

TRAINING NEEDS OF AGRICULTURAL EXTENSION AGENTS IN KHYBER PAKHTUNKHWA

MUHAMMAD ZAFARULLAH KHAN*, ZAHOOB UL HAQ***, NAQIB ULLAH KHAN**,
UROOBA PERVAIZ* and MUHAMMAD ANWAR KHAN****

* Department of Agricultural Extension Education & Communication, Agricultural University, Peshawar – Pakistan.

** Department of Plant Breeding and Genetics, Agricultural University, Peshawar – Pakistan

*** Department of Agricultural Economics, Agricultural University, Peshawar – Pakistan.

**** Department of Plant Protection, Agricultural University, Peshawar – Pakistan.

ABSTRACT

Effective and efficient extension services play pivotal role in boosting agriculture for uplifting of socio and economic condition of the end user. In-service training of the Extension Agents is the call of the time. However, these services particularly in North West Frontier Province (NWFP) now called Khyber Pakhtunkhwa (KP) remained namesake and almost limited too file work. Through trained Agricultural Extension Agents new agricultural technology can easily and favorably be transferred to clientele. The article is based on primary data collected through mailed questionnaire from 111 respondents in 2007. The present study showed that only 30% of the respondents attended regular trainings, while about 41% of respondents attended the trainings with 16-30 days duration. The majority (85%) of the respondents attended trainings in the areas of water management followed by agronomy (59%) and Integrated Pest Management (43%). It was also observed that majority (55%) of agriculture officers suggested that the training duration should be 1-15 days. Demonstration method was considered as most important one by majority of AOs. Trainings should not be conducted at the time of sowing and harvesting time and lectures should be carried out during the training sessions.

Key words: Training, extension services, Agricultural Extension Agents, KP

Citation: Khan, M.Z., Z. U. Haq, N. U. Khan, U. Pervez and M. A. Khan. 2011. Training needs of Agricultural extension agents in Khyber Pakhtunkhwa. Sarhad J. Agric. 27(1): 133-137

INTRODUCTION

Agriculture is the predominant sector of Pakistan's Economy and contributes about 21.8% of GDP and provides 44.7% to civilian labor force (GoP, 2008-09) thus, fluctuation of major crops adversely affects the economy of the country. Agricultural development is a complex process and a challenging one as well. Research, extension support and clients, are supposed to work in harmony to bring about stable and sustained growth in agriculture sector. Literature and information show that agricultural extension agents do not provide satisfactory services and hence there is an urgent need for a better understanding in this regard for developing effective extension and training programmes to reach farmers (Iqbal, 1990; Ahmed, 1993; Urooba, 2007).

Extension is a non-formal education, which provides advisory services using the educational process to help clients in acquiring knowledge and skills to cope effectively with needs and problems facing them in their own socio-economic contexts (Boone, 1989; Carter, 1993; Rahim, 1995; Swanson *et al.* 1998). All the agricultural agents consider the weed identification as an important factor for satisfying the farmers' needs. As problems have been increased due to changing cropping systems and excessive use of fertilizer and irrigation, therefore, extension agents should be trained in order to cope with the new tasks efficiently.

Darkenwald and Merriam (1982) also emphasized the importance of staff development to stimulate intellect, to increase knowledge, to keep abreast of new advances and developments and for organizational effectiveness through trainings. Training can accomplish many things. It can help people learn the new skills that are required to meet new expectations, both formal and informal. For example, a support staff person may have been hired originally for his/her ability to type, to answer the phone and file. But now, with increased workloads, we want that person to be able to do much more; perhaps to solve client problems, to use desktop publishing processes, to handle more of the day-to-day issues, so we can use our time more effectively. Training can help people accept the challenge of their evolving jobs (Merriam and Caffarella, 1991).

Cooperative Extension Service agricultural agents have traditionally been non specialists; that is, they have broad knowledge of all aspects of their general program areas i.e. agriculture, natural resources, community development, home economics, or youth development. Today, the problems faced by our society are becoming so specialized and complex that generalist extension agents have great difficulty keeping abreast of technological

developments on all fronts (Gibson and Hillison, 1994). The present investigation was undertaken to study the training needs of agricultural extension agents in KP, Pakistan.

