

**A STUDY OF BEEKEEPING IN BHUDARGAD TEHSIL, KOLHAPUR DISTRICT****Chetan Krishnat Galage**

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KEYWORDS: beekeeping, diseases, honey, problems, sac brood.**ABSTRACT**

The main objectives of the project titled, 'A study of Beekeeping in Bhudargad tehsil, Kolhapur district' are to study various problems in beekeeping and to give suggestions for improvement to these problems as well as existing practices. The researcher collected the relevant primary data by using questionnaire method and interaction with the sample size of fifty beekeepers chosen by Simple random sampling technique. Basic analysis was done through pie charts and bar charts to reveal the real picture in terms of percentage so that suggestions could be thought upon the concrete base.

It is observed from the survey that beekeeping is not the main profession for most of the people in which involvement of women, young people and qualified adults is very less. The main problem in beekeeping is a disease called Sacbrood which impacts on the colonies as well as honey production. Beekeepers don't know how to prevent colonies from this disease and they do not get any guidance regarding the same. Almost all of the beekeepers use subsidy from government and they face no problem in getting it. Majority of the beekeepers do not focus on taking byproducts. Majority of them do not want to keep beekeeping as a full time profession because of these problems.

It is suggested by the researcher that government mediators like KVIB should focus more on the training of beekeepers for improvement in production of honey as well as other byproducts, prevention of diseases, use of modern tools in beekeeping and marketing of products. The researcher has suggested the beekeepers that sac brood disease was controlled by the smoke generated by the burning of Sulphur and giving that smoke to the affected colonies.

INTRODUCTION

'If the bee disappeared off the face of the earth, man would only have four years left to live' – Albert Einstein. The importance of bees and honey is significant in the human life and also its economy.

Beekeeping refers to the domestication of honey bees for the purpose of obtaining honey and other useful products such as wax, pollen, venom and royal jelly. Beekeeping is a low cost technology with high potential for economic returns. Farmers and other workers who generally take part in agricultural operation are mainly engaged in beekeeping. It can be taken up at household as well as at commercial level to generate additional income to the marginal farmers, landless labourers and other weaker sections of the society. Beekeeping can also increase yields in some crops by up to 200% by cross pollination.

By the advent of the modern beekeeping in India, many new organizations have come up. Organizations like the Young Men Christian Association, Indian Institute of Honey, All India Village Industries Association etc. pioneered the beekeeping extension programmes. A number of beekeepers' co-operative societies are working today in India. The Khadi and Village Industries Commission and various State industrial Boards nurtured the Industry.

The Production of honey is seasonal according to the climate conditions, that is, from February to April, every year. Honey is a rich source of carbohydrates, a stimulant of energy. It is used in beauty and health products and also as a natural antibiotic. Bulk of the honey is produced in Bhudargad tehsil of Kolhapur district in Maharashtra state. Honey is a natural unmanufactured food. The average composition of honey consists of water 17.70 percent, 40.05 percent dextrose, 34.0 percent sucrose. Besides the above aromatic compounds colloids, pollen etc. contribute to the colour, taste and flavour of honey. Sweetness of honey depends upon sugar, which is its major component.

In India we have two indigenous species of honeybees producing large quantities of honey. These are *Apis dorsata* or the wild honeybees and *Apis cerana* the domestic able hive bee. In addition to these Indian honeybees, European honeybees *Apis mellifera* have been introduced in India.

PROJECT DESIGN AND METHODOLOGY

A. OBJECTIVES OF THE STUDY

1. To study the current practices of beekeeping in Bhudargad Tehsil.
2. To analyze the various problems in beekeeping.
3. To give the suggestions for improvement in existing practices and overcome the problems.
4. To enable beekeepers to generate income and sustainable economic development by solving these problems.

B. IMPORTANCE OF THE PROJECT

This Project helps in finding current practices of beekeeping in Bhudargad Tehsil. The project is important to various stakeholders like beekeepers, traders, Government mediators like KVIB and also customers. The project analyses various problems faced by beekeepers of Bhudargad and gives suggestions to these problems. This project will also help government authorities as it highlights the areas in which it has to provide guidance to the beekeepers.

