



Assessing Organizational and Personnel Structure in Iranian Agricultural Extension System

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Abstract

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The purpose of this study was to assess organizational and personnel structure in Iranian Agriculture Extension System (IAES). The research instrument was a structural questionnaire including close-ended questions which its validity and reliability was confirmed by using experts' panel and Cronbach's alpha test, respectively. The statistical population of this research included all public extension managers who are responsible for doing extension activities in Iran's townships and provinces (N=365). According to Krejcie and Morgan's table, a number of 198 extension managers of townships selected as statistical sample in a stratified sampling method based on classification of provinces by the Jihad-e-Agriculture ministry. Also, for gathering data among extension managers of provinces was used census method. Finally, 222 public extension managers in township and province levels participated in this research (n=222). Overall, extension managers stated that organizational and personnel structure in IAES was not suitable. The other results also indicated there was the significantly positive relationship between selected demographic characteristics of extension managers with their viewpoint about organizational and personnel structure in IAES. These results highlight the need for the reform of organizational and personnel structure in IAES.

1. Introduction

Agricultural extension system, like the other system, including sub-systems that organizational and personnel structure is one of the main sub-systems, because the poor extension organization leads to deliver the poor extension services. Extension organizational structure means how the agency or department that is responsible for delivering extension services, arranges itself for doing these activities (Qamar, 2005). Sha'ban-Ali-Fami (2010) stated the proper structure of extension organization results in empowering farmers through communication with research stations, getting information from several sources by farmers, adapting the Agricultural Extension Organization (AEO) to new situations, increasing personnel

motivations for doing extension activities, and being flexible AEO. Omar (2011) believed to achieve the more linkage among agricultural extension, farmers, and research stations, structure of AEO should be decentralized, less hierarchical and more flexible. Qamar (2005) stated, decentralized structure meant the structure, which transfers part of decision-making process from central government to lower governments for making the effective and local decisions. Tossou & Zinnah (2005) also stated the decentralized organization is the best kind of organizational structure for agricultural extension system. They believed this structure leads to increase power and capacity of decision- makings at local level and better responses to local needs.

On the other hands, all AEO are built with human resources to achieve specific purpose of the organization (Qamar, 2005). The success of all agricultural extension activities depends on the performance of agricultural extension personnel. In the other words, they are the key element of all agricultural extension activities (FAO, 2006). Le Ngoc et al., (2007) stated the several factors such as having technical knowledge, professional skill, motivation, program-planning skill, program evaluation skill, program implementation skill, etc impact on the performance of agricultural extension personnel. Terblanche (2008) believed agricultural extension personnel should have the skills and competencies namely technical competencies, communication skills, group facilitation skills, and extension management. Pezeshki-Raad et al. (1994) also stated these personnel in developing countries should have professional competencies in areas of management, program planning and implementation, program evaluation, communication, teaching methods, and understanding human behavior.

Structure of Iranian agricultural extension organization has been formed by using classic management theories such as bureaucracy management. There is top-down hierarchy in this structure that has been defined number of organizational units and linkage between them based on organizational chart carefully (Shah-Vali & Abedi-Sarvestani, 2005). Iranian agricultural extension organization chart illustrates Education and Extension Deputy in Agricultural Ministry which places in upper chart is special administrator of extension activities in Iran and responsible for making agricultural extension policies. Of course, in these recent years, non-governmental firms namely advisory service firms have been established based on decentralizing governmental organizations (or making small governmental organization), which have been transferred operational activities within rural and for rural people such as holding extension-education courses for farmers, etc. nowadays, agricultural extension personnel in Iran include governmental personnel at line and staff levels, subject matter specialists, non-governmental personnel in advisory service firms, and voluntary personnel. In spite of numerous attempts have been done in recent years, unfortunately, there are a few information and researches about this structure. These few researches have not also investigated all aspects of personnel and organizational structure of AEO, but they studied special aspect of this subject.