MATERIALS AND METHODS

Agriculture Officers (AOs) of Agricultural Extension Department were the universe of the study. The study was based on both primary and secondary data. Primary data were obtained through a carefully prepared and pre-tested questionnaire in 2007. Secondary data were obtained through published sources. A copy of the questionnaire along with instructions/explanatory sheet was mailed to all respondents through the Director General Agricultural Extension-KP (who is the overall incharge of agricultural extension service). Focus of questions was on training related professional competency of agricultural extension agents in KP. Total number of the respondents was 112 and data were collected from 111 of the respondents as one of the questionnaires returned was not in readable form. The data were analyzed statistically using computer software MS Office (2000) and the percentages of the respondents were calculated.

RESULTS AND DISCUSSION

Agriculture Officers were asked to provide information regarding regular trainings attended. Majority of the Agriculture Officers (70%) have not attended regular trainings while, 30% of them have attended regular training related to agriculture (Fig. 1). As regular training is the basic component to effectively communicate the new technology to the farmers, therefore, proper attention must be given to the trainings of AOs. Without proper training, Agriculture Officers cannot perform up to the mark in the field. According to Erbaugh *et al.* (2007) developing effective in-service educational and training programs is an important method for addressing a problem.

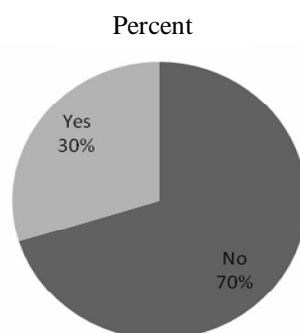


Fig. 1. Distribution of AOs according to training attended

Majority of the AOs (70.27%) reported that no trainings are arranged by the extension directorate while about 30% reported that trainings are arranged during rabi/kharif, quarterly, yearly, and occasionally respectively (Table I). The present findings reveal that all the extension agents did not get the opportunity to attend the training programs because of limited number of trainings. Thus proper training programs are needed for the extension agents to enhance their skills in the professional and technical competencies.

Table I *Distribution of extension workers according the frequency of training arranged by extension directorate*

C. No	Class	Frequency	Percent
1	Response is No	78	70.27
2	Rabi/Kharif	9	8.11
3	Quarterly	10	9.01
4	Yearly	10	9.01
5	Occasional	4	3.60
Total		111	100.00

Source: Field survey

Data presented in Table II indicate that 21.62% of the AOs did not attend any training during the service. However, 37.84% AOs reported that they attended 1–3 trainings, 27.03% reported that 4 – 6 trainings were attended, 3.60 % Agriculture Officers reported 7- 9 trainings, 6.31% AOs attended 10-12 trainings while 3.60% attended 13– 15 or more trainings during their service. Only 10 % of AOs attended 10 or more trainings. These trainings were arranged by different organizations other than extension directorate. Perusal of the data revealed that the number of trainings for the Agriculture Officers is not sufficient to significantly enhance the professional and technical

competencies of the Agriculture Officers in KP. In light of the above results it can be concluded from the study that proper training of Agriculture Officers should be arranged in various disciplines to meet the demand of globalize era.

Table II *Distribution of extension workers or AOs according to the number of trainings attended*

C. No	Training attended	Frequency	Percent
0	No. of trainings attended	24	21.62
1	1-3	42	37.84
2	4 -6	30	27.03
3	7 – 9	4	3.60
4	10 – 12	7	6.31
5	13 – 15	4	3.60
Total		111	100.00

Source: Field survey

Data regarding duration of trainings attend by the AOs in KP are presented in Table III revealed that maximum number (40.54%) of Agriculture Officers have attended the trainings having duration of 16-30 days followed by 22.52% of AOs who attended the trainings of 1-15 days duration. Similarly, minimum number of Agriculture Officers (7.21%) attended the trainings having duration of more than 90 days followed by 8.11% of Agriculture Officers who got trainings of 46-60 days duration. Only about 13% of the AOs attended trainings longer than one month duration and majority attended trainings which lasted less than a month. Keeping in mind the importance of training duration, it can be easily concluded that different institutes and organizations have organized the short-term trainings. However, many areas of biological sciences need long-term training programs to be well understood by the Agriculture Officers.

