The Extension Workers And Farmers Benefits From Virtual Extension And Research Communication Network (Vercon) In Kafr El Sheikh And El Beheira Governorates

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Summary

The main objective of this study is to explore some facts regarding The Extension Workers And Farmers' Benefits From Virtual Extension And Research Communication Network (Vercon) as a way of modernizing the extension contact methods. The specific objectives are:

1- Recognizing some characteristics of both the extension workers and the farmers.
2- Identifying the extension workers' knowledge level about the benefits of the Vercon network systems.
3- Investigating the farmers' knowledge about the systems of Vercon network, and the benefits of these systems.
4- Identifying the farmers benefits from the Vercon network.
5- Studying the correlation and regression relationships between the farmers' characteristics and their knowledge about the systems of Vercon network and the benefits of these systems.
6- Studying the correlation and regression relationships between the farmers' characteristics and their benefits from the Vercon network.
7- Identifying the barriers facing the extension workers and the farmers when using the Vercon network.

The research is mainly depending on the personal interviewing questionnaire as a technique for data collecting. Two questionnaires were designed to obtain field data necessary to achieve the research objectives. The first questionnaire dealt with all the Vercon network staff in the study area. Their total number was 42 consisted of 24 extension workers and the responsible of the extension centers in the agriculture department in Kafr ElSheikh Governorate and 16
extension workers and the responsible of the extension centers in the agriculture department in El Beheira Governorate. The second questionnaire dealt with the farmers who are visiting the extension centers in the studied area to use and have benefits from the Vercon network. The sample contains 292 farmers from 20 villages.

The statistical methods used included: percentages, frequencies, means, standard deviation, simple correlation, simple and stepwise multiple regression, and “t and f” tests. The study consists of five chapters, the first deals with the research problem, and its objectives, the second deals with the theoretical framework and the literature review, the third includes the research methodology method, the fourth covers the research findings, and the fifth involves the summary and recommendations.

Major findings of the study could be summarized as follows:

**Characteristics of researched extension workers:**

1. **Age:**
   
   Average age of extension workers is 49.82 years.

2. **Educational level:**
   
   92.30 % of researched extension workers are having bachelor's degree of agriculture science.

3. **Educational field of specialization:**
   
   12.82 % of researched extension workers are specified in agriculture extension.

4. **Place of residence:**
92.30 % of researched extension workers are living in rural areas.

5. Service period of agriculture extension:

Average period of extension workers Service in agriculture extension is 16.28 years.

6. Service period in Virtual Extension and Research Communication Network (VERCON):

Average period of extension workers Service in Virtual Extension and Research Communication Network (VERCON) is 4.21 years.

7. Training on using the computer:

69.23 % of researched extension workers have trained on how to setup programs to the computer, and the average days of training were 7 days. 46.15 % of researched extension workers have trained on how to make simple repairing to the computer, and the average days of training were 4 days. 64.10 % of researched extension workers have trained on how to use the office programs (Word – Excel – Power point), and the average days of training were 9 days. 82.05 % of researched extension workers have trained on how to use the World Wide Web, and the average days of training were 7 days. 89.74 % of researched extension workers have trained on how to use the Vercon network, and the average days of training were 8 days.

8. The extension workers' knowledge about how to use computer programs:
About 41.03% of the studied extension workers have low knowledge of the usage of some of the computers applications.

9. The importance of the Vercon network in the agriculture extension center:
   All the researched extension workers think that the Vercon network is important in the agriculture extension center.

10. The information sufficiency on the Vercon network:
    35.90% of the researched extension workers think it is very sufficient now.

11. The farmers interest to get information from the Vercon network:
    58.97% of the farmers have high interests to information from the Vercon network.

12. Farmer types who seek information from the Vercon network:
    The local leaders and the small scale farm owners are the highest group of farmers who seek information from the Vercon network.

13. The farmers benefits from the Vercon network:
    25.64% of the farmers got high benefits from the Vercon network.

14. The extension workers knowledge level about the benefits of the Vercon network systems:
    94.87% of the studied extension workers know the benefits of the News system. 95.51% of the studied extension workers know the benefits of the VERCON Community system. 100%
of the studied extension workers know the benefits of the Browse the extension documents system. 94.23 % of the studied extension workers know the benefits of Consult the Expert system. 84.61 % of the studied extension workers know the benefits of Search the Economics and Statistics database system. 98.72 % of the studied extension workers know the benefits of the Growers Problems system.

15. The extension workers attitude toward the Vercon network:

74.36% of the studied extension workers have positive attitudes towards the Vercon network.

