

Motivational Perspectives for Successful Involvement in Effective Bee Honey Production among Beekeepers and Traditional Bee Hunters in Boki Local Government Area of Cross River State, Nigeria

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ABSTRACT

There is no way Bee Honey production can be made possible without the availability of and accessibility of Bees. It is a fact that the production of keeping of bee is tasking and the process of bee honey production is usually challenging and demanding. Therefore, there is need to introduce some motivational perspectives/initiatives to encourage the keeping of bees to avoid its extinction and to encourage the production of bee honey so as to continually tap from its source of nutritional contents. To this end, the researchers were interested in emphasizing on the need for consideration of some basic motivational initiatives for successful involvement in effective Bee Honey production among beekeepers and traditional bee hunters in Boki Local Government Area of Cross River State, Nigeria. The motivational perspectives considered in this study were: provision of modern facilities/equipment, loans/subsidies, and free training on bee keeping/Bee Honey production. The study adopted an ex-post facto research design where 50 respondents (30 bee keepers and 20 traditional bee hunters) were recruited through multi-stage sampling techniques (Simple randomization and census sampling). Data were collected using researcher-designed questionnaire with 20 items. Data collected were analyzed using independent t-test to test hypotheses and results/findings presented using descriptive statistics. The study showed that there is no statistically significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of provision of modern facilities/equipment, loans/subsidies, and free training on the involvement in bee honey production. Based on the findings from the study, the researchers recommended among others that modern facilities/equipment and workshops/seminars should be provided to people ready for bee keeping/honey production.

Keywords: Motivational perspectives, Bee keeping, Bee honey, Bees.

INTRODUCTION

The relevance of Home Economics cannot be overemphasized. It is a lucrative discipline in Vocational Education that equips graduates with skills and competences required to settle in an occupation of choice on graduation either as an entrepreneur or paid employee. Areas in Home Economics that entrepreneurship can be developed include but not limited to

catering, fashion and designing, home management, bead making, horticulture, and apiculture. Apiculture is an important and lucrative area in Home Economics and Agriculture. Apiculture is a modern method of keeping bees for honey, comb/wax, pollen, bee venom and royal jelly. It is an occupation that combines knowledge of habit and behaviour of bees under varying environmental conditions with the efficient

manipulation of special equipment by the operator (Akachukwu, 2000).

The nutritional value of bee honey as well as its health benefits has given it an edge over sugar which concerted efforts should be geared towards boosting its production by farmers including bee keepers and traditional bee hunters for economic gains. These efforts should be directed towards providing modern facilities/equipment, providing loans/subsidies, providing free training to bee keepers and traditional bee hunters among others. Modern bee keeping that entails housing the bees is not difficult to embark upon because it does not require large area of land and water as well as daily care (Oluwole, 2003).

There are basically two methods of honey gathering: there are the bee hunting and the bee keeping. Bee hunting involves locating a natural colony of bees and setting the colony on fire in order to harvest the honey. This method of bee hunting has been criticized on the grounds that it is destructive both to the environment and the stability of the ecosystem (Mishra, 2001). The hives combs are removed while the brood or uncapped combs are thrown away. Honey is extracted either by squeezing it out of the combs using hand or honey extractor.

Bee keeping on the other hand involves the construction of hives with movable frames separated by space for bee to fix their comb on the frame (Langstroth hives). This allows for large scale bee farming. Modern bee keeping also involves the use of bee suit consisting of bee dress, hand gloves, boots and veil (all these protects the bee farmers against bee sting). In modern bee keeping, bee could be fed with sugar solution or diluted honey which is provided in a trough. In the dry savanna region where the atmosphere is dry, it may be necessary to provide bee with drinking water which is provided with a trough to avoid bee drowning. This is to help bee hunters maintain balance with the environment.

In Cross River State, Boki Local Government Area, prior to modern facilities

which is the desire for all bee farmers in the area, the production capacity of honey were around 2 tones and there were about 500 colonies (Martins, 2000). The introduction and utilization modern bee production equipment have increased the tones of bee production and number of bee hunters and bee keepers (Souvenir, 2001). The honey bee has been familiar to man since pre-historical days and is one of the few insects that are directly beneficial to mankind. Besides honey, other bee hives products such as royal jelly, bee wax, bee pollen, propolis and bee-venom are also available nowadays. Honey production brings not only income but helps also in increasing yield and quality of seed/fruits through cross pollination (Ayinkele, 2008).

