Extension Evaluation of solar energy use on the agricultural environment in the New Valley governorate

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ABSTRACT

The research aimed to conclude the best causal model for the Extension Evaluation of solar energy use on the agricultural environment by determining the course of causal relationships between the direct and indirect impacts of the independent variables studied and the researchers' knowledge and motivation towards the use of solar energy,

This research was carried out in the New Valley governorate. The data were collected using personal interview from a sample of 200 farmers using a questionnaire form. a simple random sample was applied. Data presentation and analysis used frequency, percentages, and average. AMOS applicatio on spss used to extract track analysis results and present results.

The results demonstrated the assessment and based on the compatibility of the analysis model with the direct and indirect impacts of the independent variables studied (external variables) on the mediator's and follower's path (internal variables).

According to the results of the model, the causal path between external variables and motivations as a dependent variable and knowledge as an intermediary variable can be assessed: (number of years of education, number of family members, agricultural tenure space, pre-energy invoice value and post-energy invoice value), the five collectively responsible for approximately 40% of the variation in researchers' knowledge related to the use of solar energy, While autonomous variables (age, number of years of energy use, plus the intermediate variable of knowledge) were responsible for explaining 15% of the variation in farmers' motivations towards the use of solar energy in irrigation of their land.

Keywords: extension, evaluation, solar energy, path analysis, new valley governorate