EFFECTS OF IMPROVED BEEHIVE TECHNOLOGIES ADOPTION ON INCOME AND WELFARE STATUS OF BEEKEEPERS IN EKITI STATE, NIGERIA

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ABSTRACT

The act of keeping bees has evolved to be a very lucrative agricultural practice for local peoples in developing countries of the world. Specifically this study was to assess the effects of improved beehive technologies adoption on income and welfare status of beekeepers in Ekiti State, Nigeria. Six objectives were drawn for the study socio economic characteristics of beekeepers, ascertain the adoption level of improved beehive technologies by beekeepers, determines the factors influencing the improved beehive technologies adopted, determine the income and welfare status of beekeepers in the study area, examine the effects of improved beehive technologies adopted on beekeepers income and welfare status and; examine the constraints associated with improved beehive technologies adoption by beekeepers. *Multistage sampling technique was used to select 249 respondents for the study. Structured questionnaire complemented with an interview schedule were used to collect primary data from respondents. Data collected were analyzed using descriptive statistics (such as frequency count, percentage and mean) and inferential statistics (such as the ordinary least square (OLS), Gini coefficient and Seemingly Unrelated Regression (SUREG)). The results revealed that the average age of respondents was 59 years, Above 82.0% had tertiary education, and also, 84.7% and 90.0% of the respondents had access to extension agents and credit facilities respectively. The result of level of improved beehive technologies adoption revealed that hives inspection ($\bar{X}$ = 2.9), baiting ($\bar{X}$ = 2.9), pests and diseases management ($\bar{X}$ = 2.9), and hives installation ($\bar{X}$ = 2.9), were major technologies adopted by the beekeepers in the study areas. The result of factors influencing improved beehives technologies adoption reveals that coefficient of determination (R^2) value was 0.8455implyingthat about 84% variations in beehives technologies adoption. The result of the Gini coefficient showed inequality in income distribution with a GI of 0.70 among the respondent. The income model result of the SUREG showed that baiting (67269.73), hive management (410907.1), harvesting and removal of comb (2685.697) and marketing of bee products (14049.11) had a significant and positive influence on the income of beekeepers, while baiting (0.9928245), hive management (1.999738), monitoring of hives (.0399083) and marketing of bee products (.0274556) had a significant effect and positive influence on the welfare status of beekeepers. The welfare model result of level of welfare indicators of beekeepers revealed that increase in income annually ($\bar{X}$ = 2.9) and eating three square meal ($\bar{X}$ = 3.0) payment of house rent ($\bar{X}$ = 2.9), additional income ($\bar{X}$ = 2.9) and payment of children school fees ($\bar{X}$ = 2.3) were high welfare indicators of the respondents. The result of constraints associated with adoption of improved beehives technologies in the study area revealed that pastoralist herdsmen inversion/theft ($\bar{X}$ = 2.9), pests and predators ($\bar{X}$ = 2.9) and indiscriminate agro-chemical usage ($\bar{X}$ = 2.8), were the major constraints hindering the improved beehives technologies adoption by beekeepers in the study areas. Based on the findings of the study, it was concluded that beekeepers were gradually out of their active and productive age. Majorities were retiree from civil service and there is low level of youth involvement in beekeeping. The study recommended that beekeeper associations across the study area and other relevant stakes holders at three tiers of government Federal Government, State Government and Local Government should intensify training on the efficient use of bee technologies to improve on the income and welfare status of the beekeepers and encourage youth's participation to increase Nation economy.*

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