C. SCOPE OF THE STUDY

The project attempts to visualize, to evaluate the various problems of beekeepers in Bhudargad tehsil and to suggest remedial measures to overcome the problems. The geographical scope of the study is limited to Bhudargad tehsil only. The research will only study the beekeepers and not the other stakeholders of the industry.

D. RESEARCH METHODOLOGY

PRIMARY DATA

The Researcher has used random sampling technique to collect primary data from the honey producers of the Bhudargad tehsil, Kolhapur District. A sample size of 50 beekeepers was chosen from Bhudargad tehsil and the data was collected by using the structured questionnaire and got it filled from beekeepers of this area.

Sample Size- 50 respondents Sample

Sample Unit - Beekeepers

Sampling Area – Bhudargad tehsil

Sampling Technique - Random Sampling technique

Secondary data:

The secondary data of beekeeping practices, information related beekeepers, honey and other products' production is obtained from various websites, KVIB and references books.

LIMITATIONS OF THE STUDY

1. The researcher could collect data from a sample size of 50.
2. The scope of the project is limited to the Bhudargad tehsil in Kolhapur district. So, we cannot say that the same results will appear throughout India.
3. This study is based on the study of beekeeping and beekeepers' problems and prospects. But the beekeepers' problems may change according to the internal and external conditions faced by them every time.



ANALYSIS OF DATA

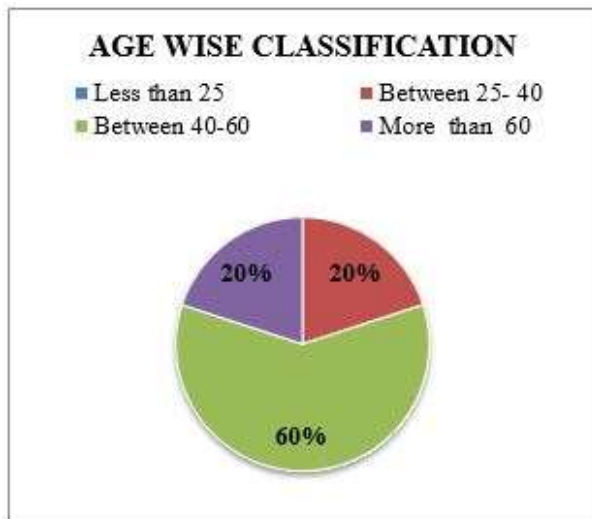


Fig 1

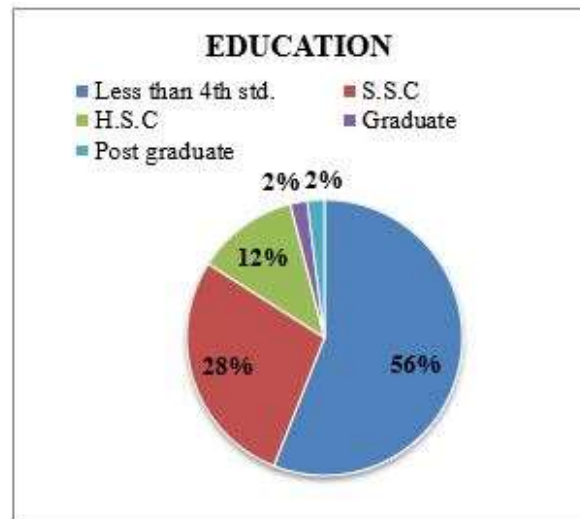


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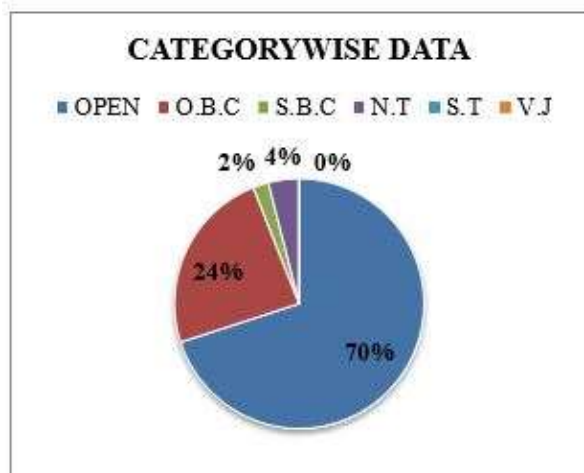