Honey has many uses in food, machine, pharmaceutical and cosmetic industries. Bee hunting and keeping is agro-based rural enterprise but does not compete with other resources of farming system (Mishra, 2001). This enterprise has great potentials in increasing the economy and financial status of rural community by using it in rural development programmes. Here, due to the environment and abundance bee flora and fauna, the quality of honey production is found superior and gives more remunerative income to the honey producers. With its vast area and immense potentials for boosting honey production, it was imperative to equip honey or bee keepers with sophisticated tools and techniques to enhance honey production in the area and hence motivate them. This is because, motivation is very important in understanding behaviour (Luthan, 2008). Motivation is a drive that increases owns disposition to a particular activity. Thus, motivational initiatives should be provided to bee keepers and traditional bee hunters to enhance their involvement in bee honey production: such as provision of facilities, loans/subsidies and free training programmes.

Martins (2000) noted that the provision of facilities to enhance bee activities cannot be emphasized. The author

explained that relevance of bee farming and with the number of individuals who are currently involved in bee farming activities: the provision of modern equipment will facilitate the cultivation and maintenance of large bee houses and health that increase their income status. Okokon (2009) noted that most of the farmers in the local areas have no access to tangible capital that facilitates their cultivation of large scale farming. Bee keepers and traditional bee hunters are not exception to this. They are therefore always de-motivated and tend to work as their strength can carry them.

In most establishments, organization of seminars, workshops and participation in conferences helps individuals acquire the necessary skills, ideas, knowledge and techniques as well as definite behavioural pattern that can enhance their commitment and improvement in their engagement. Bee keepers and traditional bee hunters are not left out in the crusade for provision of new ideas and skills that will facilitate their productive increase. This is because new species of plants, new techniques or rearing and harvesting bees are introduced on almost annual basis. Therefore, workshop programmes are important.

GENERAL OBJECTIVES OF THE STUDY

The study examined some basic motivational initiatives for successful involvement in effective Bee Honey production among beekeepers and traditional bee hunters in Boki Local Government Area of Cross River State, Nigeria. In specific terms, the study examined the influence of:

- i. provision of modern facilities/equipment on involvement of beekeepers and traditional bee hunters in bee honey production;
- ii. provision of loans/subsidies on involvement of beekeepers and traditional bee hunters in bee honey production; and,
- iii. provision of free training programmes on involvement of

beekeepers and traditional bee hunters in bee honey production.

The specific objectives guided the researchers in formulating three hypotheses as follows:

H₀₁: There is no significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of modern facilities/equipment on the involvement in bee honey production.

H₀₂: There is no significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of loans/subsidies on the involvement in bee honey production.

H₀₃: There is no significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of free training programmes on the involvement in bee honey production.

THEORETICAL FRAME WORK

The theory that formed the basis of this research work was Maslow's Hierarchy of Needs Theory by Abraham Maslow in 1954. One of the most popular needs theories is Abraham Maslow's hierarchy of needs theory. Maslow proposed that motivation is the result of a person's attempt at fulfilling five basic needs: physiological, safety, social, esteem and self-actualization. According to Maslow, these needs can create internal pressures that can influence a person's behaviour. Physiological needs are those needs required for human survival such as air, food, water, shelter, clothing and sleep; Safety needs include those needs that provide a person with a sense of security and well-being. Personal security, financial security, good health and protection from accidents, harm and their adverse effects are all included in safety needs; Social needs, also called love and belonging, refers to the need to feel a sense of belonging and acceptance. Social needs are important to humans so that they do not

feel alone, isolated and depressed. Friendships, family and intimacy all work to fulfill social needs; Esteem needs refer to the need for self-esteem and respect, with self-respect being slightly more important than gaining respect and admiration from others; Self-actualization needs describe a person's need to reach his or her full potential. The need to become what one is capable of is something that is highly personal. The theory is relevant to this study, with regards to the provision of facilities (physiological needs), loans/subsidies and training programmes (self actualization). For example, providing beekeepers and traditional bee hunters with training programmes would consequently motivate their venturing into bee honey production, thus contributing to the Nation's economy.

