A COMPARATIVE ANALYSIS OF PROFESSIONAL COMPETENCIES POSSESSED BY PUBLIC AND PRIVATE AGRICULTURAL EXTENSION FIELD STAFF IN BALUCHISTAN

Ahmed Ali Mengal¹, Zaheeruddin A. Mirani² and Shoukat Ali^{3,*}

¹Department of Agricultural Education, Extension and Short Course, Sindh Agriculture University, Tandojam, Pakistan; ²Department of Agricultural Education, Extension and Short Course, Sindh Agriculture University, Tandojam, Pakistan; ³Institute of Agricultural Extension and Rural Development, University of Agriculture, Faisalabad, Pakistan.

*Corresponding author's e-mail: shoukat78pk@yahoo.com

Present research sought to analyze professional competency level of public and private sector extension field staff in Baluchistan province of Pakistan. Five districts i.e. Turbat (Kech), Lasbela, Mastung, Sibi, and Loralai, one from each ecological zone, were selected purposefully. Competency level of the field staff of public and private agricultural extension was assessed through farmers' respondents. A sample of 375 farmers was selected using systematic sampling procedure. A pre-tested and validated research instrument was used to collect the data. Data obtained were analyzed using SPSS (PC) program. Mean, standard deviations, rank order and T-values were calculated to analyze and compare the competency means of both public and private extension field staff. The results of the study revealed that farmers had a view that both public and private extension field staffs were not competent enough to perform the extension job. However, they were of the opinion that comparatively, private field staff is more competent than public field staff. T-values reveal that out of 13 competency indicators, 8 were statistically significant at 0.05 level of significance. However, five competency indicators were non-significant. The study suggested that adoption of regular in-service training procedures could build the capacity of the public and private extension field staff.

Keywords: Extension workers, professional competency, extension services, capacity building; resource management

INTRODUCTION

Competency has been defined as collective set of relevant knowledge, skills, and attitudes that trigger and promote performance of individual in effective way for successful performance (Cooper and Graham, 2001; Herringer, 2002; Langdon and Whiteside, 2004). Pakistan has an elaborate bureaucratic agricultural extension system with entire provincial set up having separate Directorate Generals for agricultural extension (Mellor, 1994). However, the recent fiscal deficit and budgetary crises adversely affected all spheres including agriculture sector. Country, like Pakistan facing problems in agricultural extension system due to top down planning, insufficient operational fund, bureaucratic procedure of delicate management, ignored tailend users and lack of involvement of stakeholders in decision making process (Davidson et al., 2001). Due to these factors, the diffusion of innovation among small scale farmers is a very slow (Mahmood, 1987; Rashid, 1987; Tahseen, 1987; Rogers, 1995). Particularly, public sector has inadequate funds and low competency level of front line extension workers. Moreover it has centralized structures, and bureaucratic style trends (Lodhi, 2003; Obaa et al., 2005; Khan, 2006; Khooharo et al., 2008). On the other hand, the private companies which provide the extension services are

actually meant for profit maximization and are enthusiastic to engage practices which facilitate sale of their products (Saravanan, 2001; Bajwa, 2003; Sulaiman and Suresh, 2005; Mirani, *et al.*, 2007; Khooharo *et al.*, 2008). The role of private extension services is generally criticized due to sale oriented services and profit motives. Critics believed that the private extension mainly focus on maximizing its profits and favors resource-rich farmers while ignore poor and needy farmers (Riaz, 2010).

In Balochistan like other provinces of the country, the organizational structure of agricultural extension is conventional. The executive district officers (EDOs) supervise district level extension activities but these EDOs do not carry out agricultural extension activities in proper way due to lack of operational funds and poor capacity building of extension field staff (Ahmad, 2007). The extension agents mostly have large area of jurisdiction with large number of farmers to be advised. The existing agricultural extension system do not meet the needs most of the farmers due to incompetent staff which primarily focus on resource-rich farmers. Poor and ineffective performance of agricultural extension regarding diffusion of information among farming community is key constraints for declining growth rate of agricultural productivity (Akmal, 2003).

Various areas of competency level are important for the extension field staff to perform their job and duty in efficient manner (Oakley and Garforth, 1985). It has been considered very important to judge the validity of professional value and competency level according to the job distributions of public and private extension field staff. The present study used 13 statements which were relevant to competency level of public and private extension field staff.

