AN ANALYSIS OF EFFECTIVENESS OF EXTENSION METHODS USED IN FARMERS FIELD SCHOOL APPROACH FOR AGRICULTURAL EXTENSION WORK IN PUNJAB PAKISTAN*

Muhammad Shahbaz Bajwa, Munir Ahmad and Tanvir Ali**

ABSTRACT

Farmers field schools (FFS) are becoming popular to educate the farmers, and Government of Pakistan is convinced to adopt the FFS approach to reach marginalized rural poor farming community. Initially it was launched in 14 districts of Punjab. The present study was conducted to analyse the effectiveness of extension methods being used under FFS approach in Punjab. Data were collected with the help of interview schedule from randomly selected 341 respondents in three districts of Punjab viz. Sargodha, Sheikhpura and Vehari. The results show that 63.58 and 58.6 percent respondents were of the view that extension methods such as group discussion and lecture were used to an average extent, whereas 31.93 percent respondents were of the view that sign boards / slogans was the method used by FFS staff to a below average extent. Similarly group discussion method ranked first among others with weighted score 1107, mean value 3.24 and standard deviation 0.77. Exhibition was the extension method ranked last with weighted score 65, mean value 2.50 and standard deviation value 1.27.

KEYWORDS: Farmers field school; extension activities; Punjab; Pakistan.

INTRODUCTION

In Pakistan agriculture is a main source of livelihood of 66 percent people. It accounts for 20.9 percent of the GDP and employs 43.4 percent of the total work force. It also contributes a big share of raw material to industry and other value-added products (3). Thus development in agriculture means the well being of about 150 million people, living about 4500 villages. So ultimately any improvement in agriculture sector does not only help country’s economic growth but also improves living standard of a large segment of

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country’s population. Agricultural extension is one of the means available to help the farmers for their capacity building. It is unique service in the sense that it provides access to small farmers and rural poor living far from the urban areas in addition to technology transfer. In past several extension approaches have been implemented in Pakistan for up-scaling the living standard of poor rural farmers. The village cooperative movement, village aid programme, basic democracy system (BDS), integrated rural development programme (IRDP) and training and visit (T&V) programme were introduced in country from time to time, but all these programmes partially succeeded to achieve the required objectives and were abolished one after the other (2).

In Punjab, area and intensity of crops under cultivation has almost doubled over the period of time, but yield per unit area and net income is still very low as against the potential. Several factors contribute to this low crop productivity i.e use of outdated and inefficient tools and methods for crop management, indiscriminate use of pesticides, poor varieties and seeds, inappropriate nutrients, inefficient water management, and poor marketing system. All these have reduced the profitability and made this profession unprofitable. This is further aggravated by lack of skills at farm level to determine the cause of damage and appropriate management option. In view of above situation, Govt. of Punjab chalked out a comprehensive integrated plan to improve per acre crop productivity in the province. Newly introduced and innovative approach i.e. FFS is claimed to be cost effective, client oriented, group based and demand driven, but how do farmers view, what are their perceptions and what extension methods are used in FFS is the foremost question which needs to be answered. Therefore, this approach needs to be analyzed as an alternative approach.

FFS approach has many attributes that make it truly participatory and capacity building methodology for farming community (10). Different extension methods i.e. group discussion, demonstration, lecture, literature, etc. are also employed by FFS staff during dissemination of information to farmers (6). It represents a paradigm shift in agricultural extension, the training programme utilize participatory methods and help farmers develop their analytical skill, critical thinking and creativity. It also helps them learn to make better decision (9). The information provided by the extension field staff through different extension methods is also considered averagely effective (4, 8). During dissemination of new technologies to farmers, different extension methods used by extension field staff play an important role (11). The selection of best method suitable for dissemination of information lies upon the extension that which extension method should be appropriate at certain stage (12).
Extension teaching methods are considered as tools in the hands of extension field staff to disseminate agricultural technology among farming community. Different extension methods play different roles according to their nature, with purpose and nature of farmers upon whom these methods are applied. The primary purpose of this study was to explore the extension methodologies being employed under this FFS approach.

**MATERIALS AND METHODS**

This study was conducted in the Department of Agricultural Extension, University of Agriculture, Faisalabad, Pakistan during the year 2008. Registered farmers of FFS (under public sector) residing in three strata of action districts i.e. Rahim Yar Khan, Sargodha, Multan, and T.T. Sing for fruits, Lahore, Sheikhupura, Okara, Gujranwala, Kasur, Nankana Sahib and Rawalpindi for vegetables, and Vehari, Bahawalpur, Lodhran and D.G. Khan for cotton and wheat were included. Three districts i.e. Sargodha, Sheikhupura and Vehari were selected randomly from each stratum, then three tehsils i.e. Sargodha, Sheikhupura and Mailsi were also selected randomly from selected districts, respectively. A list of registered FFS members was prepared from each tehsil with the help of DIU office (District Implementation Unit). A total of 120 FFS were working in the study area at the time of data collection, each FFS comprised 25 farmers, so 3000 farmers were registered in these three tehsils. Sample size was determined by using Fitzgibbon table (5). Three hundred and forty one respondents constituted sample for the study, proportionally taken from the population of 3000 registered FFS members in three randomly selected tehsils. Data were collected by using validated questionnaire and Likert scale was used to measure the use and extent of use of extension method by FFS staff during FFS technique. Likert scale i.e. 1, 2, 3, 4 and 5 indicates to some extent, below an average extent, an average extent, above average extent and high extent, respectively. The data were collected through personal interview and were analyzed by using SPSS computer software.