Overall, some of researches indicated personnel and organizational structure of IAES has not desirable situation. These researches showed the main weakness in the organizational structure of

IAES include lack of proper organizational structure for transferring modern technology (Allahyari, 2009); duplication of agricultural extension agencies for doing operational activities (Qamar, 2001); lack of transferring sufficient authorities to extension managers at lower levels (Soori et al., 2008); not being experience in non-governmental for delivering extension activities (Noori et al., 2008); and structure changes in Agricultural Ministry during past decades (Karbasion & Mulder, 2004). The other problems and challenges in area of quality and quantity of agricultural extension personnel can state as follows lack of essential skills of personnel for changing new research results into extension messages (Ommani & Chizari, 2010; Pezeshki-Raad et al., 1994); the low level motivation and salary of extension personnel in comparison with the other deputy personnel in Agricultural Ministry (Soori et al., 2008); lack or shortage of delivering pre or in-service education to agricultural personnel and the low number of operational personnel (Karamidehkordi, 2010; Pezeshki-Raad et al., 2001); and the low access to information and learning technologies (Karbasion & Mulder, 2004).

According to problem statement mentioned above, the main purpose of this study was to assess organizational and personnel structure in IAES.

2. Materials and methods

The study represented descriptive-correlation research. The statistical population included all public extension managers who are responsible for doing extension activities in Iran's townships ($N_1=334$) and provinces (states) ($N_2=31$). Sample size in public extension managers of townships were determined by Krejcie and Morgan (1970) which offered a table for determining sample size for a given population. Based on the classification of the Jihad-e-Agriculture ministry which has divided Iran's provinces into six different regions, sample taking has been conducted using proportional stratified sampling technique ($n_1=198$). Furthermore, census method was used to gather data from public extension managers of provinces that after two follow-ups (calling and sending another copy of the instrument), 24 persons responded. Finally, 222 public extension managers in township and province levels participated in this research ($n=222$).

According to the review of literature, the researchers developed an instrument to collect data. The instrument was divided into three sections. Sections one and two were designed to gather data about respondents' viewpoints about being suitable extension organizational structure (13 items) and personnel quality and quantity (12 items). The five-

point Likert-type scale was used to quantify responses for these sections which ranged from 1=very low, 2=low, 3=moderate, 4=high, and 5=very high. Section three was designed to gather data about the respondents' demographic characteristics such as age, years of agricultural work, and level of education, and major.

The research instrument was a structural questionnaire including close-ended questions which its content and face validity were established by a panel of experts consisting of faculty members at Agricultural Extension Department of Tarbiat Modares University, Tehran, Iran and agricultural officers of the Jihad-e-Agriculture ministry. A pilot test was conducted with 30 extension specialists who work in Deputy of Extension and Education of Iran's Ministry of Jihad-e-Agriculture in Tehran. Minor changes in wording were made because of the pilot test. The questionnaire reliability was estimated by calculating Cronbach's alpha. Reliability for the sections one and two of instrument was estimated 0.88 and 0.71, respectively.

The data were coded and analyzed by using the Statistical Package for the Social Science (SPSS, 16) for windows. Descriptive statistics (frequency, percent, mean, standard deviation, coefficient of variance, minimum, and maximum) were used to describe data. Spearman correlation coefficient and Mann-Whitney test were employed to analyze the relationships and the differences among variables.

3. Results and discussion:

3.1 Describing demographic characteristics of extension managers

Extension managers who participated in this study ranged in age from 26 to 59 years old. The mean age of respondents was 44 years old (SD=7) that the majority of them (f=100 or 45%) ranged from 42 to 49 years old. Extension managers were asked to indicate the number of years of working in the agricultural office. Years of working ranged from three to 40. On average, extension managers had 20 years of working in the agricultural office (SD=7) that the majority of them (f=102 or 45.90%) ranged years of working in the agricultural office from 13 to 22 years. In addition, extension managers had, on average, 15 years of doing extension activities (SD=7) that the majority of them (f=75 or 33.80%) ranged years of doing extension activities from 9 to 15 years. Extension managers were asked to report their highest level of education: Only 0.90% of them had high school diploma, 8.10% of respondents had Junior college diploma (14-year education), 54.50% of respondents had Bachelor's degree, 33.30% of respondents had Master's degree and 3.20% of them were a Ph.D. student. Unfortunately, only nearly 22% of extension managers stated that studied agricultural extension and education major at university as a main subject while nearly 78% of them did not (table 1).

