

ASSESSING THE EXTERNAL ENVIRONMENT OF PUBLIC EXTENSION SYSTEM IN THE KINGDOM OF SAUDI ARABIA

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ABSTRACT

The government of the Kingdom of Saudi Arabia (KSA) is increasingly emphasizing the importance of institutional re-arrangements. One area of current interest to the Ministry of Environment, Water & Agriculture involves reforming public agricultural extension system. This research aimed to assess the external environment of KSA national system of agricultural extension. A scale concerning the external environment of organization (seven dimensions with 39 statements) was used for the assessment. The reliability of the scale was estimated by Cronbach's alpha; reliability coefficient was 0.813. Data were collected using an internet-based questionnaire form (in collaboration with Extension Administration, Ministry of Agriculture) with 81 extension personnel representing all extension directories in the country during the period May-August 2016. Percentages and mean scores were used for data presentation. The findings revealed that scores for extension personnel's perceptions of the external environment scale were above average levels for four components (socio-cultural, political, administrative, and geographical environment) of the scale and below average levels for the remaining three components (technological, legal and economic environment). The mean score of socio-cultural environment was at the top of the list with the mean score of 3.98 (66.3% of the maximum score), followed by political environment (63.1%). While the mean of extension personnel's perception of the economic environment reached 4.5 (37.6%) followed by legal environment with about 45.6% of the maximum score. The result also showed that the mean score of the total scale reached 41, which represent 52.63% of the total score of the scale. Finally, some interventions for more enabling external environment of extension organization were recommended.

Keywords: *Organizational environment, Agricultural extension, Saudi Arabia*

Introduction

Approximately spreading over an area about four-fifths of the Arab Peninsula, with a total area of around 2,000,000 square kilometers, the kingdom of Saudi Arabia is the home of 31.8 million masses. It comprises about 80 percent of the Arabian Peninsula. It has borders with Jordan, Iraq and Kuwait in the north; Arab Gulf, Bahrain, Qatar and the United Arab Emirates in the east; the Sultanate of Oman and Yemen in the south and the Red Sea with a coastline of 1750 km in the west. The climate of Saudi Arabia varies from one region to another because of its diverse topographical features. As a result of a subtropical high-pressure system, the Kingdom is generally hot in summer and cold in winter where rains fall often. Moderate climate is seen in the west and the southwestern part of the Kingdom; dry hot summer and cold winter in the interior parts; and high temperature and humidity in the coastal areas. Major parts of the Kingdom usually receive scanty amounts of rain in winter and spring. However, in the summer, rainfall is significant in the southwestern mountains. Humidity is high on the western coasts and mountains almost all year and it gets lower as we go inland. The Kingdom is divided into 13 administrative regions. Each one of them is divided into a number of governorates differentiating in number from one region to another. And each governorate is divided into centers linked administratively

to the governorate itself or the emirate. The emirate, governorate or center includes a number of population settlements linked administratively to it (GASTAT, 2016).

The Ministry of Agriculture has an elaborate network of centers, branches and facilities located across the country that provide various agriculture-related services to the farmers and other stakeholders in line with the mandate of the Ministry. The network comprises the following: six main sectors (five technical i.e. agriculture, agricultural development, livestock and fisheries, as well as agricultural natural resources and one for administrative and financial affairs), thirteen general directorates for agricultural affairs, located in main provinces, twelve directorates, 122 branches, 28 agricultural plant and animal quarantines, 34 veterinary units, 5 agricultural research centers, one olive research unit, three aquaculture research centers, 10 centers and branches for fisheries services, a national research center for combating locusts, eight veterinary diagnostic laboratories, a veterinary vaccine production center, a gene bank and artificial insemination, eight veterinary laboratories, and four agricultural training centers. The ministry has overall responsibility for providing public agricultural extensions services to the farmers. The Extension and Agricultural Services Division, performs this function in collaboration with the extension staff located in the General Directorates for Agricultural Affairs (Alsaghan, 2006, 2011; Ministry of Agriculture, 2016; Alsaghan et al., 2017; GFRAS, 2017).

Organizations are social entities oriented to certain goals. They are characterized by a designed structure and coordinated activities, and are open in terms of closeness with their environment (Fabac, 2010: 34). Organizations could be handled as open systems getting influences from the environment where they act, but the influence is not only unilateral; organizations also target shaping and reshaping the environments for themselves (Reino, et al., 2007: 124). The organization does not exist in a vacuum. It is located in a country and region to which it is inextricably linked. It operates within a legal and cultural context. These and other external-environment variables influence how an organization operates and what it produces. Such variables can shape the ways an organization defines itself and the ways it defines good performance (Lusthaus *et al.*, 1999: 52). The organizational environment is defined as all elements that exist outside the boundary of the organization and have the potential to affect all or part of the organization. The environment of an organization can be understood by analyzing its domain within external sectors (Daft, 2010: 53).

