

**FACILITATORS' PERFORMANCE of COMUNICATION and  
EDUCATIONAL EXTENSION ACTIVITIES of FARMERS FIELD  
SCHOOLS (FFSs) in FAYOUM GOVERNORATE**

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**Abstract**

FFS is a participatory approach through which the extension worker functions as a facilitator helping farmers to learn by doing to discover their field problems and reach to the best-fit solutions for these problems.

This study investigated the levels of FFSs facilitators' performance of communication and educational extension activities as perceived by farmers, and the relationships among these levels and the following independent variable: Age, size of land holding, opinion leadership, cosmopolitans, participation in extension activities, formal social participation, informal social participation, exposure to sources of agricultural information, attitudes towards FFSs.

The study was conducted in 3 Districts of Fayoum Governorate, namely: Fayoum, Senores and Tamia. A sample of 196 farmers was selected from the members of 20 FFSs in these three districts, representing 49% of the total FFSs members. The selected sample was personally interviewed by using a questionnaire designed and pretested for data collection. Level of performance was measured by using an index including 40 statements covering the different FFSs' communication and educational extension activities. Farmers' responses to each statement ranged from (no, rarely, sometimes and always). The scores 0,1,2,3 were assigned to these

responses respectively. Total score of each farmer was used to represent his point of view concerning facilitators' performance of the FFSs' activities. Frequencies, percentages, average mean, standard deviation and correlation coefficient were used for data presentation and analysis.

**The study results revealed that:**

1. The majority of FFSs' facilitators (around 77 %) demonstrated high and medium levels of performance.
2. Statistically significant and positive correlations were found among the levels of performance and the following independent variables: opinion leadership, participation in extension activities, informal social participation, exposure to sources of agricultural information and attitudes towards FFSs.

**Introduction**

Extension was a top down approach that requires little feedback from target audience to researchers. Throughout the years extension has changed from such top-down approaches to more two-way approaches including participatory extension, farmer field schools, etc. (Neil and Pusto. 2017, p3).

Participatory extension provides a frame work for extension workers to participate with rural communities in the facilitation of development activities planning and implementation (Kamalpreet and Prabhjot 2018, p6).

FAO introduced the Farmer Field Schools (FFSs) approach in 1989. It enabled small-scale rice farmers in Indonesia to discuss and learn together the necessary skills for the adaptation of Integrated Pest Management (IPM) practices to their rice fields. FFS has been demonstrated to be very effective; therefore it was rapidly applied to other crop production systems in different developing countries, and has become favorable to other agricultural subjects, including animal production (Groeneweg *et al.*, 2006, p1).

The FFS approach centers on people. It brings together groups of producers and engages their members in a process of hands-on, participatory learning. Groups meet regularly throughout the production cycle to test, validate, and adapt new practices to their local conditions. FFSs groups develop solutions by comparing local practices with new ideas through trials, observation, critical analysis and discussion. Farmer Field Schools contribute to community development by building skills, trust, competencies and informed decision-making, as well as by enhancing the ability of small-scale producers to work together. Indeed, FFSs often help strengthen existing producer groups or form new groups (both formal and informal) (FAO, 2018, p1).

The quality and characteristics of employees are the bases for any organization to accomplish its goals. Thus, The total performance of members of an organization can reflect the performance of this organization (Bolarinwa., 2017, p1).

Good facilitation is necessary for the success of FFSs. Facilitators should not provide answers but they should guide farmers to reach their own solutions for their current situation (Damaso *et al*, 2016, p17).

Thus, because of the dependency of FFSs on the facilitators mainly, this study problem was trying to answer some questions concerning the performance of Farmer Field Schoolsfacilitators (FFSs facilitators) and its relationship with the FFSs farmers' characteristics

**The study Objectives wereas follows:**

- 1) To measure the levels of facilitators' performance of communication and educational extension activities of FFSs as perceived by FFSs' members.
- 2) To identify the relationship among the levels of facilitators' performance of communication and educational extension activities of FFSs as

perceived by FFSs' members, and the characteristics of the respondents.