Table 1. Demographic characteristics of extension managers (n=222)

Variable	Category	Frequency	percent	Mean	SD	Min.	Max.
Age (year)	23-33	15	6.80	43.95	6.53	26	59
	34-41	61	27.50				
	42-49	100	45				
	50-59	46	20.70				
Years of working in the agricultural office	3-12	41	18.50	19.76	7.30	3	40
	13-22	102	45.90				
	23-32	72	32.40				
	33-40	7	3.20				
Years of doing extension activities	2-8	55	24.80	14.63	7.26	2	30
	9-15	75	33.80				
	16-22	57	25.70				
	23-30	35	15.80				
Level of education	High school diploma	2	0.90	-	-	-	-
	Junior college diploma	18	8.10	-	-	-	-
	Bachelor's degree	121	54.50	-	-	-	-
	Master's degree	74	33.30	-	-	-	-
	PhD student	7	3.20	-	-	-	-
Academic Major	Agricultural extension and education	48	21.60	-	-	-	-
	The others	174	78.40	-	-	-	-

Table 2. Ranking organizational characteristics in IAES (n=222)

Items	Mean*	SD	CV	Rank
The amount of linking between agricultural extension deputy with other deputies in agricultural ministry	3.36	0.94	0.2797	1
The amount of planning, coordinating, and controlling activities by governmental extension	3.43	0.98	0.2857	2
The amount of transferring operational activities from governmental extension to non-government extension	3.58	1.10	0.3072	3
The amount of encountering with extension organization and personnel by non-extension managers as desired**	2.89	1.03	0.3564	4
The number of ordered organization to extension units**	2.83	1.03	0.3639	5
Number of special units in organizational structure such as rural youth and rural women	2.90	1.10	0.3793	6
The amount of transferring responsibilities and authorities proportionally	3.15	1.22	0.3873	7
The amount of the proper distribution of activities between staff and line units	2.72	1.06	0.3897	8
The amount of emphasis on the use of information technology in organizational structure	3.22	1.28	0.3975	9
The amount of being fit organization chart	2.59	1.04	0.4015	10
The amount of changes and transitions in organization structure of extension**	2.68	1.09	0.4067	11
The amount of delegating authorities to lower levels of government (townships) for regional planning	2.88	1.18	0.4097	12
The amount of coordinating with extension units or agencies in other ministries (except of agricultural ministry)	2.04	0.94	0.4607	13
Overall Mean	2.94	1.07	-	-

Note: * very low=1, low=2, moderate=3, high=4, and very high=5

** very low=5, low=4, moderate=3, high=2, and very high=1

Table 3. Classification of the amount of being suitable of organizational structure in IAES (n=222)

Classification	Category	Frequency	Percent
1-2.33	Week	19	8.60
2.34-3.67	Moderate	196	88.30
3.68-5	Good	7	3.20

Table 4. Ranking personnel characteristics in IAES (n=222)

Items	Mean	SD	CV	Rank
The education level of extension personnel	3.01	0.84	0.2790	1
The amount of extension personnel professional skills	3.77	1.12	0.2970	2
The amount of extension personnel belief about impressing extension activities	3.54	1.11	0.3135	3
The amount of being relevant academic major of extension personnel with their extension activities	2.68	0.96	0.3582	4
The amount of delivering in-service education to extension personnel	2.77	1.07	0.3862	5
The amount of extension personnel salary in comparison with other personnel of the Jihad-e-Agriculture ministry	2.30	0.89	0.3869	6
The number of subject matter specialists in comparison with number of line personnel	2.16	0.85	0.3935	7
The amount of extension personnel motivation in comparison with other personnel of the Jihad-e-Agriculture ministry	2.38	1.02	0.4285	8
The amount of delivering pre-service education to extension personnel	2.29	1.00	0.4366	9
The number of women personnel in comparison with men personnel	1.87	0.84	0.4491	10
The number of indigenous line personnel	2.37	1.08	0.4556	11
The number of line personnel in comparison with number of farmers	2.04	0.98	0.4803	12
Overall Mean	2.59	0.98	-	-