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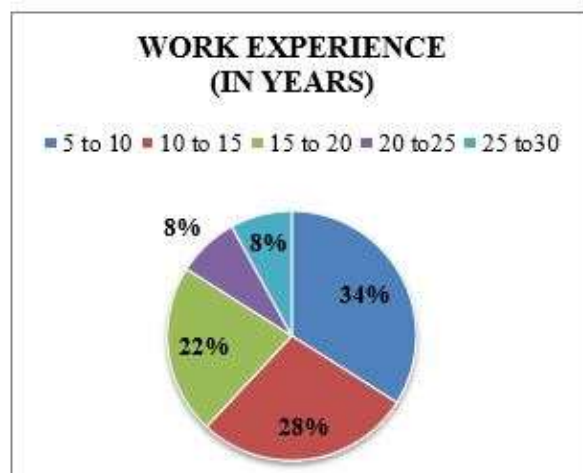


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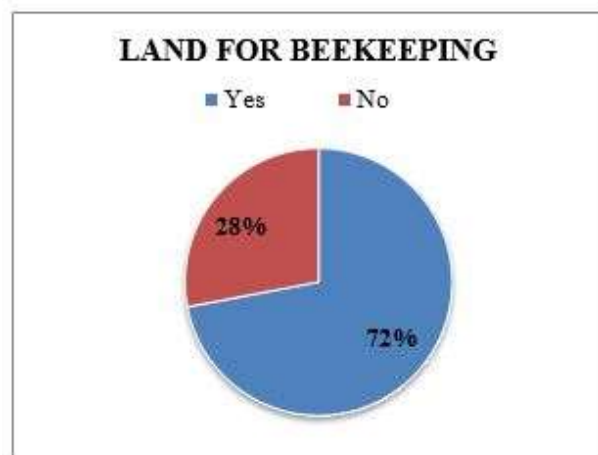


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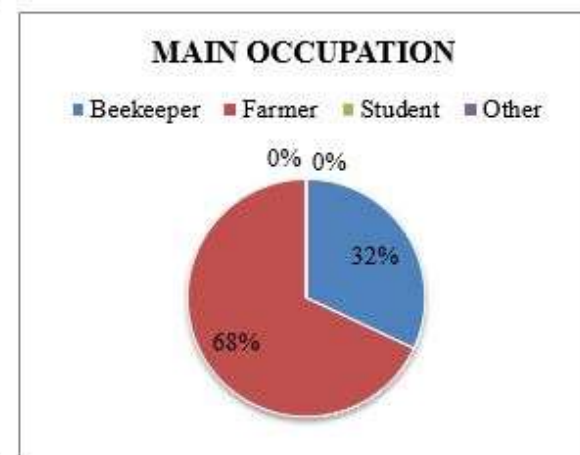


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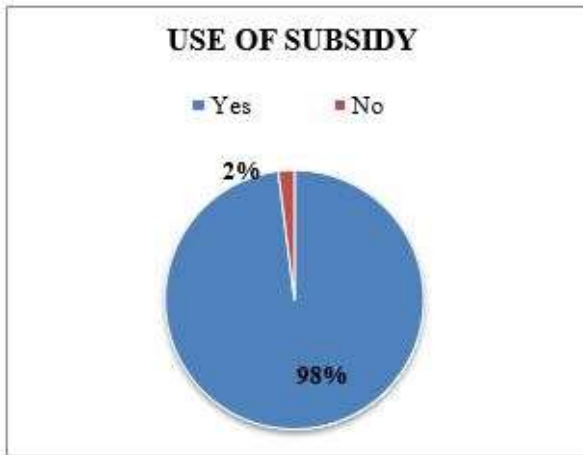


