Behavior of rural women towards reducing agricultural environment risks in El Bahariya Oasis

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Abstract

The research was amided to identify the knowledge and implementation level of rural women to the technical recommendations related to mitagate the environmental and agricultural risks, determine the relationship between them and the studied independent variables, to determine the contribution percentage of the relevant variables of significant correlation in explaining the total variance, and to identify the most important problems and the solving suggestions. Data were collected using questionnaire forms, in February and March, 2021, a systematic randomized sample of 102 female respondents, farmers' wives, representing 5 % of the total research respondents who hold agricultural lands within the selected villages under study. To analyze and present the data, replicates, percentage, the arithmetic mean, standard deviation, Pearson's simple correlation coefficient and step-wise multiple correlation and regression model (Step-Wise Multiple Correlation and Regression) were used.

The most important results were as follows:

1. 52.9 % of female respondents were of moderate knowledge level, 25.5 % were of high knowledge level, whereas 21.6 % were of low knowledge level to the studied technical recommendations.

2. 48 % of female respondents had a moderate implementation level, 30.4 % had low implementation level to the technical recommendations on minimizing the agricultural environment risks.

3. There was a significant correlation between the degree of rural women's knowledge to the technical recommendations on minimizing the agricultural environment risks and the following studied independent variables: level of female respondent's education, degree of openness to the outside world, degree of economic values, degree of exposure to the information sources in terms of curbing the agricultural environment risks which are significant at level of 0.01. , meanwhile there was a significant relationship at level of 0.05 for the following independent variables: female respondent's monthly income, size of agriculture holding of female respondent, size of farm animal's possession degree of social values,

degree of others' assistance to female respondent toward reducing the agricultural environment risks and degree of readiness to take risks upon performing for agricultural activities

4. The calculated "F" reached 10.674 which was significant at level of 0.01, the modified determination coefficient was 0.357, indicating five (5) independent variables explaining 35.7 % of the total variation if the degree or rural women's knowledge to the technical recommendations on reducing the agricultural environment risks.

5. There was a significant correlation between the degree of rural women's implementation to the technical recommendations on reducing the agricultural environment risks and the following independent variables: level of female respondent's education, degree of exposure to the information sources on reducing agricultural environment risks which were significant at level of 0.01, whereas there was a significant relationship at level of 0.05 for the following independent variables: female respondent's possession of farm animals, degree of openness to the outside world, degree of economic values, degree of social values, degree of others' assistance to female respondent in terms of minimizing the agricultural environment risks, and the degree of willingness to take risks upon performing for agricultural activities

6. The calculated "F" reached 12.457 which was significant at level of 0.01, , the modified determination coefficient was 0.339, indicating four (4) independent variables explaining 35.7 % of the total variation if the degree or rural women's knowledge to the technical recommendations on reducing the agricultural environment risks.

7. the most important problems facing the respondents were the weakening of the role of governmental and non-governmental institutions, and the wasteful use of pesticides to obtain the highest production, with frequencies of 89.2% , 84.3% recurrence.

8. The most important suggestions of the respondents to face the problems were to conduct training courses to raise the efficiency of workers in governmental and non-governmental agencies to play their role to preserve the agricultural environment from pollution, educating rural women about the optimal use of pesticides, as their frequency reached 88.2% , 82.4% recurrence