Table III *Distribution of extension workers according to duration of training*

C. No	Number of days	Frequency	Percent
1	1 – 15	25	22.52
2	16 – 30	45	40.54
3	31 – 45	14	12.61
4	46 – 60	9	8.11
5	61 – 90	10	9.01
6	90 and above	8	7.21
Total		111	100.00

Source: Field survey

Data indicate that the extension agents received trainings in six different areas Table IV. Data recorded show that 84.68, 59.46, 43.10, 58.56, 36.94 and 52.25 % attended trainings in the areas of water management, agronomy, integrated pest management, training of trainers, skill enhancement and rural development, respectively. All the training areas have their importance in uplifting the standard of rural community; however, more training are required in integrated pest management (IPM) and information technology IT. All of these trainings belong to technical subject matter such as general agriculture, crop production, crop protection, water management, rural development, and training of trainers. All in-service trainings that AOs received were related to only technical subject matter and none of these were related to management/administration or related areas. Agriculture Officers are facing various challenges to address the farming related issues; therefore, training in every aspect of social and scientific discipline is required.

Table IV *Distribution of extension workers according to training areas*

C. No	Training	Training (Yes)	Training (No)	Percent attended
1	Water Management	94	17.00	84.68
2	Agronomy	66	45.00	59.46
3	Integrated Pest Management	50	66.00	43.10
4	Training of trainers	65	46.00	58.56
5	Skill Enhancement	41	70.00	36.94
6	Rural Development	58	53.00	52.25

Source: Field survey

Agriculture Officers were asked to suggest about the suitable training duration that should be arranged to improve their professional competencies. It was noted that majority (54.95%) of the Agriculture Officers suggested that the training duration should be 1–15 days followed by 22.52% who suggested that the training duration should be 16- 30 days

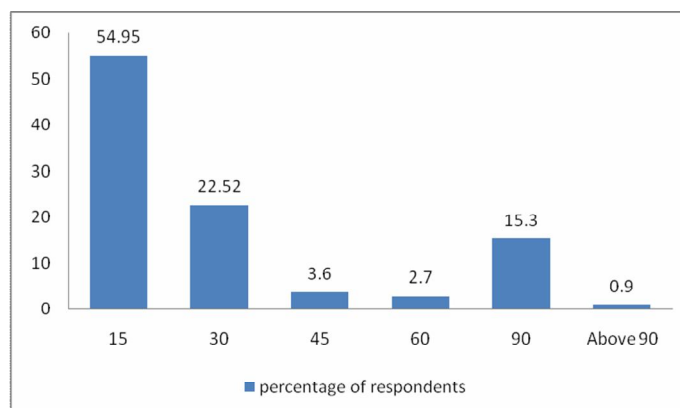


Fig 2. Response of Agriculture Officers to suggest suitable training duration

Minimum (0.90 %) of the Agriculture Officers were of the view that the training duration should be more than 90 days followed by 2.70% of the Agriculture Officers who suggested 46 – 60 days training course, while 15.32 and 3.60 % of the Agriculture Officers reported that the training duration should be 61 – 90 and 31 – 45 days, respectively. Our findings are consistent with the results of Khan (2003) who reported that majority of the agricultural professionals were of the view that training duration should not be more than one month. Training is the basic need of all the Agriculture Officers, which can indirectly benefit the farming community in a proper way. Trainings build better communication skills, develop the hidden talent, ensure consistent quality, provide greater focus, produce more effective/productive efforts and clarify the concepts of agriculture related issues. Training should be a very important priority for all organizations. Surely we can drive our competitiveness through conducting different training programs for the Agriculture Officers. Training has long been an issue for Agriculture Officers in KP due to lack of funds and other infrastructure.

The response of Agriculture Officers regarding the suitable time for conducting training program is presented in Table V. Majority (44.14%) of Agriculture Officers suggested rabi/kharif seasons for conducting training programs for them in KP. However, the remaining Agriculture Officers specified the time for conducting training program. Training before joining service was suggested by 11.71 % of the Agriculture Officers, which was at par with the Agriculture Officers who suggested training during January to March and July to September. Time of training is as important as training itself, as the Agriculture Officers are extremely busy during the sowing and harvesting time of the crops. As KP has diverse climatic conditions and two different seasons prevail during the same month. Therefore, the training for different geographical areas should be at different times.