16. The barriers that decrease the farmers' utilization from the Vercon network can be summarized as follow: the lack of the incentives presented to the extension workers, the high illiteracy among farmers, there are no regular maintenance to the computer, fixing the computer at the Central Lab of Expert Systems means a big waste of time, effort and money, the low connection speed of the internet, the old information on the Vercon network and there is not any expert system for the animal production.

Characteristics of researched farmers:

1. Age:

Average age of researched farmers is 47.39 years.

2. Educational level:

Average degree of researched farmers is 4.24. 73 % of studied farmers have medium and high education.
3. Farm size:
   Average degree of researched farmers is 4.24 feddan.

4. Full time farming:
   59.9% of the studied farmers are full-time of agricultural work.

5. Exposure to agriculture information:
   Average degree of researched farmers is 22.09. The extension worker is the main source of agricultural information. 68.49% of the researched farmers are highly exposed to agricultural information sources. The Vercon network came in the fifth rank as a source of agricultural information.

6. Participation in agriculture extension activities:
   46.9% of researched farmers participate highly in agriculture extension activities.

7. The farmers attitude toward the agricultural extension:
   29.1% of the studied farmers have positive to moderate attitudes towards the agricultural extension.

8. The farmers attitude toward the Vercon network:
   80.8% of the studied farmers have positive to moderate attitudes towards the Vercon network.

9. Farmers motivation of using the Vercon network:
   The reasons of why the farmers are using the Vercon network are the farmers' trust in the Vercon's information (91.09%), the farmers' trust in the extension organization (86.64%), the Vercon network is the extension worker's source of...
information (81.16%), the Vercon network contains the modern agriculture information (80.48%), it is easy and fast to get information from the Vercon network (78.08%) and the Vercon network is a reliable source of the agricultural information.

10. The farmers attitude toward the agricultural extension workers:

7.9% of the studied farmers have positive to moderate attitudes toward the extension workers.

11. Farmers exposure to Vercon network:

Average times of researched farmers exposure to Vercon network is 3.17 times a month.

12. The farmers desire to keep using the Vercon network:

All the farmers like to keep using the Vercon network.

13. Farmers knowledge about the Vercon network systems:

The highest known system is Browse the extension documents system (67.47%), then the Growers Problems system (61.64%).

14. Farmers knowledge about the benefits of the Vercon network systems:

41.44% of the farmers have low knowledge about the benefits of the Vercon network systems.

15. Farmers fields of using the Vercon network:

Farmers use the Vercon network to get information or search for a solution of an agricultural problem in the following fields: plant production (87.33%), animal production (50.34%),
environmental issues (23.97%), small scale food industries and marketing (3.42%).

The farmers uses the Vercon network for the following crops: wheat, rice, cotton, maize, potato, bean, sugar beet, tomato and orange. The farmers used the network to get information about seeds, fertilization and the suitable time of planting. The farmers uses the Vercon network for the following categories of animal production: cattle, sheep and home livestock.

16. Farmers benefits from using the Vercon network:
   Increased production, knowing new varieties of seeds, fast resistant of pests and decreasing the usage of herbicide and pesticides are the main benefits in plant production. Increased production, knowing the components of animal forages, knowing new methods of animal feeding and decrease the production cost.

17. The barriers that decrease the farmers' utilization from the Vercon network can be summarized as follow: the high illiteracy among farmers, the weak economic state of the farmers, the farmers' unawareness of the Vercon network, the farmers' few times of visiting the extension center and there are too much data required at some of the Vercon network systems.

- There are significant correlation relationships between the farmers' knowledge about the systems of Vercon network and the benefits of these systems as dependent variable and each of the following independent variables: age, the educational level, the farmers participation in agriculture extension activities, the
attitude toward the Vercon network, the farmers purposes from using the Vercon network, the attitude toward the extension worker and the number of the Vercon network usage times.

- There are significant correlation relationships between the farmers' benefits from the Vercon network as dependent variable and each of the following independent variables: farm size, sources of agriculture information, the farmers participation in agriculture extension activities, the attitude toward the Vercon network, the farmers purposes from using the Vercon network and the attitude toward the extension worker.

- There were five independent variables explain 34.5% of the total variance in the farmers' knowledge about the systems of Vercon network and the benefits of these systems, and they are: the number of the Vercon network usage times, the farmers purposes from using the Vercon network, the educational level, the farmers participation in agriculture extension activities and the sources of agriculture information.

- There were two independent variables explain 17.4% of the total variance in the farmers' benefits from the Vercon network, and they are: the farmers purposes from using the Vercon network and the farm size.

Based on the research findings some suggestions and recommendations were formulated to maximize the effectiveness of Vercon network in the future.