

Abstract

Bee farming has become a rewarding and enjoyable occupation with many benefits over other farming enterprises. Although beekeeping in Kenya has practised over the years, the introduction of the improved modern hives in Kenya has grown in the recent past, making bee farming an important enterprise in the livestock sub-sector. The main purpose of the study was to try and examine the viability of adopting modern bee farming as an adaptation strategy for food insecurity menace caused by rainfall variability effects in arid and semi-arid regions in Kenya. The study was carried out in Kitui county because this activity has been practised in the region for a long time and the communities there have the knowledge of bee farming. Among the objectives was to assess the viability of adoption of bee farming as an adaptation strategy for rainfall variability effects on food security among the vulnerable communities in Kenya. This is because despite the fact that bee farming has been practiced in Kitui for a very long time, the communities concerned have continued to depend on food aid and donations. A sample size of 385 bee farmers was selected from the target population, in the three study sites that is Mutomo, Kitui, Yatta and Kitui Central. Only 196 respondents turned up during the focus groups meeting which represented about 50% of the sample size population. Primary data and secondary data were used. Descriptive statistics and inferential statistics specifically chi square were used to analyze the data. The study established that, rainfall variability has affected agricultural production in the region, hence the need for an alternative source of livelihood. It was also noted that there are many hindrances and challenges to bee farming in the region such as cutting down of trees for charcoal burning, lack of knowledge on improved bee farming, use of traditional hives hence low honey production and lack of proper marketing for the harvested honey. The chi square test done did show that, modern bee hives were way much better than the traditional hives in terms of the quality and quantity of honey produced. Modern hives also fetched more income than the traditional hives. The study concluded that the only solution to improved honey production to enhance food security in the region was by adopting modern bee farming. The study made recommendation on adoption of modern bee hives such as Langstroth which did not require a tree to hang the hive and hence increased quantity and quality of the honey. It also recommended regular trainings to bee farmers in order to know the different bee species and avoid them that are known to be notorious in absconding.