



## Identifying of Barriers of the Private Sector in Providing Agricultural Services to Producers in Agricultural Sector in Khuzestan Province in Iran, Application of Factor Analysis

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**Abstract.** In Currently, development of Agricultural Services of private sector in different regions in Iran is faces with numerous barriers of software and hardware barriers, that to Correctly Confronting with these barriers and achieving to Goals of agricultural Development is subject to reload of past experiences, recognition of the status quo, drawing of future prospects and detailed assessment of possibility of transition from the status quo. In this regard, the main objective this research is the analysis of the barriers and constraints of the private sector in providing agricultural services to farmers. Research methodology is descriptive and population of this research is including experts of agricultural Public sector in agriculture organization of Khuzestan province and subordinate offices in Iran with the number of 200 persons. The sample was estimated 126 by using of Morgan table. The results showed that from the perspective of experts, the rate of barriers and constraints of the agricultural public sector to provide agriculture services to farmers is the medium. According to factor analysis was conducted, barriers to providing agricultural services by the private sector was classified in order of importance in two groups, which includes: The constraint of facilities, equipment, investment and financial resources and Planning and organizational barriers. Total explained variance with these two barriers in providing services by the private sector is % 56.44 and the remainder of this variance is explained by other barriers, that not present in this research.

**Keywords:** Agricultural services, Barriers, Constraints, private sector

### 1. INTRODUCTION

Agricultural sector is responsible to during the economic growth and development that including providing food and food security for growing population, supply of raw materials needed by industry and help to development of productive activities. In this regard, agricultural development will bring Increasing of production of agricultural and animal, and increasing production of these items, while job creation and contribute to economic growth, will lead to food security and nutrition improvement (Dickson, 2004).

Akbari *et al* (2009) believes that, in current world, agriculture is transformation with increasing speed, that can be attributed to main reason for this changes to technological advances and economic considerations. The transformation in information systems and current technology and changes made to the social infrastructure of nations has caused to be subject to change of all of the social and economic sectors; So that is emerging a great revolution in volume of information and knowledge generated and applied techniques and also communication mechanisms of information distributors in worldwide.

In general, any of the services system, which including elements and relations of between them, could be included: the access of smallholder farmers to agricultural inputs, consulting

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services of public and private companies to commercial farmers and also designing developed organizations for improvement of agricultural services in a special area (Doppler,2000).

At the moment, in many countries, there are issues such as the presence of inequality and development growing gaps, that must be sought to mainly reason of this issue in unequal distribution of development services in the agricultural communities (Eftekhari,2002). Hupert and urban (1998), believe that the agricultural services are very diverse, and including the provision of inputs, and material goods, and also performing activities or implementing processes of agriculture intangible. On the other side; agricultural services are included factors. On the other hand, agricultural services are included factors that it's essential for agricultural producers, so that they can increase to production efficiency to directly or indirectly. Also, agricultural services centers (such as public and private institutions, cooperatives and farmers' organizations) it's a tool for agricultural development and also is a prerequisite for development to providing of appropriate services (melor, 2005).

The large number of farmers in agriculture sector due to low awareness with developments of updated science and technology, have faced structure of human resources of Iran's agricultural sector with numerous problems in terms of dynamism and inventions; so that, standardize of this structure not achieved except by providing of comprehensive and effective and appropriate agricultural services; Therefore, Should be major attempt of agricultural development policies in order to quantitative and qualitative development of agricultural human resources, through of these services and by expanding the field, possibilities and appropriate facilities for further and more comprehensive services to farmers(feeli *et al*, 2008).

It is noteworthy; it may be a services system which consists of elements and relations between them, to include items such as availability of subsistence farmers to agricultural inputs, consulting services of private research institutes to commercial farmers, private extension services of public institutions, and designing of organizations developed in a particular area for improving of agricultural services. Agricultural services system in Iran, for issues that are raised in relation to providing services by the public sector, is confronted with challenges and problems. that these challenges shows necessity to reload and revision in patterns related to Providing of agricultural services to create the conditions for greater participation of the private sector in this context(shieeh,1994).

According to the agriculture organization of Hamedan Province in Iran (2008), The long-term nature of services program to farmers and financial burden of these programs, has imposed a High cost on financial budget, especially in developing countries; The other hand, budgetary problems that has been involved with it of many countries, has caused that they are looking for other ways for financing of these programs. Therefore, participation of private sector is a new approach which its purpose is overcomes the institutional constraint that restricts to access for farmers to knowledge and increased efficiency of technologies that these restrictions include: poor communication with agricultural operations and farmers, absence of technical and scientific experts in agricultural areas, a shortage of specialist manpower on the farm. The slowness of information flow and technical knowledge between of agricultural producers and research centers,the restriction of masking level of technical and consultancy and training services for farmers, the ravages to supply of agricultural inputs, the poor relation of research with agricultural extension, the uncoordinated and non-participatory and supply -oriented

services, the high levels of bureaucracy while providing services, low response to needs of farmers and lack of financial and performance accountability. Therefore, The basic objective of contribute to the development of the private sector in the field of agricultural services, is the development of engineering services system which is demand-oriented, client-oriented and farmers-oriented, especially in targeting the regional development. Ghaderi *et al*(2013), in the study as " Investigating the obstacles of privatizing agricultural advisory and technical services in the Zanjan township " showed that from the perspective of experts of public sector and experts of private sector were classified in six categories: cognitive barriers, economic barriers, social barriers, geographical barriers, functional barriers and structural barriers. Also, according to these categories, the low level of technical knowledge tailored to the needs of farmers, the lack of necessary experience in understanding of customer needs, unwillingness to competition between of private companies, lack of adequate financial strength in private companies and Lack of facilities and equipments for commuting. Based on the items listed, the main objective this research is the analysis of the barriers and constraints of the private sector in providing agricultural services to farmers.