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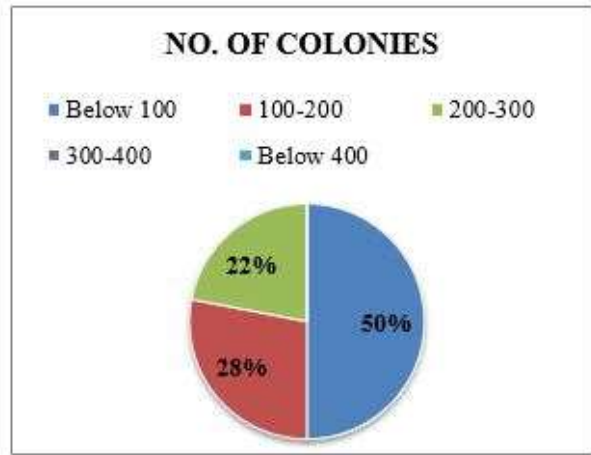


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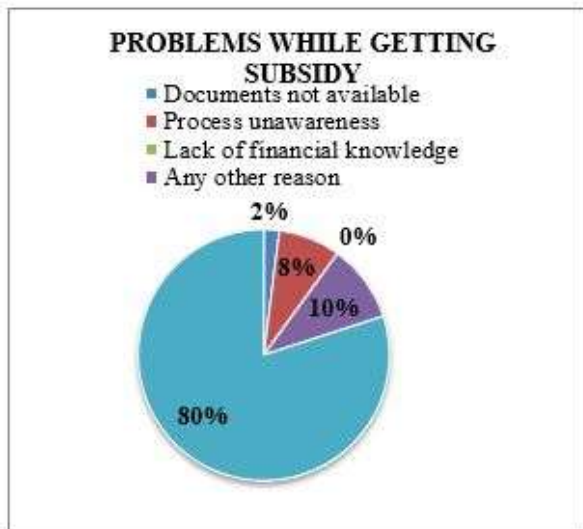