The competency level is the significant variable and job performance of extension field staff is always co-related with the competency level. Stone and Bieber (1997), Langdon and Whiteside (2004), and Lakai (2010) described competency as comprehensive and combined set of skills, knowledge, attitudes and attributes that assists collective performance of the actions. The competency level is considered as ability to involve and lead farmers to adopt innovation and act accordingly (Linders, 2001; Armstrong, 2006; Ali et al., 2009). Four domains i.e. knowledge, attitude, skill, and quality contribute to develop competency level of extension workers (Cooper and Graham, 2001; Ali et al., 2008). A number of factors such as time management, quantity, quality and effectiveness of work, knowledge, skill, effectiveness of communication, ability to manage, and discipline have influence on competency level of extension workers (Tiraievari, 2009). Since little efforts were made to identify the competency level of the public and private EFS in Baluchistan Province. Present study was, therefore, designed to examine the competency level of the public and private extension field staff.

MATERIALS AND METHODS

The research design of this study was based on a descriptive survey. This type of design plays cardinal role in social research and provides information from different perspective (Knupfer and McLellan, 2001). This design is considered most appropriate for obtaining people's perception on socioeconomic facts. This design describes the characteristics or behavior of a particular population in a systematic and accurate fashion (Mark, 2003). By descriptive survey, researcher could gain a better understanding of different aspects of the study and the nature of existing condition in a situation (Trochim, 2000; Jonassen, 2001).

The target population for this study consisted of farmers of the five purposively selected districts of Baluchistan province namely Turbat (Kech), Lasbela, Mastung, Sibi, and Loralai. Three hundred and seventy five farmers (75 farmers from each district) were selected by using systematic sampling procedure whereby every Kthnumber was randomly selected from a list (Gay and Mills, 2006). The sample size for both populations was determined by using McCall (1980) table of "determining sample size from given population" at the 0.05 percent error.

For the purpose of data collection, a questionnaire was developed, with the help of available literature keeping in view the objective of the study. Likert-type scales were used where deemed fit to measure the responses.

The team of researchers personally conducted the interviews of the farmers using the questionnaire. Data were analyzed using SPSS (PC) program and was interpreted accordingly. Following section present and discuss the results.

RESULTS AND DISCUSSION

The professional competencies were assessed from both the service provider's i.e. public and private extension field staff. Demographic as well as the competency data are presented in the following tables which is discussed on the basis of the findings.

The demographic characteristics of the respondents are presented in Table 1. The maximum age of the farmers was 55 years. Farmers had a maximum of 44 years of farming experience. The maximum landholding of all categories of the farmers was 75 and a large number of farmers (38.70%) were tenants. The educational level of farmers was good with more than 46% of the farmers had formal education.

Table 2 presents the professional competency level of public and private extension field staff. There were competencies based upon the leadership, communication, and participation. Data presented in Table 2 depicts the response of the respondents regarding professional competency level of the public and private extension field staff. Data revealed the mixed trends of competency levels possessed by extension field staff of both sector. For example, if one competency indicator indicates the professional competency of public extension field staff, the other indicator indicates the incompetency. The same is the case with private extension field staff.

While looking at mean values of the competency indicators, it is obvious that regarding public extension field staff, all competency indicators fall between mean values of 2.37 and 3.61 at the likert scale of 5. The case of private extension field staff is slightly better where mean values of competency indicators ranged between 2.41 to 3.84 at the scale of 5. It is an alarming situation that farmers were not agreed that extension field staff of public and private extension possess required competency level. Ali *et al.* (2009), Wigforss (2002), Fami (2006) and Reddy and Rao (2001) reported somewhat similar results.

t-test analysis was used to compare the differences in professional competencies of public and private extension field staff. T-values indicated that in 7 competency indicators i.e. ability to use audio visual aids effectively, use tactics in planning and organizing extension activities, be pro-active and innovative in extension delivery, use latest agricultural information and communication technologies,

Table 1. Selected demographic attributes of the farmers.

Characteristics		Resi	onse
		Max.	Min.
Age (in years)		55	19
Farming experience (in years)	44 8	
Farm size (in acres)	•	75	15
Characteristics	Category	Resp	onse
		f	%
Status	Owner	120	38.70
	Owner-cum-tenant	90	29.05
	Tenant	100	32.25
Educational level	Illiterate	166	53.54
	Up to primary (1-5 years of schooling)	60	19.35
	Primary to middle (6-8 years of schooling)	30	09.68
	Middle to matriculation (9-10 years of schooling)	40	12.90
	Matric to intermediate (11-12 years of schooling)	10	03.23
	Above intermediate (13-16 years of schooling)	04	01.30
	Postgraduate	9	06.70

Table2. Professional competency level of public and private extension field staff.