The development of any organization is one of the most important goals of its policy makers, so as to achieve the organization's objectives and programs to promote and grow at the level of the organization (Al-Qahtani, 2015). The process of improving the performance of any organization is the essence of comparing the actual performance of the organization with predetermined standards and measures. It aimed to diagnose, shed the light on the deviations and identify causes in order to taking the necessary rearrangements (AbdulRahman and Majeed, 2012: 191).

The organizational environment could be subdivided into the task environment and general environment as follows (Daft, 2010: 54-55): i) The task/ internal environment includes sectors with which the organization interacts directly and that have a direct impact on the organization's ability to achieve its goals. The task environment typically includes the industry, raw materials, and market sectors, and perhaps the human resources and international sectors; and ii) The general/ external environment includes those sectors that may not have a direct impact on the daily operations of a firm but will indirectly influence it. The general environment often includes the political, sociocultural, legal conditions, technology, and economic resources sectors. In contrast to the specific or task environment, the general or external environment mostly influences many enterprises at the same time. The term ‘external environment’ means the total of all individuals, institutions and other forces that are outside the control of the organization but that may affect its performance (Kattookaran, 2015: 5)

A good understanding of environment by managers enables them not only to identify and evaluate, but also to react to the forces external to their organizations. Thus, the economic, social,

political, technological and other forces which operate outside the organization are part of its environment (ICSI, 2014: 2).

Dimensions of, or the factors constituting the external environment include economic, social, technological, political and legal conditions, which are considered relevant for decision-making and improving the performance of an enterprise. However, management of every organization can benefit from being aware of these dimensions instead of being disinterested in them. Elements constituting the external environment of organization are given below (Lusthaus *et al.*, 1999: 52-56; ICSI, 2014; Kattookaran, 2015):

- 1. Administrative Environment** includes all administrative issues that can affect the organization i.e. administrative norms and values, rules of related organizations, bureaucracy, etc.
- 2. Economic Environment:** Interest rates, inflation rates, changes in disposable income of people, stock market indices and the value of SR are some of the economic factors that can affect management practices in an organization.
- 3. Socio-cultural Environment:** The social environment of organization includes the social forces like customs and traditions, values, social trends, society's expectations from business, etc.
- 4. Technological Environment** includes forces relating to scientific improvements and innovations which provide new ways of producing goods and services and new methods and techniques of operating a business.
- 5. Political Environment** includes political conditions such as general stability and peace in the country and specific attitudes that government representatives hold towards organization.
- 6. Legal Environment** includes various legislations passed by the Government, administrative orders issued by government authorities, court judgments as well as the decisions rendered by various commissions and agencies at every level of the government.
- 7. Geographical Environment** includes geographical conditions such as location, climate, and natural phenomenon and ecological factors that can effect on the organization.

Extension organization does not exist in isolation. Each organization is not an island unto itself; it exists, survives and grows within the context of the element and forces of its environment. While an individual organization is able to do little to change or control these forces, it has no alternative to responding or adapting according to them. Based on this quick discussion, this study is aimed to assess the external environment of KSA public system of agricultural extension.

Materials and Methods

A scale for organizational external environment (seven dimensions with 39 statements) was developed based on review of literature in the field of organizational environment. Respondents were asked to indicate their opinion on each statement on a 3-point scale ranging from zero to 2 (not applicable, somewhat, applicable). The reliability of the scale was estimated by Cronbach's alpha. Data were collected using internet-based questionnaire (in collaboration with Extension Administration, Ministry of Agriculture) form within personal interviews with 81 extension personnel representatives from the extension directorates around the nation during the period from May-August 2016. Percentages and mean scores were used for data presentation.

In order to confirm the reliability of the used scale, reliability analysis (for the items of each component and the overall scale) was carried out via Cronbach's alpha by SPSS software. Findings in table 1 show that reliability coefficient (Cronbach's Alpha) was about 0.813 for the overall scale. While it ranged from 0.656 to 0.879 for the components of the scale. These findings indicate that the scale is reliable and could be used for measuring the external environment of agricultural extension system in KSA.

Table 1. Number of items of organizational environment dimensions and corresponding values of Cronbach's Alpha.

No	Dimensions of external environment	No. of items	Cronbach's Alpha
1	Socio-Cultural Environment	3	0.665
2	Political Environment	6	0.825
3	Administrative Environment	10	0.880
4	Geographical Environment	3	0.656
5	Technological Environment	5	0.847
6	Legal Environment	6	0.875
7	Economic Environment	6	0.879
	Overall External Environment	39	0.813

Source: The study's findings.

Results & Discussion

Table 2 shows mean scores and percentages for extension workers' perception of the organizational environment dimensions. It can be realized that the respondents' overall perception of the enabling environment for extension system is 40 which represents 52.6% of the total score; this implies that extension workers barely perceive the enabling environment for public agricultural extension organization in KSA. The table also revealed that scores of four dimensions of external environment are above overall average of scale while the remaining three are under the overall average scores.

The table revealed also that “Socio-cultural environment” received the highest score among the seven components (66.3% of the maximum score) followed by the “political environment” (63.1%). This implies that public agricultural extension system has gained the socio-cultural advocacy as well as the political advocacy which could be reflected in its potential success.