Fig 9

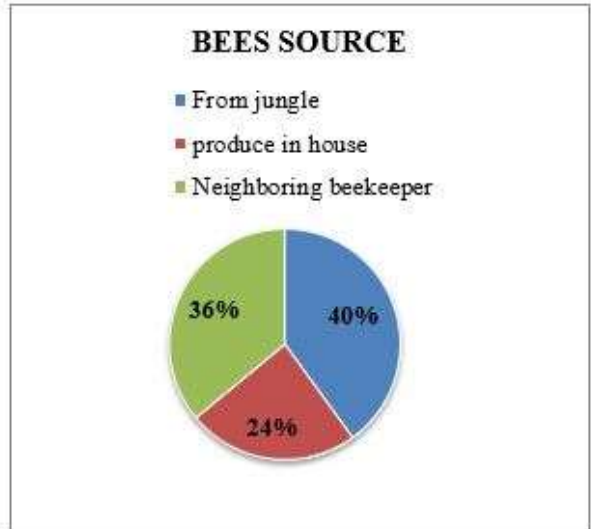


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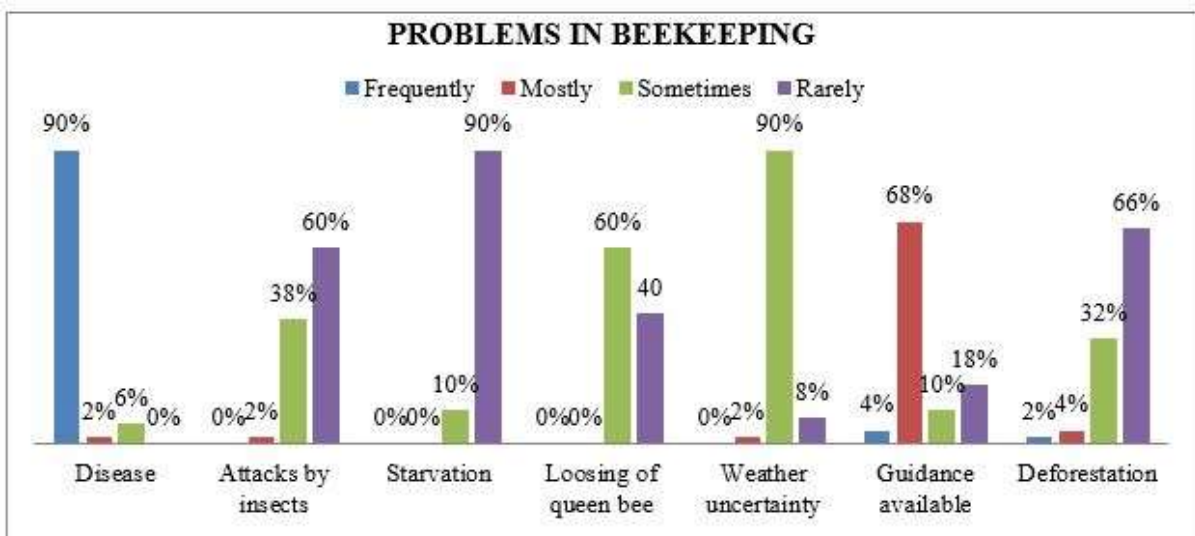