Competence		Public Extension			Private Extension			4 walna
Competency	Mean	SD	RO	Mean	SD	RO	Diff.	t-value
Lead farming community	2.65	1.125	10	2.75	1.081	11	0.089	1.24
Identify the needs and problems of the farmers	3.14	1.231	06	3.37	1.043	07	0.092	2.57*
Use audio visual aids effectively		1.166	09	3.10	1.210	09	0.095	3.85**
Use tactics in planning and organizing extension activities	2.48	0.994	11	2.74	1.042	12	0.082	3.23**
Apply knowledge and skill for quality work	2.79	1.175	08	2.89	1.075	10	0.090	1.03
Be pro-active and innovative in extension delivery	2.89	1.199	07	3.48	0.994	04	0.088	6.71**
Maintain personal communication relationship with farmers	3.22	1.242	04	3.37	1.064	08	0.093	1.63
Conduct effective discussion with farmers	2.43	1.103	12	2.41	0.964	13	0.083	0.23
Use latest agricultural information and communication technologies	3.19	1.286	05	3.45	0.960	05	0.091	2.90**
Mobilize farming community for adoption of innovations	3.39	1.253	03	3.73	0.841	02	0.086	3.97**
Use tactics and skill for cooperation, dialogue and conflict management	2.37	1.062	13	3.44	1.095	06	0.087	12.36**
Communicate effectively with self-confidence	3.43	1.264	02	3.55	0.897	03	0.088	1.47
Deal farmers with flexible and positive attitude	3.61	1.160	01	3.84	0.772	01	0.079	2.89**

^{*}Significant at 0.05 level; SD = Standard deviation; RO = Ranked order; **Significant at 0.01 level; 1= strongly disagree; 2= disagree; 3= undecided; 4= agree; 5= strongly agree

mobilize farming community for adoption of innovations, use tactics and skill for cooperation, dialogue and conflict management, and deal farmers with flexible and positive attitude, there was a significant difference at 0.01 level of significance. Looking at mean values, it is clear that private extension field staff was more competent in the mentioned 7 competencies and had made the difference. One competency indicator i.e. ability to identify the needs and problems of the farmers was significant at 0.05 level of significance. It was

concluded that private sector field staff was more competent as compared to public extension field staff. Rest of the five (5) competency indicators i.e. ability to: lead farming community, apply knowledge and skills for quality work, maintain personal communication relationship with farmers, conduct effective discussion with farmers , and communicate effectively with self-confidence were non-significant. Field staff of both the extension services had

similar level of competency. They were not competent in these categories.

Conclusions: There is need to strengthen the system by building competencies of extension field staff. Both, public and private extension field staff is not enough competent to perform agri. extension activities. However, farmers had a view that private extension field staff is more competent as compared to public extension field staff. It is, therefore, necessary that both sectors should emphasize on capacity building of their field staff. It is suggested that adoption of regular in-service training procedure could serve this purpose. Some competencies like identification and solution of farmers' needs and problems are the core of extension. Farmers rated this competency of field staff at 6th and 7th position. It is recommended that such core competency areas must be addressed in very effective way.

REFERENCES

- Ahmad, S. 2007. Restructuring national agricultural research system (NARS)-the case of NARS Balochistan. Water for Balochistan: Policy Briefings 3.7.
- Akmal, H. 2003. Pakistan national human development report: Poverty, growth and governance, Pakistan. Oxford University Press.
- Ali, H.O.K., I. Maimunah, S. Turiman and S. Abu-Daud. 2008. Extension worker as a leader to farmers: Influence of extension leadership competencies and organizational commitment on extension workers' performance in Yemen. J. Int. Res. 1: 368-387.
- Ali, S., M. Ahmad, T. Ali and M.I. Zafar. 2009. Analysis of competencies possessed by field staff of private agricultural extension system in Punjab. J. Agric. Res. 47: 101-106.
- Armstrong, M. 2006. A Handbook of Human Resource Management Practices, 2nd Ed. Kogan Page Ltd., London.
- Bajwa, R. 2003. Agricultural extension and the role of the private sector in Pakistan: National Rural Support Program, Islamabad, Pakistan.
- Cooper, A.W. and D.L. Graham. 2001. Competencies needed to be successful county agents and county superiors. J. Ext. 39:1-8.
- Davidson, A.P., M. Ahmad and T. Ali. 2001. Dilemmas of agricultural extension in Pakistan: Food for thought. Agric. Res. Ext. Network 116: 1-14.
- Fami, H.S. 2006. Islamic republic of Iran: Country paper. In: V.P. Sharma (ed.), Enhancement of Extension Systems in Agriculture, pp.116-125. Asian Productivity Organization, Tokyo, Japan.
- Gay, L.R. and G.E. Mills. 2006. Educational Research: Competencies for Analysis and Applications, 8th Ed. Upper Saddle River, N.J., Merrill/Prentice Hall.