Table 5. Classification of Extension personnel quality and quantity in IAES (n=222)

Classification	Category	Frequency	Percent
1-2.33	Week	58	26.10
2.34-3.67	Moderate	161	72.50
3.68-5	Good	3	1.40

Table 6. Correlation between extension managers' viewpoints about organizational and personnel structure in IAES and their demographic characteristics (n=222)

Variables	Personnel Quality and Quantity		Being Suitable Organizational Structure	
	r_s	p	r_s	p
Age	0.177**	0.008	0.295**	0.001
Year s of working in the agricultural office	0.191**	0.004	0.353**	0.000
Year s of doing extension activities	0.132*	0.049	0.389**	0.000
Level of education	-0.143*	0.034	0.187	0.015

Note: * $P \leq 0.05$ ** $P \leq 0.01$

Table 7. Comparison of extension managers' viewpoints who studied agricultural extension and education major and the others about organizational and personnel structure

Variable	Extension managers who studied agricultural extension and education major	The others	Z-test	U-test	P-value
	Rank Mean	Rank Mean			
Being suitable extension organizational structure	79.43	65.84	-1.885	1779.500	0.059
Extension personnel's quality and quantity	73.31	69.03	-0.594	2073	0.553

3.2 Assessing organizational structure in IAES

Extension managers were asked to indicate their viewpoints about organizational structure in IAES for 13 items. Mean, standard deviation, and coefficient of variance (CV) for the 13 items are reported in Table 2. As table 2 shows, generally, extension managers stated that the amount of being suitable organizational structure in IAES was at nearly moderate level ($M= 2.94$, $SD= 1.07$). Furthermore, the other results indicated that the main organization characteristics of IAES was "the amount of linking between agricultural extension deputy with other deputies in agricultural ministry" ($CV=0.2797$). Two next organizational structures were "the amount of planning, coordinating, and controlling activities by governmental extension" ($CV=0.2857$), and "the amount of transferring operational activities from governmental extension to non-government extension" ($CV=0.3072$). As table 3 shows, the amount of being suitable of organizational structure in IAES is divided into three levels with equal distance according to scores range. This result showed that the majority of extension managers ($f=196$ or 88.30%) stated the amount of being suitable of organizational structure in IAES was at moderate level while only nearly 9% of respondents stated this subject was at week level.

3.3 Assessing personnel quality and quantity in IAES

Extension managers were asked to indicate their viewpoints about extension personnel quality

and quantity in IAES for 12 items. Mean, standard deviation, and coefficient of variance (CV) for the 12 items are reported in Table 4. As table 4 shows, generally, extension managers stated that extension personnel quality and quantity in IAES was at less than moderate level ($M= 2.59$, $SD= 0.98$). Furthermore, the other results indicated that the main personnel characteristics of IAES was "the education level of extension personnel" ($CV=0.2790$). Two next personnel structures were "the amount of extension personnel professional skills" ($CV=0.2970$), and "the amount of extension personnel belief about impressing extension activities" ($CV=0.3135$).

As table 5 shows, personnel quality and quantity in IAES is divided into three levels with equal distance according to scores range. This result showed that the majority of extension managers ($f=161$ or 72.50%) stated personnel quality and quantity in IAES was at moderate level while nearly 26% of respondents stated this subject was at week level.

3.4 Examining the correlation between extension managers' viewpoints about organizational and personnel structure in IAES and their demographic characteristics

Spearman coefficient was also employed for measurement of the relationships between extension managers' viewpoints about organizational and personnel structure in IAES and their demographic characteristics. As table 6 shows, there was significant, statistic, positive relationship between extension managers' viewpoints about being suitable

organizational structure in IAES and their demographic characteristics including age ($r_s = 0.295$, $P \leq 0.01$), years of working in the agricultural office ($r_s = 0.353$, $P \leq 0.01$), and years of doing extension activities ($r_s = 0.389$, $P \leq 0.05$).