Fig 11

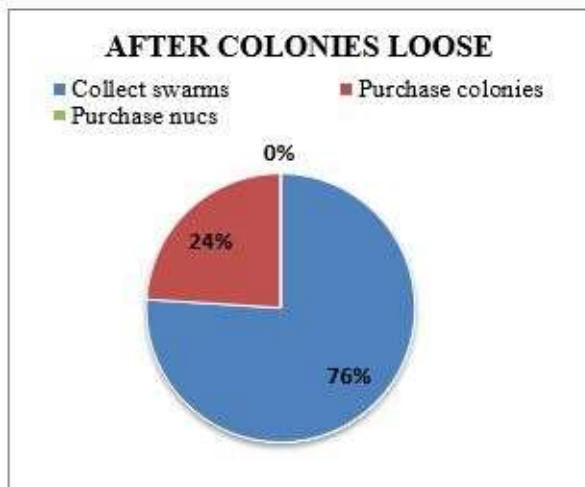


Fig 12

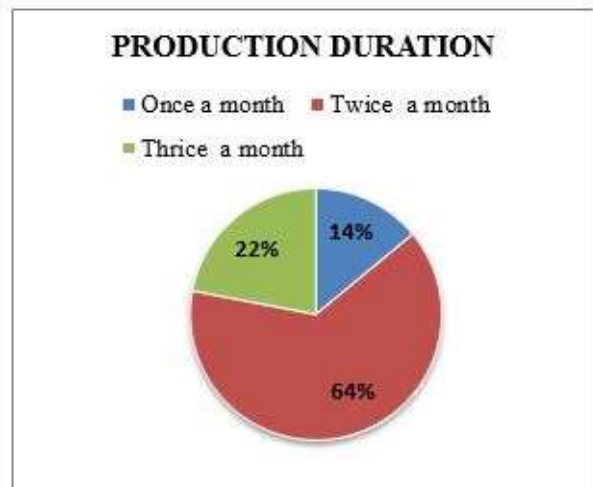


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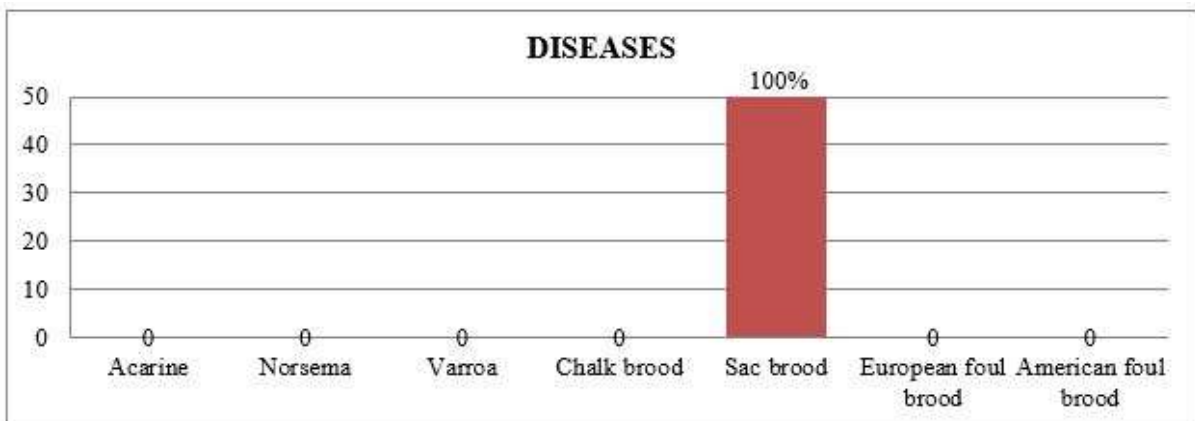


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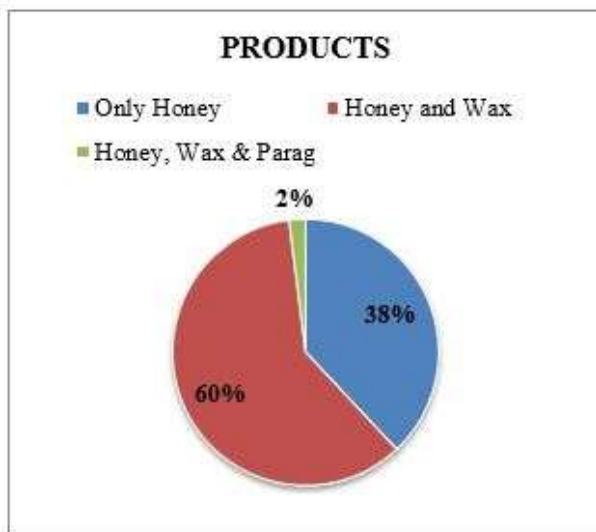


