey bees from nectar of flowers(Wilson,2006).The source which is the main raw material for honey production is the principal determinant of the taste, colour and other properties(Agbidye et

al,2018).S It enjoys an increasing demand because of a growing understanding of its nutritional quality and curative ability(Agriculture Today,1993;Morse and Hooper,1985).Honey is a very useful product, which if managed efficiently could bring about increased income. Nigeria does not produce enough honey presently as the traditional method of collecting honey encourages the destruction of bee population, which reduces honey production and thereby results in the reduction of income derivable from honey production.(Winston,1987).

Apiculture is an aspect of the Agricultural sector that has not been given much attention, particularly at the commercial level in the country (ICTA,2004). Presently in Nigeria, honey production is at its developmental stage, this could be attributed to inadequate information and lack of efficient government involvement in terms of educating the rural farmers who are the ones mostly found in the profession. In order to be able to proffer adequate intervention, there is need to identify the various production systems adopted by bee farmers and also know their level of awareness and exposure to technical skills.

Beekeeping is the manipulation of honey bees for the purpose of honey production and other products such as bees wax, pollens, propolis, royal jelly, and bee venom and pollination of agricultural plants (Agbidye et al. 2018). In Africa, beekeeping is mainly carried out for the

purpose of honey production (Leen et al., 2005; Michener 2000; Oyeleye 1999).

Beekeeping is concerned with practical management of the social species of honey bees, which live in large colonies and the oriental, the African bees *Apis mellifera adansonii* (Lestis) is the most widely used species in Africa for honey production.(Michener, 2000).

Beekeeping can be practised by any interested individual as it does not require serious academic knowledge and therefore anyone can engage in beekeeping irrespective of age or sex

(Ukioma and Edeki, 2010). There is paucity of information on beekeeping activities in developing countries of the world especially Nigeria (Kareem et al., 2010). Traditionally, honey is harvested with the use of fire or torches which burn the insects to death, however this practice has declined in recent times as a result of increasing urbanization , increasing population pressure on available land and as improved knowledge of husbandry practises increases. However, the period when the practise lasted was one that led to a depletion of bee population , thus resulting in scarcity of honey (Seeley, 1985).

2. Methodology

The research was carried out in Sekona, a community under Ede South Local Government in Osun state. In the study, a simple random sampling technique was adopted, and a total of 60 bee keepers were served structured questionnaires. The data collected was analysed using frequency and percentages and the profitability determined with the use of gross margin analysis.

Table 1.0: Showing Socio Economic Characteristics of Respondents

Variable	Frequency	Percentage
A Sex		
Male	42	70
Female	18	30
B Marital Status		
Single	2	3.33
Married	56	93.3
Widowed	2	3.33
Divorced	-	-
	40	67
	16	27
C Education	4	6
Primary		
Secondary	35	58
Tertiary	15	25
D Primary Occupation	10	17
Farming	-	-
Trading		
Artisan	30	50
Civil servant	30	50
E Religion	-	-
Christianity		
Islam		
Others		

3. Result and Discussion.

Analysis of the socio- economic variables indicates that 70% of the honey producers in the area are male and 30% are females, this shows that both male and females are involved in

honey production in the area, though there is male dominance in this case. The analysis also indicates that there is no religion barrier to honey production in the area as there is equal participation of the two prevalent religions in the area. Also 93% of married couple are involved

in the production of honey in the study area, this emphasises the importance of honey as a source of food and income to the beekeepers.

However, it is observed that the community is being faced with challenges such as; lack of government involvement in terms of provision of training services through extension officers; this could be the reason why it is observed that about 72% of honey producers in the area do not know about other bee products apart from honey and none of those that knows are even producing any of the other products which could equally fetch them good income. Also bee keepers in the community do not have access to modern tools which the government can also supply them at subsidised rate. It is also observed that there is a

high rate of bush burning and other human interference such as theft and destruction of bee hives in the area.

3.1 Costs and Return Analysis

The result of the costs and returns analysis showed that honey production enterprise is a lucrative business; an average of 120 litres of honey was produced per farmer per season, a gross farm income of #180,000 with a total cost amount of #75,540.00. Farmers should therefore be encouraged to expand production by increasing the number of hives they have so as to improve on their income and standard of living.