STATEMENT OF THE PROBLEM

Bee hunting and bee keeping is an occupation that combines knowledge of habit and behaviour of bees under various environmental conditions with the efficient manipulation of special equipment of the operation. The production of honey depends largely on areas where bees can get the necessary nectar to protect their hives. According to Akachukwu (2000), the importance of honey over sugar has been realized and other benefits such as medicine, food, pharmaceuticals and cosmetic purpose are also noted. Unfortunately, despite the usefulness of honey production as source of food and income to practicing farmers, it has received less attention. It has been observed that many beekeepers and traditional bee hunters are still having challenges in honey production. This has been attributed to lack of motivational initiatives such as provision of facilities, loans/subsidies and training programmes to enhance them venturing into bee honey production. In this circumstance, the questions that arose are: what can be done to motivate beekeepers and traditional bee hunters to successfully be involved in bee honey production? Can these

motivational perspectives be relevant? With these puzzles in mind, the researchers were poised to search and find out what motivational perspectives would prompt the involvement of beekeepers and traditional bee hunters in bee honey production in Boki Local Government Area of Cross River State, Nigeria.

LITERATURE REVIEW

Provision of facilities and bee honey production is key. Globalization with its attendant technological characteristics has brought a lot of innovations in virtually all facets of human life. There are productive changes in all spheres of human endeavours resulting from industrial revolutions in the 18th century. Productivity in all sectors since then has increased geometrically as a result of the utilization of mechanized instrument in their activities. Obikwe (2000) noted that the emergence of industrial revolution brought a lot of improvement in Nigeria economy as increased production, increase in the Gross Domestic Product (GDP) and per capita income of the individual. This suffices that, in any sector where crude implements are substituted for the modern mechanized tools, productivity at increased level is inevitable.

Bee keeping in the study area is characterized by the use of traditional equipment such as log, pot and others. This crude material retards their productive capacity and de-motivates their commitments to bee keeping as right income proportion has not been gotten. It therefore means that, for beekeepers and traditional bee hunters to produce more honey, they need modern bee keeping or bee farming facilities to enhance their productivity. The provision or availability of these modern facilities will ginger them to embark on bee keeping as well as increase their income level for a better standard of living.

In a research work conducted by Martin (2000) on activities of bee hunters and bee keepers in Oyo State, Nigeria; the researcher compared the socio-economic

characteristics of bee hunters and bee keepers. The study also categorized bee sting prevention techniques and problems and the two categories of bee farmers encountered in bee farming. The population of the study was made up of both bee hunters and bee keepers. A snowball technique was used to select the list of beekeepers association. A total of 50 respondents were selected consisting of 20 bee hunters and 30 beekeepers. An interview schedule was used in collecting data from the bee hunters since it was assumed that majority of them might not be able to read and write, while a questionnaire was used in gathering information from the beekeepers since it was believed that they were literate. The findings of the study showed that 75.0% of bee hunters used no prevention methods against bee sting as a result of inadequate facilities and equipment at their disposal, while 25.0% of the hunters cited stinging as one of the problems they encountered, but 46.7% of the beekeepers cited inadequate working space. More so, the beekeepers had better yield and made more income than the bee hunters. It was concluded and recommended that bee hunters should be provided with equipment and facilities.

Ogebehe (2013) stated that the use of modern equipment like gloves, helmets, among others provide the bee keepers and hunters with the disposition to carry out their farming without any fear thereby enhancing their productivity and living standard. A similar research conducted by Gregory (2010) on the effective provision and utilization of modern equipment in bee farming and hunting in Boki Local Government Area of Cross River State; using a survey research design with simple random sampling technique as a tool for selecting a sample of 50 respondents in the study area; adopting a questionnaire and oral interview as measures for data collection; using independent t-test and simple regression as tools for statistical analysis, showed that although the percentage of bee farmers in

the area stood at 45%, bee hunting was carried out with crude means of setting fire on bees without adequate protection. It was further revealed that the number of persons who have been casualties in the bee expedition have drastically reduced in the area. It was recommended in the study that the bee hunters be provided with materials that can protect them against be stung as well as waste during rearing. From the foregoing, it is believed that if facilities are provided for bee hunters and bee keepers, it will motivate them in bee honey production.

Provision of loans and subsidies are important too. Rural area are basically agrarian and at subsistent level. These levels of agricultural activities do not permit mass production due to the level of income and infrastructural development in the area. Most of the bee farmers carry out this process themselves owing to the inability to get capital anywhere and the unavailability of funding houses like micro-finance banks that are not available or incapacitated. Bee hunters and bee keepers need capital in order to acquire modern facilities that are relevant for production. They need loans either from the government or financial institutions to aid them in improving their bee keeping or bee farming activities. Unfortunately, these credit facilities are grossly inadequate in this study area. Porhel (2008) identified that many bee farmers are unable to manage predators, parasites, diseases, pesticides poisoning as regards bee keeping. Okokon (2009) noted that most of the farmers in local areas have no access to tangible capital that facilitates their cultivation of large scale farming.