Fig 15

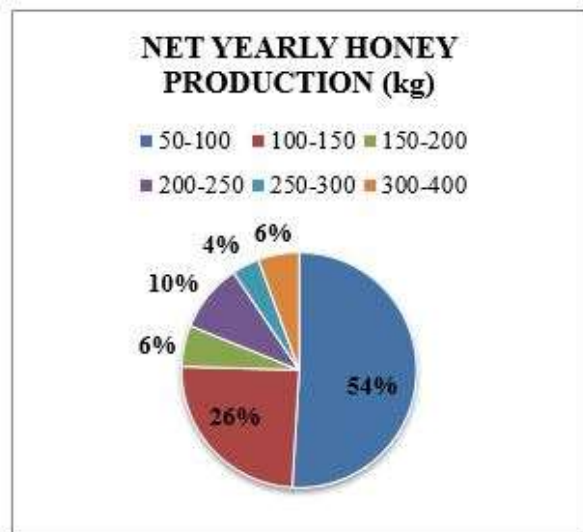


Fig 16

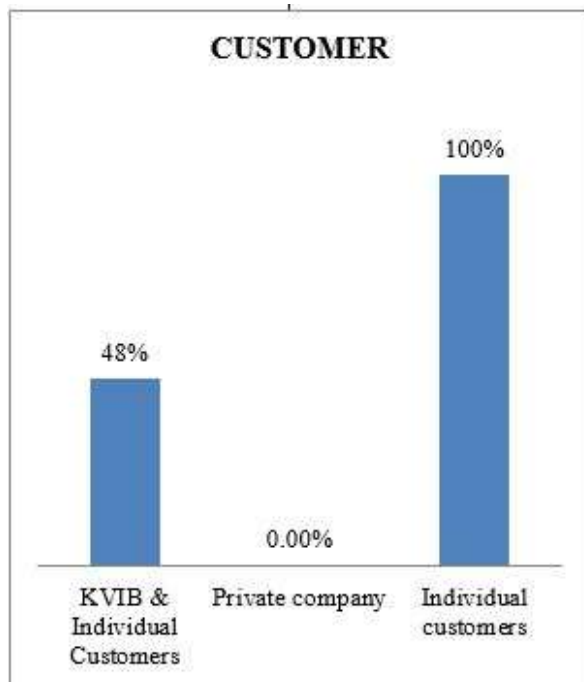


Fig 17

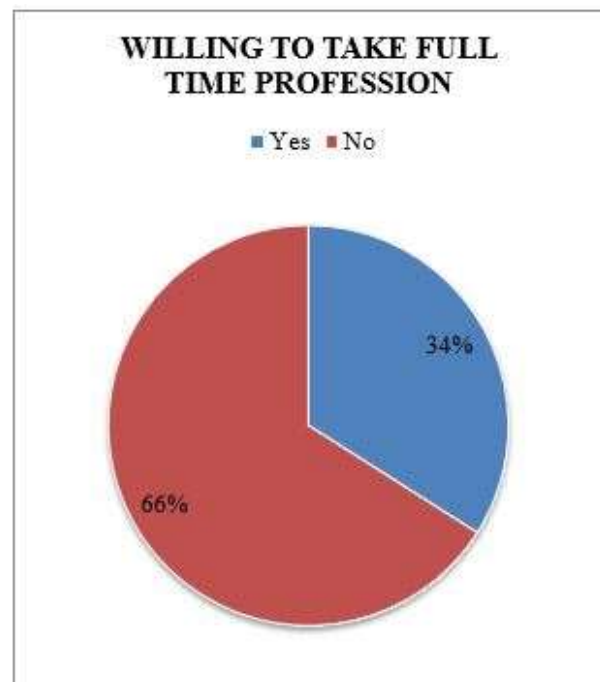


Fig 18

FINDINGS

1. The most of the i.e. 94% beekeepers are male so the involvement of women is very less, most of beekeepers i.e. 50% have the number of colonies below 100.
2. 84% beekeepers have very less educational qualification and 80% of beekeepers are aged above 40 years i.e. the involvement of young generation and qualified people is very less.
3. 68% of beekeepers have main occupation as farming and 32% beekeepers depend only on beekeeping, whereas 72% beekeepers having own land and 28% depend on others' land.
4. More than 96% of beekeepers get subsidy government and majority of them do not face any problem while getting it.
5. The majority of beekeepers i.e. 40% collect bees from jungle and 36% collect from neighboring beekeeper, nobody collect from KVIB. All the beekeepers use 'Apis Cerana' bees.
6. 90% of beekeepers face frequent disease as a main problem. Sac brood is a disease which impacts their colonies and they do not know how to prevent or cure this disease.
7. The average honey production for 54% of the beekeepers is 50-100 kg per year. 60% of them produce only honey while 38% produce honey along with wax. Only 2% go for production of paragon.
8. All the beekeepers sell their products to individual customers directly. Few beekeepers sell it to KVIB. Not a single beekeeper sells their product to private company.

SUGGESTIONS

Government organizations like KVIB should focus more on the training of beekeepers for improvement in production of honey as well as other byproducts, prevention of diseases, use of modern tools in beekeeping and marketing of products.

- 1) The sac brood disease was controlled by the smoke generated by the burning of Sulphur and that smoke can be given to the affected colonies to cure the disease.
- 2) There is excellent opportunity for honey market in urban areas, so it is suggested to approach various retailers or private companies directly to sell their products.
- 3) Younger and educated people should be motivated by understanding various business opportunities in the sector. Use of modern tools should be done to improve hygiene and productivity.



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