### **Methodology**

The study was conducted in three districts in Fayoum Governorate, namely: Fayoum, Senores and Tamia. Data were collected by using a questionnaire, designed and pretested for achieving the study objectives. This questionnaire was applied on a sample of 196 farmers, representing 49 % of the total population of farmers in 20 FFSs in the three Districts during personal interviews. Level of performance was measured by using an index including 40 statements covering the different FFSs' communication and educational extension activities. Farmers' responses to each statement ranged from (no, rarely, sometimes and always). The scores 0,1,2,3 were assigned to these responses respectively. Total score of each farmer was used to represent his point of view concerning facilitators' performance of the FFSs' activities.

Frequencies, percentages, means and standards of deviation were used for the presentation and the description of the study results. In addition, the simple Pearson correlation coefficient was used to identify the relationships among the dependent variable (Facilitators' performance, as perceived by FFSs' members) and the following independent variables: Age, size of land holding, opinion leadership, Cosmo politeness, participation in extension activities, formal social participation, informal social participation, exposure to sources of agricultural information, attitudes towards FFSs.

### **Results and discussion**

#### **Characteristics of FFSs' members**

As shown in table (2) the main characteristics of the respondents are as follows:

- Around (38%) in middle age, ranging from 45–54 years.

- Approximately half (44.4%) have 1–2 feddans,
- The majority (73.6%) have high and medium degrees of opinion leadership,
- More than one half (55.5%) have high and medium cosmopolitaness.
- Only about one third of respondents (27%) have high level of participation in extension activities.
- The vast majority (94%) have low and medium level of formal social participation.
- The majority (75.5%) have high and medium informal social participation.
- The majority (71.4) have high and medium degree of exposure to sources of agricultural information.
- The majority (75%) have high and medium attitudes towards FFSs.

It was concluded that the majority of FFSs members have high and medium levels of most studied characteristics. This may indicate to the impact of their participation in FFSs in their awareness because they learn depending on themselves in groups, they work, think and discuss together and reach the solutions to their problems. Therefore, this participatory approach can have a good impact on farmers' characteristics.

#### **Levels of facilitators' performance as perceived by FFSs' members**

As shown in Table (1) the majority of FFSs (76.5%) demonstrated high and medium levels of performance, compared with only 23.5% of the respondents in the low–performance category.

This result showed that farmers have high degrees of satisfaction towards FFSs and facilitators and the results of this study revealed that the

majority of FFSs farmers have high and medium degrees of attitudes towards FFSs and thus FFSs facilitators. The benefits from this result are focusing on the strengths of performance for supporting them and paying attention to weaknesses and working on strengthening them by training.

### **Facilitators' performance correlates**

As shown in table (3), Statistically significant relationships were found among the level of performance of FFSs' facilitators as perceived by FFSs' members and the following variables: opinion leadership ( $r = 0.173$ ), participation in extension activities ( $r = 0.203$ ), informal social participation ( $r = 0.248$ ), exposure to sources of agricultural information ( $r = 0.228$ ).

### **Tables**

**Table No. 1 : Level of facilitators' performance from FFSs members' perspectives**

<b>Performance level</b>	<b>N</b>	<b>%</b>
Low (Less than 88)	46	23.5
Medium (88 – 99)	70	35.7
High (100 and more)	80	40.8
<b>Total</b>	<b>196</b>	<b>100</b>

**Table No.2 : Characteristics of FFSs' members**

<b>Personal characteristics</b>	<b>Frequency</b>	<b>%</b>
<b>Age (N=196)</b>		
Young (less than 45)	59	30.1
Medium (45-54)	75	38.3
Old (55 and over)	62	31.6
<b>Size of land holding(N=196)</b>		
Low (less than acre)	56	28.6
Medium (24-24)	87	44.4
High (43 and over)	53	27
<b>Opinion leadership (164)</b>		
Low (1)	29	17.7
Medium (2)	47	28.7
High (3)	88	53.6

Continued Table no. 2

<b>Personal characteristics</b>	<b>Frequency</b>	<b>%</b>
<b>Cosmo-politeness (N=196)</b>		
Low (less than 3)	88	44.9
Medium (3)	66	33.7
High (3)	42	21.4
<b>Participation in Extension Activities(N=196)</b>		
Low (less than 4)	76	38.8
Medium (4-6)	67	34.2
High (7 and above)	53	27
<b>Formal social participation (N=150)</b>		
Low (less than 2)	111	74
Medium (2-3)	30	20
High (4 and more)	9	6