The results of table 4 shows that there also was significant, statistic, positive relationship between extension managers' viewpoints about personnel quality and quantity in IAES and their demographic characteristics including age ($r_s = 0.177$, $P \leq 0.01$), years of working in the agricultural office ($r_s = 0.191$, $P \leq 0.01$), and years of doing extension activities ($r_s = 0.132$, $P \leq 0.01$), and level of education ($r_s = -0.143$, $P \leq 0.05$).

3.5 Examine comparison of extension managers' viewpoints who studied agricultural extension and education major and the others about organizational and personnel structure

A Mann-Whitney test was conducted to evaluate the differences between extension managers' viewpoints who studied agricultural extension and education major and the others about organizational and personnel structure. As table 7 shows, there was no statistically significant difference between extension managers' viewpoints who studied agricultural extension and education major and the others regarding being suitable organizational structure and personnel quality and quantity in IAES.

4 Discussion, Conclusion and Recommendations

Extension managers who participated in this research, on average, were active in AEO for 15 years that this means much experience of them in doing extension activities. The key point that it is essential to state is the academic major of extension managers. Unfortunately, nearly 20% of them studied agricultural extension and education major as main academic major at university. This means the majority of extension managers were not academic familiar with agricultural extension major. Results of this research indicated the both personnel and organizational structures of IAES are not suitable. Thus, with considering this structure, it is normal that IAES is not active effectively for delivering educational or advisory services to farmers. The other results showed the amount of linking between agricultural extension deputy with other deputies in agricultural ministry, the amount of planning, coordinating, and controlling activities by governmental extension, and the amount of transferring operational activities from governmental extension to non-government extension is more suitable in comparison with the others. This result supports by Qamar's research (2001). These results

also showed educational level, the amount of professional skills and beliefs about impressing extension activities among extension personnel in comparison with the other personnel characteristics are more suitable. Of course, these may be the result of self-confidence because of doing extension activities for many years. These descriptive results also supported by inferential results of the same research for there is the positive directly statistical relationship between extension managers' age, years of experiences in agricultural office and AEO with their viewpoints about personnel and organizational structure in IAES. It seems extension managers with more age, years of experiences in agricultural office and AEO have better viewpoint about personnel and organizational structure in IAES. Of course, this research showed the negative statistically relationship between education level of extension managers with their viewpoints about personnel and organizational structure in IAES, as their education level is the more, their viewpoints about personnel and organizational structure is the less.

The other results also indicated the number of women personnel in comparison with the men personnel is very low. Of course, ratios of both the number of subject matter specialists to line personnel and the number of line personnel to farmers are low, too. These results support by previous results of Karamidehkordi's research (2010) and Pezeshki-Raad *et al.*'s research (2001). Finally, the others revealed there was no statistical difference between extension managers' viewpoint who studied agricultural extension and education major with the other about personnel and organizational structure in IAES. In fact, it seems in spite of differing extension managers from each other in terms of academic major, they stated similar viewpoints about not being suitable personnel and organizational structure in IAES.

References:

- 1) Allahyari, M. S. (2009). Reorganization of Agricultural Extension toward Green Agriculture. *American Journal of Agricultural and Biological Sciences*, 4 (2): 105-109.
- 2) FAO. (2006). Chapter 8: The extension agent. Available at: <http://www.fao.org/docrep/t0060e/T0060E08.htm>
- 3) Karamidehkordi, E. (2010). Transition of Agricultural Extension in Iran. First Intercontinental Meeting of the Global Forum for Rural Advisory Services and the 16th Annual Meeting of the Neuchatel Initiative, Vina del Mar, Chile.
- 4) Karbasian, M. & Mulder, M. (2004). HRM and HRD in Agricultural Extension Organization In Iran: A Literature Review. Chair Group Education

and Competence Studies, Wageningen University, Wageningen, Netherlands.

5) Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30: 608-610.

6) Le Ngoc, T., Maimunah, I., Jegak, U. & Khairuddin, I. (2007). Individual Factors as Predictors of Extension Agents' Performance in Mekong Delta, Vietnam. *The Journal of Human Resource and Adult Learning*, 3 (1): 93-102.