Table V *Frequency of number of agriculture officers of agricultural extension department of KP showing month of training*

C. No	Class	Frequency	Percent
1	Rabi/Kharif	49	44.14
2	January – March	13	11.71
3	April – June	12	10.81
4	July – September	13	11.71
5	October - December	11	9.91
6	Before joining service	13	11.71
Total		111	100.00

Source: Field survey

Agriculture Officers in KP rated the importance of different training methods Table VI. Results revealed that majority (40.54%) of the Agriculture Officers rated lecture method as important. While in case of discussion 41.44 % rated discussion as more important. In a similar way, buzz group technique was rated more important by 35.14%, problem solving discussion as more important by 38.74%, participatory technique as more important by 40.54%, role playing as more important by 40.54%, critical incident as more important by 35.14%, demonstration as most important by 37.84 %, games and exercise as important by 34.23 % and brain storming as more important by 36.04 %. Combining the dependence who rates the methods as more important and most important, about 73%

respondents gave problem solving discussion top importance. Similarly, participatory technique was given greater importance by 71% AOs; next rated methods were demonstration and discussion methods.

Overall, all the training methods were considered beneficial in training programs. However, few of them were considered more important as compared to others. In the above mentioned methods, demonstration was considered as most important one by majority of the Agriculture Officers. Analogous results were reported by (Agriculture extension, 2007) who concluded that as per latest reports, the effects of oral presentation remain in mind 10%, visual 35% and visual and oral 65%. Similarly there is an old proverb which states that “people may doubt what you say, but they will believe what you do”. Khan (2003) also stated that demonstration method was the priority of all the Agriculture Officers in Punjab.

Table VI *Percentage of AOs showing the scale (1 to 5) of importance of training methods*

C. No	Method scale →	Percentages of AO showing the scale (1 to 5) of importance				
		1	2	3	4	5
1	Lecture	5.41	18.02	40.54	29.73	6.31
2	Discussion	7.21	12.61	13.51	41.44	25.23
3	Buzz group technique	8.11	16.22	31.53	35.14	9.01
4	Problem solving discussion	5.41	9.01	12.61	38.74	34.23
5	Participatory technique	7.21	7.21	14.41	38.74	32.43
6	Role playing	6.31	15.32	22.52	40.54	15.32
7	Critical incident	4.50	18.92	32.43	35.14	9.01
8	Demonstration	8.11	7.21	15.32	31.53	37.84
9	Games and exercise	7.21	13.51	34.23	32.43	12.61
10	Brain storming	4.50	13.51	28.83	36.04	17.12

1 = least important, 2 = less important, 3 = important, 4 = more important, 5 = most important

CONCLUSION AND RECOMMENDATIONS

The present conclusions are based on the earlier discussion presented in this article. It is concluded that overwhelming majority of the sample respondents urgently needed required training in their respective field. Moreover, the training schedule should be planed and chalk out avoiding slack season of the respondents for their convenience to afford time for such training. Agriculture officers play an important role in the diffusion and dissemination of new agricultural technologies and thus, should be given priority for training. This would enable the farmer to be benefited for proper utilization of new technological packages.

REFERENCES

- Annonymous. 2007. Agric. Ext. http://en.wikipedia.org/wiki/Agricultural_extension.
- GoP. 2006. Economic survey of Pakistan. Govt. of Pakistan, Ministry of Finance, Econ. Advisor Wing, Finance. Div. Islamabad, Pakistan.
- Boone, E.J. 1989. Philosophical Foundations of Extension. In D. J. Blackburn (ed.). Foundation & Changing Practice in Ext. Univ. of Guleph, Canada.
- Carter, G.L. 1993. Looking to the future prospects for extension here and elsewhere: What might be learned from the USA experience. Conf. Trend & Priorities in Ext. Univ. of Pertanian, Malaysia.
- Darkenwald, G.G. and S.B. Merriam. 1982. Adult education: Foundation of practice. Harper & Row, New York.
- Erbaugh, J.M., P. Kibwika and J. Donnermeyer. 2007. Assessing extension agent knowledge and training needs to improve IPM dissemination in Uganda. J. Int'l Agric. Ext. Educ. 14 (1):59.
- Jerry, D.G. and J. Hillison. 1994. Training needs of area specialized extension agents. J. Ext. 32(3): A3.
- Khan, M.A.J. 2003. Identification and rank order development of self-perceived competencies possessed by agriculture extension agents in the Punjab, Pakistan. Ph. D Dissert. Deptt. of Agric. Ext., Univ. Agric. Faisalabad, Pakistan.
- Merriam, S.B. and R.S. Caffarella. 1991. Learning in adulthood. San Francisco.
- Rahim, M.S. 1995. Extension education for industrializing Malaysia: Trends, priorities and emerging issues. Inaugural Speech. UPM.
- Swanson, B.S., R.P. Bentz and A.J. Sofranko . 1998. Improving agricultural extension. A Ref. Manual. FAO, Rome, Italy.