

Adoption of Agriculture Intercropping Innovations among graduate and Farming beneficiaries of the New Land, Namelyat Banger Elsokar Region in Alexandria Governorate.

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Abstract

The research aimed at identifying the adoption level of two farming Alexandria governorate. A questionnaire is administered to 165 farming graduate and 211 farming beneficiaries; it includes ten intercropping agriculture innovations set by agric specialists. Adoption level is measured via personal interview as an index of three parameter: hearing about the innovations, to what extent adopt that and reasons for adoption discontinuing, and variance between the two categories is identified for adapting each intercropping practice, the study attempt to find reasons of adaption problems a random sample is calculated based on Robert Mason equation for determining sample size, it amounts to 376 respondents from three villages whose population is 823. Different statistical tools were used for data analysis such as: frequencies, percentages, arithmetic mean, standard deviation, simple correlation coefficient, and multiple regression method. In addition" F" test was used to contrast the level of adoption for intercropping innovations for the two categories of farmers.

The results indicate that the adoption rate of the graduates and the beneficiaries of the agricultural intercropping innovations decreased, as well as the superiority of the graduates in their knowledge and adoption, and the continued adoption of the innovations of the agricultural intercropping practices dealt by the current study, and the highest rate of adoption of graduates to intercropping Turnip on sugar beet, and lettuce on sugar beet by 52% for both types. The highest percentage of beneficiaries was to intercropping lettuce on sugar beet, and onions on garlic by 47% and 43% respectively. The results also showed that the highest continuity of adoption for both graduates and beneficiaries was in the field of intercropping lettuce on sugar beet, by 65% and 43% respectively.

A simple correlation coefficient of Pearson indicates from independent variables that play a major role in initiating these variations, It appears a significant correlation at ($p < 0.05$) between adoption level on a dependent variable and the following independent variables: the education level of the Family respondent, the householder level of living ,number of agric information sources and readiness to change .these four independent variables explain 35%of variance at the dependent at determination coefficient 35.6% T test present a significant difference at < 0.05 between

graduates and beneficiaries' for their adoption of three intercropping practices, namely ,turnip on sugar beet ,and onion on wheat.

Overall, the study offers an important context for understanding the problems that impair farmers adaption of agric intercropping as follows :shortage of water for irrigation ,the irregular timing of irrigation on and off ,lack of knowledge for the majority of agric extension efforts geared toward agric intercropping practices such as symposiums and extension demonstration farms ,expensiveness of agric intercropping especially on cultivation and harvesting to further understand and why producer may or may not desire to apply intercropping practices, they are asked to mention sources of agric intercropping troubles . they singled out that intercropping needs more follow up for the irrigation periods and quantities, and overcoming the difficulty of mechanization applications, they also raise the problem of mass-media role in diffusing such practices and the inability of cotton cultivation because of its marketing .the study recommended the necessary of solving the problem of irrigation system by converting it into more water-saving system such as sprinkler irrigation on trickler irrigation.