Table 2.0: Showing other Bee Products known

Product	Frequency	Percentage
Pollen	1	3.44
Bee wax	7	24.14
Propolis	-	-
None	22	72.21

Table 3.0: Showing other Bee Products Produced

Product	Frequency	Percentage
Pollen	-	-
Bee wax	-	-
Propolis	-	-
None	60	100

Table 4.0: Respondents response as regards Government support

Government support		
	Frequency	Percentage
Yes	-	0
No	60	100

Table 5.0: Showing accessibility to modern beekeeping equipments.

Access to Modern Equipment		
	Frequency	Percentage
Yes	12	10
No	48	90

Table 6.0: Showing level of exposure to modern beekeeping training.

Access to Training		
	Frequency	Percentage
Yes	8	13.33

No	52	86.66
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Table 7.0: Showing challenges being faced by beekeepers in the study area.

Challenges	Frequency	Percentage
Sales problem	-	0
Bush burning	30	50
Theft	4	6.67
Human interference	26	43.33

4. Conclusions and Recommendations.

Honey production is a very rewarding enterprise if well managed. The identified constraints includes; high cost of inputs, insufficient hives, inadequate capital, lack of government intervention and technical information.

- Government should assist interested honey producers with soft loans and necessary inputs at subsidised rate ,
- Provision of constant training on new technologies.
- Bush burning should be averted by regular clearing of the bee areas. Since land is not a limiting factor in the study area, rural dwellers should be encouraged in bee keeping through provision of incentives so as to be able to produce more to reduce poverty and foster rural development.

References

Agbidye, F.S and Hyamber,T.O.(2015): Beekeeping practise and forest conservation in Gwer west local government of Benue State ,Nigeria . *SPG Journal of Agriculture, Forestry and fisheries*, 4(5), 222 – 227

Agbidye ,F.S, Ishuwa M.M and Odeh G.O. (2018): Survey of bee keeping practice, Obi Local Government Area of Benue State, Nigeria. Proceedings of 40th Annual conference of Forestry Association of Nigeria ,2018 Pp 307- 314

Agriculture Today ,1993. Beekeeping in Nigeria Vol I, No.3; pp 8 – 12

Kareem , A.A ,Iroko ,O.A .,Adio ,A.F., Jegede, O.C., Olaitan , A.O., and Jayeola, A.A. (2010): Role of Non-timber forest products (NTFPS) in creating wealth ; A Case Study of Honey Production. In : Popoola, L., F.O., Idumah , V.A.J . Adekunle and I.O., Azeez (eds). The Global Economic Crisis and

sustainable renewable resources Management . Proceedings of the 33rd Annual conference of the Forestry Association of Nigeria held in Benin Edo state, 25th -29th October, 2010. Pp 429- 435.

Leen V.T., William ,J.B., Marielle, M. Piet. S., and Hajo V.,(2005); Bee keeping in the tropics .Digigrafi Netherlands, pp 7- 49.

Michener ,C.D., (2000): The bees of the world . The John Hopkins University press. Baltimore, M.D, USA.913 Pp

Morse , R.A., and T. Hooper., (1985); The illustrated encyclopaedia of beekeeping ,E.P .Dutton Inc, NewYork.

Ojeleye , B (1999); Foundation of Beekeeping in the tropics, CENRAD press , Ibadan.225 Pp

Seeley, T.D., (1985) ; Honeybee ecology, Princeton University press, Princeton New Jersey.

Ukioma , A.A., and Edeki ,U.F (2010); Apiculture; A panacea for poverty alleviation in the Niger Delta of Nigeria in : L. Popoola, F.O Idumah , V.A.J Adekunle and I.O Azeez ., (eds). The global economic crises and sustainable renewable resources management , Proceedings of the 33rd Annual conference of the Forestry Association of Nigeria held in Benin Edo state, 25th -29th October, 2010. Pp 567- 572.

Winston ,M.L., (1987); The Biology of the Honey bee, Harvard University press . Cambridge , Massachusetts .

Wilson .R.T., (2006) : Current status and possibilities for improvement of traditional apiculture in Sub -Sahara Africa . Livestock Research for Rural Development, Vol. 13 (8); I-II