



DETERMINANTS OF AGRICULTURAL MODERNIZATION IN SIWA OASIS

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ABSTRACT

The study aimed basically at identifying the determinants of agricultural modernization in Siwa oasis through: identifying the level of agricultural modernization in the study area, determining the correlation between the level of farmer's agricultural modernization and some of the studied variables, identifying the effects of the studied independent variables on the level of respondent farmers' agricultural modernization and identifying the most important problems facing the agricultural modernization efforts in the study area and suggestions to solve them from the perspective of respondent farmers.

The study was conducted in Siwa oasis, Matrouh governorate on a random sample of farmers located in the area. Data were collected through personal interviews using a questionnaire. The statistical analyzing tools used in the study were: Pearson's correlation coefficient, Chi square test, Cramer's coefficient, stepwise multiple regression

in addition to frequencies, percentages, arithmetic mean, standard deviation and alpha coefficient.

The findings showed that about 18.2% of respondent farmers had a low level of agricultural modernization, 48.2% of them had a moderate level and about 33.6% of respondent farmers had a high level of agricultural modernization. The findings showed also that there was a positive significant relationship at the probability level of 0.01 between the level of respondent farmers' agricultural modernization and the following variables: family size, farm holding size, organizations' membership, geographic openness, utilization of extension information sources, the level of ambition and social affiliation. There was also a negative significant relationship at the probability level of 0.01 between the level of respondent farmers' agricultural modernization and farmers' ages.

Finally, there were four independent variables contributes in explaining the total variance of the level of respondent farmers' agricultural modernization, these variables were: educational level, family size, organizations' membership and farm holding size.

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