- Herringer, J.M. 2002. Once isn't enough when measuring staff competence. Nursing Manage. 33(2):22.
- Jonassen, H.D. 2001. Handbook of Research on Educational Communications and Technology: AECT 1800 Blomington, IN 47404.
- Khan, A.A. 2006. Strengthening education-researchextension linkages for effective agricultural extension services: Experience of Pakistan. In: V.P. Sharma (ed.), Enhancement of Extension system in Agriculture. APO, Tokyo, Japan; pp.145-150.
- Khooharo, A.A., R.A. Memon and M.H. Lakho. 2008. An assessment of farmers' level of knowledge about proper usage of pesticides in Sindh province of Pakistan. Sar. J. Agri. 24: 531-539.
- Knupfer, N.N. and H. McLellan. 2001. An Outline of Chapter 41: Descriptive Research Methodologies" EME 7939
- Lakai, D. 2010. Identification of competencies needed by the extension agents in North Carolina. Master of Science in Extension Education North Carolina State University, USA.
- Langdon, D. and K. Whiteside. 2004. Bringing sense to competency definition and attainment: Performance improvement (Online) 43: 10-15.
- Linders, J.R. 2001. Competency assessment and human resource management performance of county extension chairs in Ohio. J. Agric. Edu. 51: 21-31.
- Lodhi, T.E. 2003. Need for paradigm shift from top-down to participatory extension in the Punjab, Pakistan: Perceptions of farmers, change agents and their supervisory staff. Ph.D. Thesis, Agric. Ext., Univ. Agric. Faisalabad, Pakistan.
- Mahmood, K.A. 1987. A study into the extent of adoption of improved poultry production practices by poultry farm owners in Sahiwal. M.Sc. (Hons.) Thesis, Agric. Ext., Univ. Agric., Faisalabad, Pakistan.
- Mark, L.R. 2003. Introduction to Behavioral Research Methods, 4th Ed. Allyn & Bacon Pearson Education, Inc., Upper Saddle River, New Jersey, USA.
- McCall, C. 1980. Sampling and Statistics Handbook for Research in Education: National Education Association, USA.
- Mellor, A. 1994. International reforms to accelerate irrigated agriculture; Vol. I & II, Washington DC.
- Mirani, Z.A., S.S. Bukhari and M.A. Narejo. 2007. Assessment of the impact of farm advisory services in Sanghar and Mirpurkhas districts of Sindh province Pakistan. Pak. J. Aric. Agril. Eng. Vrt. Sci. 23:39-46.
- Obaa, B., J. Mutimba and A.R. Semana. 2005. Prioritizing farmers' extension needs in a publicly-funded contract system of extension: A case study from Mukono District, Uganda. AGREN; Paper No. 147.
- Oakley, P. and C. Garforth. 1985. Guide to Extension Training. FAO Training Series No. 11, Rome.

- Rashid, K. 1987. To study the impact of agricultural credit on the adoption of improved farm practices by small farmers in district Sheikhupura. M.Sc. (Hons.) Agric. Ext. Thesis, Univ. Agric., Faisalabad, Pakistan.
- Reddy, P.G. and P.P. Rao. 2001. Privatization of agricultural extension: An analysis. In: P.C. Shekara (ed.), Private Extension: Indian Experiences; pp.222-226. National Institute of Agricultural Extension Management, Hyderabad, India.
- Riaz, M. 2010. The role of the private sector in agricultural extension in Pakistan: Rural Development News. pp.15-22
- Rogers, E.M. 1995. Diffusion of Innovation, 4th Ed. The Free Press. New York, USA.
- Saravanan, R. 2001. Privatization of agricultural extension: In: C.P. Shekara (ed.), Private Extension in India: Myths, Realities, Apprehensions and Approaches. National Institute of Agricultural Extension Management (MANAGE), Hyderabad, India; pp. 60-71.
- Stone, B.B. and S. Bieber. 1997. Competencies: A new language for our work. J. Ext. 35(1):1-3.

- Sulaiman, R., V.H. Andy and N. Suresh. 2005. Effectiveness of private sector extension in India and lessons for the new extension policy agenda. Agricultural Research and Extension Network Paper No.141.
- Tahseen, M. 1987. An investigation into the adoption of recommended practices of growing late wheat in Tehsil Cichawatni. M.Sc. (Hons.) Agric. Ext. Thesis, Univ. Agric. Faisalabad, Pakistan.
- Tiraieyari, N. 2009. The Importance of cultural competency for agricultural extension worker in Malaysia. J. Int. Res. 2: 411-421.
- Trochim, W.M. 2000. The Research Methods Knowledge Base, 2nd Ed. Atomic Dog Publishing, Cincinnati, OH.
- Wigforss, N. 2002. Scaling up the impact of rural development NGOs in Nepal: A case study of FORWARD. M.Sc. Thesis No. 17, Department of Rural Development Studies, Swedish University of Agricultural Sciences, Sweden.