On the other hand the “economic environment” received the lowest score (37.6%) followed by the “legal environment” (45.6%) and the “technological environment” (52%); this indicates that the low satisfaction of the extension personnel on the economic circumstances around extension organization, the disabling legal environment as well as inappropriate technical resources available for public agricultural extension system.

Findings also revealed that administrative and geographical environments have gained a moderate satisfaction of extension personnel with percentages of 55% and 54%, respectively. This result indicates that these dimensions do not act as inhibitors or as catalysts for the extension organization, so some more efforts in these directions may improve the performance of extension organization.

Table 2. Means and percentages of extension workers' perceptions of the organizational environment dimensions.

No	Dimensions of external environment	Max. score	Mean		Gap*	
			Score	%	Score	%
1	Socio-Cultural Environment	6	3.98	66.33	-2.02	-33.67
2	Political Environment	12	7.57	63.08	-4.43	-36.92
3	Administrative Environment	20	11.09	55.45	-8.91	-44.55
4	Geographical Environment	6	3.25	54.17	-2.75	-45.83
5	Technological Environment	10	5.19	51.9	-4.81	-48.1
6	Legal Environment	12	5.47	45.58	-6.53	-54.42
7	Economic Environment	12	4.51	37.58	-7.49	-62.42
	Overall external environment	78	41.05	52.63	-36.95	-47.37

Source: The study’s findings. * gap score = mean score – maximum score.

The radar chart as shown in Figure 1 was used to illustrate the gap between maximum and mean scores of extension workers' perceptions of the studied scale components; this gap could be calculated by subtracting the maximum scores from the mean ones. It could be noticed that gap score have negative signs, indicating a value of reduction in the respondents' perceptions compared to the maximum scores of each component

The Figure also revealed that the component “socio-cultural environment” showed the lowest gap (33.7%), followed by “political environment” component with value of (37%). While the component “economic environment” received the highest gap value (62%), followed by component “legal environment” (54%), and component “technological environment” (48%).

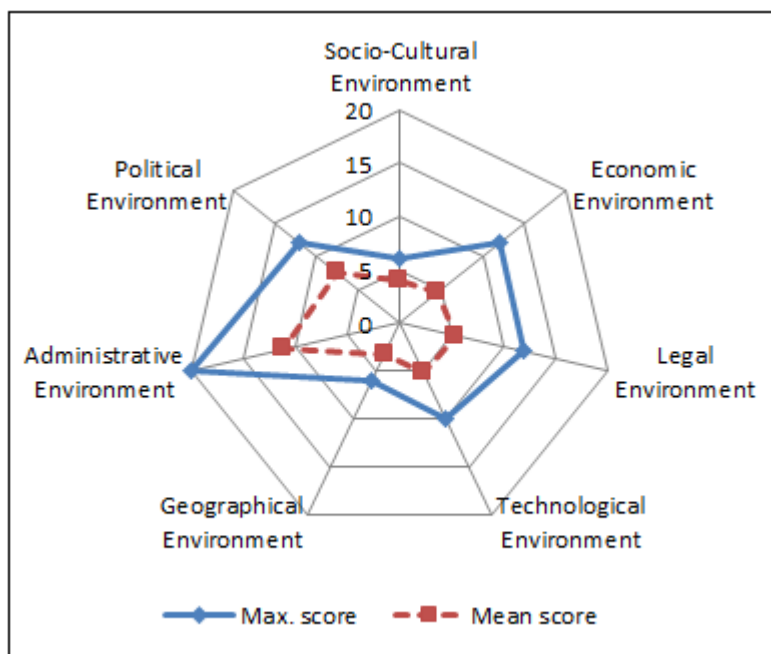


Figure 1: Radar chart displays of gaps of the external environment dimensions. Source: The study’s findings.

Conclusion

This study highlighted the significance of recognizing extension workers' perception of the enabling environment for the national system of agricultural extension. It could be noticed that scores of administrative, political, and socio-cultural dimensions of organizational environment are above the overall average of scale while legal, economic and technological dimensions are under the overall average scores.

It could be concluded that there is high opportunity to support the organizational environment of extension system concerning all studied dimensions, much effort has to be done to reach an enabling environment for extension system. One of these efforts is policy-makers' faith on the importance of creating an enabling environment for agricultural extension through planned, purposeful and constructive vision.

Since, the government (The Minister of Agriculture, Director of the General Administration of Agricultural Extension, Director of the Department of Agricultural Extension) tend to achieve more enabling external environment for extension organization, bellow some suggestions to improve agricultural extension in Saudi Arabia: 1) Moving towards digitalization of agricultural extension system and utilization of ICTs services provision as well as extension management; 2) Establishing a flexible organizational structure to respond to changes and modern trends; 3) Availability of financial and human resources needed to support agricultural extension projects

and plans; 4) Supporting public-private and local-international partnerships; and 5) Improving the efficiency of the institutional performance by applying quality assurance criteria in extension organization.

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