Okegene (2012) noted that most farmers cannot get the required facilities to carry out their bee exploitation. That the provision of loans and subsidies will enhance the acquisition of facilities and relevant manpower. In a study conducted by Ebewore (2010) on the impact of loans administration on local farmers in Isoko South Local Government Area, Delta State, Nigeria, ninety farmers and ten bank officials were selected for the study using

simple random sampling and purposive sampling techniques with the aid of a structured questionnaire to obtain data for the study. Various descriptive and inferential statistics such as percentages, frequency distribution, and mean and regression analysis were used to analyze the data. The findings indicated discrepancy between actual amount of loans disbursed to farmers and time of loan disbursement affected farming. In line with the above findings, Deghor (2000) noted farmers should be encouraged to apply for loans on cooperative basis where collateral may not be required. Oyama observed that the presence of adequate loan facilities will not only serve as motivation factor to workers but also serve as a way of enhancing the standard of living of those involved and the general Gross Domestic Product of the economy.

In another study on the evaluation of availability and provision of loan to farmers in Kwande Local Government of Benue State, Nigeria by Eohaya (2007). The study adopted the survey research design with a stratified and simple random sampling techniques on 120 respondents were selected for which 70% were farmers. A validated questionnaire was used for data collection for the study. Various statistical methods such as Chi-square, regression and population t-test were used for data analysis. The findings showed that the presence of substantial collateral as well as high interest percentage have deterred most farmers from accessing capital for investment in order to improve their farming activities. The results of this low investment according to Mahmed (2012) finds expression in many people abandoning farm lands in search for white collar jobs, low activity, high rate of crime and high importation of what ordinarily would have been produced in Nigeria. Francis (2009) noted that most of these modern bee rearing and keeping equipment are capital involving and the percentage of those involved in bee hunting are mostly living below per capita income.

When there is availability of modern equipment and efficient capital, there is need for constant training and retraining to constantly update knowledge in bee honey production. Workshops and programmes are important because new innovations are constantly popping up. Ofen (2011) noted that training of farmers (bee farmers to be precise) provides them information they want on bee rearing. The skills and techniques acquired during trainings in the form of seminars, workshops or mass public enlightenment can influence pattern of farming. In a study on the adoption and constrains of beekeeping in district panchula (Haryana), India by Monga and Manocha (2002), in Pannchkula district of Haryana State in India and respondents included a group of 30 beekeepers comprised of respondents who had left the occupation of beekeeping for one or other reasons. A pre-tested interview schedule was used to delineate the physical, economical and economic factors affecting beekeepers for continuing in the occupation and to assess the constraints faced by them. The result revealed that the respondents who were young educated and had more exposure to mass media continued with the profession. Adesiji (2004) found that one of the motivations to farmers is constant training on how to get is better in their farming endeavours.

METHODOLOGY

The study adopted an Ex-post facto research design. According to Kerlinger (2001), ex-post facto is a systematic inquiry in which the researcher does not have direct control of the variables because their manifestations have already occurred. The study area was Boki Local Government Area. It is one of the eighteen local government areas of Cross River State and the second largest in terms of landmass (344,952km²). It is located on latitude 5°82'N and 6°40'N; longitude 8°50' and 9°01'E. The area is bounded to the North by Obudu and Obanliku Local Government Areas, to the South by Ikom, to

the West by Ogoja and to the East by Cameroon Republic with Boje as its headquarters. It has 17 communities: Iso-Benedghe, Bansa-Osokom, Nsadop, Okundi, Iman, Beteriko, Bumaji, Orimekpong, Wula, Natamante, Kakwagom, Abo, Kayang, Buitong-Bunchor, Borur, Njua-Bano and Neymar (Takon, 2013).

Based on 2006 National Population Census (NPC), Boki has a projected population of 146,192. It bears an international reputation for being a major commercial center for forest and international agricultural communities such as cocoa, coffee, timber and palm products. So, inhabitants are predominantly farmers. It has a mean annual temperature of 25°C and annual rainfall between 2,000mm to 3,500mm, the rainfall of double maximum regime (July and September). The population used for the study consisted of all identified bee farmers. According to oral interview and primary sources gathered from the area of study, the total number of bee hunters and bee farmers was 160, and

made up of 95 bee farmers and 65 traditional bee hunters. The sample drawn from this population was 50 respondents from 10 randomly sampled communities with 30 bee keepers and 20 traditional bee hunters. Respondents were sampled using census sampling technique. A researcher-made questionnaire with 18 items was used for data collection. Data were analyzed using independent t-test statistical technique.