**Informal social participation (N=196)**

Low (less than 12)	48	24.5
Medium (12–14)	61	31.1
High (15 and above)	87	44.4
<b>Exposure to sources of agricultural information(N=196)</b>		
Low (less than 12)	56	28.6
Medium (12–16)	78	39.8
High (17 and above)	62	31.6
<b>Attitudes towards FFS(N=196)</b>		
Low (less than 2)	49	25
Medium (2–3)	78	39.8
High (4.5 and above)	69	35.2

**Table No. 3: Facilitators' performance correlates**

Independent variables	correlation coefficient
	Facilitators' performance
1. Age	– 0.004
2. Size of land holding	– 0.090
3. Opinion leadership	0.173 *
4. Cosmo-politeness	0.133
5. Participation in extension activities	0.203 **
6. Formal social participation	0.100
7– Informal social participation	0,248 **
8. Exposure to sources of agricultural information	0,228 **
9 – Attitudes towards FFSs	0,111

\* Correlation is significant at 005 level

\*\*Correlation is significant at 001level



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## أداء الميسرين للأنشطة الاتصالية والتعليمية الإرشادية المتعلقة بالمدارس الحقلية في محافظة الفيوم

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### المستخلص

تم استخدام المدارس الحقلية كأسلوب للتعليم الجماعي الفعال في ريف مصر. في كل مدرسة حقلية يجتمع عدد من المزارعين (20-25 من الذكور أو الإناث أو مدارس مختلطة) بانتظام (على أساس أسبوعي) مع ميسريهم، الذين يقومون بالأنشطة اللازمة لتسهيل عملية التعلم الجماعي من خلال تنظيم أنشطة الاتصال والتعليم في المدارس الحقلية من خلال تنظيم المناقشات التفاعلية، والتعلم القائم على المشاركة بين المزارعين. ويعد مستوى أداء الميسرين لهذه الأنشطة أحد أهم العوامل المحددة لنجاح المدارس الحقلية.

استهدفت الدراسة قياس مستويات أداء الميسرين للأنشطة الاتصالية والتعليمية المتعلقة بالمدارس الحقلية في محافظة الفيوم من وجهة نظر مزارعي المدارس الحقلية، والتعرف على العلاقة بين أداء ميسري المدارس الحقلية من وجهة نظر مزارعي المدارس الحقلية والمتغيرات المدروسة لهم. وأجريت الدراسة بثلاث مراكز في محافظة الفيوم هي مركز الفيوم، ومركز سنورس، ومركز طامية. تم إجراء مقابلات شخصية باستخدام استبيان تم تصميمه واختباره مسبقاً لجمع البيانات، مع عينة من 196 مزارعا من أعضاء المدارس الحقلية (يمثلون 49 ٪) من 20 مدرسة حقلية في المراكز الثلاث، وتم قياس مستويات أداء الميسرين عن طريق جمع الدرجات المتحصل عليها من استجابات المبحوثين فيما يتعلق بتقييمهم لمدي قيام الميسرين بالأنشطة المتعلقة بإدارة المدارس الحقلية، ويمكن استخدام المقياس المتدرج: دائما (3 درجات)، أحيانا (درجتان)، نادرا (درجة واحدة)، لا (صفر).

وتم استخدام التكرارات والنسب المئوية والمتوسط الحسابي والانحراف المعياري ومعامل الارتباط البسيط لبيرسون لعرض البيانات وتحليلها.

وتتلخص أهم نتائج البحث فيما يلي :-

1. أظهر معظم ميسري المدارس الحقلية (حوالي 77 ٪) مستويات عالية ومتوسطة من الأداء، في مقابل (حوالي 23%) ذوي مستوى أداء منخفض.

2. توجد علاقات معنوية موجبة بين مستوى الأداء والمتغيرات المستقلة التالية: درجة قيادة الرأي ،  
ودرجة المشاركة في الأنشطة الإرشادية، ودرجة المشاركة الاجتماعية غير الرسمية، ودرجة  
التعرض لمصادر المعلومات ودرجة الاتجاه نحو المدارس الحقلية.