7) Noori, M., Sadighi, H. & Sha'ban-Ali-Fami, H. (2008). Identifying Problems Of Extension Programs For Linkage With Personnel Of Agricultural Knowledge And Information System From Viewpoint Of Extension Experts. *Proceedings of the 3th Agricultural Extension and Education Annual Conference*, Mashhad, Iran. P: 18.

8) Ommani, A. R. & Chizari, M. (2010). Sustainable water resources management and agricultural extension mechanisms. Shoushtar: Islamic Azad University Shoushtar Branch, Iran.

9) Omar, E. A. J., Abu Bakar, A. H., Jais, M. H. & Ibraik, M. F. (2011). A Review Study of the Reorganization of Agricultural Extension toward Sustainable Agricultural Development. *International Journal of Engineering Science and Technology*, 3 (5): 4358-4366.

10) Pezeshki-Raad, G., Yoder, P. E. & Diamond, E. J. (1994). Professional Competencies Needed By Extension Specialists and Agents in Iran. *Journal of International Agricultural and Extension Education*, 1 (1): 45-54.

11) Qamar, K. M. (2001). *Restructuring and Strengthening the National Agricultural Extension System in Islamic Republic Of Iran*. Rome: FAO.

12) Qamar, K. M. (2005). *Modernizing National Agricultural Extension Systems: A Practical Guide for Policy-Makers of Developing Countries*. Rome, FAO.

13) Sha'ban-Ali-Fami, H. (2010). *Principles of Agricultural Extension and Education (Fifth Eds.)*. Payam Noor University Press, Tehran, Iran.

14) Shah-Vali, M. & Abedi-Sarvestani, A. (2005). Achieving Agricultural Extension Procedures in Future. *Iranian Journal of Rural and Development*, 8 (4): 113-145.

15) Soori, S., Sadighi, H. & Pezeshki-Raad, Gh. (2008). Identifying Problems of Extension Programs from Viewpoints of Extension Agents and Experts in Goam Province. *Proceedings of the 3th Agricultural Extension and Education Annual Conference*, Mashhad, Iran. P: 270.

16) Terblanche, E. S. (2008). Towards An Improved Agricultural Extension Service as a Key Role Player in the Settlement of New Farmers in

South Africa. *South African Journal of Agricultural Extension*, 37: 58-84.

17) Tossou, C. R. & Zinnah, M. M. (2005). Search for Better Institutional Arrangements for Agricultural Extension Services in a Decentralized Context: The Republic of Benin. *Journal of International Agricultural and Extension Education*, 12 (3): 43-52.



ارزیابی ساختار سازمانی و پرسنلی نظام ترویج کشاورزی ایران

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هدف از این مطالعه ارزیابی ساختار سازمانی و پرسنلی نظام ترویج کشاورزی ایران بود. ابزار تحقیق یک پرسشنامه ساختاریافته دارای سؤال‌های بسته که روایی آن از طریق پائل متخصصان و پایایی آن از طریق ضریب کرونباخ آلفا تعیین شد، بوده است. جامعه آماری این تحقیق شامل تمام مدیران ترویج که مسئول انجام فعالیت‌های ترویجی در استان‌ها و شهرستان‌ها در سراسر کشور می‌باشند، بود (N=365). بر اساس جدول کرجی و مورگان ۱۹۸ نفر از مدیران ترویج شهرستان‌ها به عنوان نمونه آماری انتخاب شد. همچنین از طریق روش سرشماری کلیه مدیران ترویج در سطح استان‌ها نیز بررسی شدند. بنابراین در مجموع ۲۲۲ نفر نمونه آماری را تشکیل دادند. در مجموع بر اساس نظر مدیران ترویج، ساختار سازمانی و پرسنلی در نظام ترویج وضعیت مناسبی نداشت. همچنین یک رابطه مثبت و معنی‌داری بین ویژگی‌های دموگرافیکی مدیران و دیدگاه آنها در زمینه ساختار سازمانی و پرسنلی در نظام ترویج به دست آمد. نتایج تحقیق، نیاز به اصلاح در زمینه ساختار سازمانی و پرسنلی در نظام ترویج را تأکید نمود.

چکیده

کلمات کلیدی: مدیر، ساختار سازمانی، ساختار پرسنلی، نظام ترویج کشاورزی، ایران