RESULTS/FINDINGS

Data analyzed presents the mean and standard deviation of respondents on the major research variables. The data revealed that the mean values for variables ranged from 2.81 to 3.21 indicating that respondents were not too far from each other in their opinion on the major research variables. The standard deviation values ranged from 1.61 to 2.24 depicting homogeneity in the opinions of respondents (Table 1).

Table 1 Descriptive statistics Mean (X) and Standard Deviation (SD) for all major variables in the study N = 50.

S/N	Variable	N	Mean (X)	SD
A	Independent:			
1	Provision of modern facilities/equipment	50	3.10	2.24
2	Provision of loans/subsidies	50	2.81	0.61
3	Provision of free training programmes	50	3.21	1.82

Source: Field Survey (2017)

Hypothesis one (H_{01}). There is no significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of modern facilities/equipment on the involvement in bee honey production. As shown in Table 2, the calculated t-value is 1.4 and critical t-value is 1.6 when tested at 0.05 level of significance with 48 degree of freedom. Since the calculated t-value was found to be less than the critical t-value, the null hypothesis was not rejected.

Table 2 Independent t-test analysis of the mean rating of beekeepers and traditional bee hunters on the influence of the provision of modern facilities/equipment on the involvement in bee production (N = 50)

Variable	N	X	SD	Cal-t	Crit-value	Decision
Bee-keepers	30	19.4	6.8			
				1.4	1.6	NS
Traditional bee hunters	20	12.9	7.0			

NS = not significant at $p > 0.05$, $df = 48$.

Hypothesis two (H_{02}). There is no significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of loans/subsidies on the involvement in bee honey production. Analysis in Table 3 revealed that the calculated t-value was 0.97, the critical t-value was 1.6, tested at 0.05 level of significance with 48 degree of

freedom. Since the critical t-value was found to be higher than cal-t-value, the researchers failed to reject the null hypothesis.

Table 3 Independent t-test analysis of the mean rating of beekeepers and traditional bee hunters on the influence of the provision of loans/subsidies on the involvement in bee production (N = 50)

Variable	N	X	SD	Cal-t	Crit-value	Decision
Bee-keepers	30	16.1	4.3			
				0.97	1.6	NS
Traditional bee hunters	20	12.2	3.1			

NS = not significant at $p > 0.05$, $df = 48$.

Hypothesis three (H_{03}). There is no significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of free training programmes on the involvement in bee honey production. Analysis in Table 4 indicates that the calculated t-value was 0.84 and critical t-value was 1.6 when tested at 0.05 level of significance. Since the calculated t-value was found to be less than the critical t-value, the researchers did not reject the null hypothesis.

Table 4 Independent t-test analysis of the mean rating of beekeepers and traditional bee hunters on the influence of the provision of free training programmes on the involvement in bee production (N = 50)

Variable	N	X	SD	Cal-t	Crit-value	Decision
Bee-keepers	30	15.1	4.6			
				0.84	1.6	NS
Traditional bee hunters	20	14.6	3.7			

NS = not significant at $p > 0.05$, $df = 48$.

DISCUSSION

The finding on hypothesis one revealed that there is significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of modern facilities/equipment on the involvement in bee honey production. This is also found in Ogebeheme (2003) who stated that the use of modern equipment like gloves, helmets among others provides the bee keepers and hunters the disposition to carry out their farming without any fear thereby enhancing their productivity and living standard.

The finding on hypothesis two revealed that there is significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of the provision of loans/subsidies on the involvement in bee honey production. Okegene (2012) noted that most farmers cannot get the required resources to do farming and as such, provision of loans will enhance the farming process.

The finding on hypothesis three revealed that there is significant difference in the mean ratings of beekeepers and traditional bee hunters on the influence of

the provision of free training on the involvement in bee honey production. Ofen (2011) noted that training of farmers provides them with information needed to get it better in farming activities.

SUMMARY/CONCLUSION

It is no doubt that bee farming is stressful but it is very lucrative. However, to successfully motivate beekeepers and bee hunters, there is need to provide modern facilities, equipment, loans/subsidies with little or no interest and provide constant free training to bee farmers.

Recommendation

Based on the study findings, summary and conclusions, the following recommendation are made:

- i. Modern facilities/equipment should be provided to bee farmers so as to motivate them to do more in bee honey production.
- ii. Conditions for obtaining loans/subsidies should be provided with little or no interest.
- iii. Workshops/seminars should be organized to constantly update knowledge of bee farmers on the current

trends and innovation in respect to bee honey production.

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