**RESULTS AND DISCUSSION**

**Use and extent of use of extension methods employed by FFS staff**

The data (Table 1) indicate that extension field staff is using varied extension teaching methods for technology transfer among farming community.
The data show that majority of respondents used to extension methods such as group discussion to an average extent (63.58%) followed by lectures (58.6%), literature (57.42%) and demonstration (55.67%). Campaigns were also the extension method used by FFS staff to an average extent (43.65%).
Similarly signboards/slogans were used by FFS staff to below an average extent (31.93%). These results are almost in line with earlier work (11) which revealed that lectures meeting method was employed by researcher on 92.3 percent respondents and discussion methods was employed on 85 percent respondents occasionally Abbas et al. (1) also stated that overall, 59 percent respondents considered demonstration method as the best extension method. In another similar study (6) 60 percent respondents viewed the discussion method as best extension method for dissemination of agricultural information among farmers. Similarly, information provided by FFS staff with the use of different extension methods was also considered averagely effective (3). Regarding exhibitions it is not possible for FFS staff to arrange exhibitions for each FFS separately. Moreover, exhibitions and signboards/slogan need huge amount and time for preparation which is not possible for any FFS individual separately. So 92.4 and 15.2 percent respondents were of the view that exhibitions and signboards/slogans, respectively were not used by FFS staff.

The weighted score, mean, standard deviation and rank order of use of extension methods were calculated by multiplying the relative score values allotted to each category of scale with its frequency counts (Table 2).

<table>
<thead>
<tr>
<th>Extension methods</th>
<th>Weighted score</th>
<th>Mean</th>
<th>S.D.</th>
<th>Rank order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstration</td>
<td>925</td>
<td>2.71</td>
<td>0.78</td>
<td>4</td>
</tr>
<tr>
<td>Group discussion</td>
<td>1107</td>
<td>3.24</td>
<td>0.77</td>
<td>1</td>
</tr>
<tr>
<td>Lectures</td>
<td>1003</td>
<td>2.94</td>
<td>0.89</td>
<td>2</td>
</tr>
<tr>
<td>Literatures</td>
<td>935</td>
<td>2.86</td>
<td>0.74</td>
<td>3</td>
</tr>
<tr>
<td>Exhibitions</td>
<td>65</td>
<td>2.50</td>
<td>1.27</td>
<td>7</td>
</tr>
<tr>
<td>Campaigns</td>
<td>872</td>
<td>2.66</td>
<td>0.96</td>
<td>5</td>
</tr>
<tr>
<td>Slogans/ signboards</td>
<td>609</td>
<td>2.10</td>
<td>0.99</td>
<td>6</td>
</tr>
</tbody>
</table>

The data show that mean values regarding the use of extension methods such as group discussion, lecture, and literature were 3.24, 2.94 and 2.86 with weighted scores of 1107, 1003 and 935 and were ranked as 1st, 2nd and 3rd, respectively. Similarly, mean values of use of signboards/slogans and exhibitions were 2.10 and 2.50 and which were ranked as 6th and 7th, respectively. The weighted score values of these extension methods were 609 and 65 with standard deviations of 0.99 and 1.27, respectively.

These findings are almost supported by earlier scientists (7, 8) who reported that among various extension used in Japan and China, discussion method...
was the most commonly used. Siddiqui (12) also concluded that group
discussions, lectures, literature and demonstration were the most frequently
used extension methods for dissemination of information among framers.

CONCLUSION

Farmers field school staff used different extension methods under FFS
approach. The extension methods like group discussions, lectures and
literature were used to an average extent and ranked as 1st, 2nd and 3rd with
mean values of 3.24, 2.94 and 2.74, respectively. It can be concluded that all
extension methods except exhibitions and signboards/slogans were used to
slightly above or below an average extent.

REFERENCES

Dissemination of wheat production technologies and interface of out
Advisor’s Wing, Govt. of Pakistan, Islamabad.
Advisor’s Wing, Govt. of Pakistan, Islamabad.
Farmers Field school approach for Information dissemination of
used by Rafhan Maize Products Co. for dissemination of recommended
maize production practices among registered growers in tehsil Dipalpur
system in Asia and the Pacific. Asian Productivity Organization. Tokyo,
Japan.
extension services in the Republic of China (Taiwan). In: Agri. Ext.
System in Asia and Pacific. Asian Productivity Organization, Tokyo,
Japan.


Table 1. Distribution of respondents according to the use and extent of use of extension methods employed by FFS staff.

<table>
<thead>
<tr>
<th>Extension methods</th>
<th>Response</th>
<th>Extent of use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>%</td>
</tr>
<tr>
<td>Demonstration</td>
<td>341</td>
<td>100.0</td>
</tr>
<tr>
<td>Group discussions</td>
<td>341</td>
<td>100.0</td>
</tr>
<tr>
<td>Lectures</td>
<td>341</td>
<td>100.0</td>
</tr>
<tr>
<td>Literature</td>
<td>332</td>
<td>97.4</td>
</tr>
<tr>
<td>Exhibition</td>
<td>26</td>
<td>7.6</td>
</tr>
<tr>
<td>Campaigns</td>
<td>328</td>
<td>95.9</td>
</tr>
<tr>
<td>Signboards/ slogans</td>
<td>289</td>
<td>84.8</td>
</tr>
</tbody>
</table>

Scale: 1= to some extent, 2= to below an average extent, 3= to an average extent, 4= to above average extent, 5= to high extent, F = Frequency