## **2. MATERIALS AND METHODS**

The methodology used in this study involved a combination of descriptive and quantitative research. The population of this study included farmers, (N = 200) in selected in khuzestan province, of which 126 agricultural experts of Public sector was selected in khuzestan county in Iran. Research based on the table Morgan and using random sampling and questionnaires.

Different data collection methods were applied in this research, such as using national and international searching scientific references on internet; hence, a questionnaire was designed as the main research tool based on obtained results. It should be mentioned that the questionnaires completion method was through interviews and face to face visits.

Face validity was established by a panel of experts consisting of faculty members. A pilot test was conducted with 30 agricultural experts of Public sector questionnaire reliability was estimated by calculating Alfa Cronbach methods by was estimated by SPSS reliability for the overall instrument was estimated at 90%, which indicates the high validity of the mentioned tool. Also in order to investigate the validity of the research tool, the mentioned questionnaire was given to a group of authorities, when after receiving their points of view, the required corrections were applied.

## **3. RESULTS**

### **3.1. Individual and Occupational Characteristics of experts**

The descriptive findings showed that the studied users' average age was 38.02, also most of studied users (62.2%) had bachelor's degrees; On the other hand, findings showed that the studied users' average work experience was 38.02.

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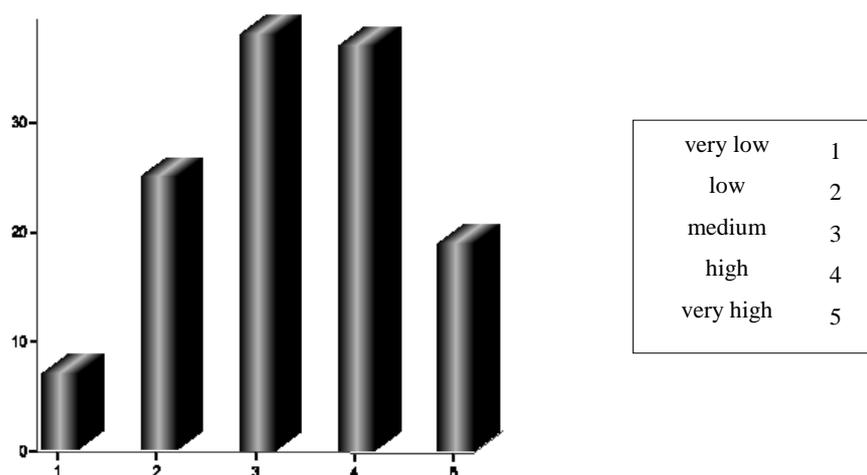
**3.2. Agricultural experts' Attitude to the rate of constraints of the agricultural private sector to provide agriculture services to farmers**

In order to evaluate agricultural expert's attitude to the rate of constraints and barriers of the agricultural public sector to provide agriculture services to farmers, 10 queries were designed and the participants were asked to questions through a 5-point Likert scale (very low, low, medium, high, very high) that result showed that this rate is the medium (Table 1) (Diagram 1). Also, the priorities of agricultural expert's attitude showed that "Inappropriate vision to private sector" is their first priority (Table 2).

**Table 1.** Frequency distribution of barriers and constraints of private sector in providing of agricultural services.

Level	Frequency	Frequency percentage	Cumulative percentage
very low	7	5.6	5.6
low	25	19.8	25.4
medium	38	30.2	55.6
high	37	29.4	84.9
very high	19	15.1	100
Sum	126	100	

**Diagram 1.** Frequency distribution of barriers and constraints of private sector in providing of agricultural services.



**Table 2.** Barriers and constraints of private sector in providing of agricultural services (n=126).

<i>barriers and constraints</i>	<i>Mean Ranking</i>	<i>SD</i>	<i>CV</i>	<i>Ranking</i>
Inappropriate vision to private sector	3.50	0.961	0.274	1
Duality and multiplicity of distribution and supplying systems and involvement of private companies in matters relating to Providing of inputs, especially the lack of timely supply and referral of farmers	3.55	1.001	0.2819	2
Failure to timely allocation of credit to the private sector (Lack of timely payment of funds for agricultural projects, Lack of providing credit in the long term)	3.67	1.043	0.2841	3
Lack of appropriate facilities and equipment (Lack of liquidity, lack of resources and funding, Transportation problems, Lack of appropriate training places in villages)	3.67	1.081	0.2945	4

Lack of financial support until the customer acquisition and income generation, especially the initial Brought for agency contracts the distribution of agricultural inputs and machinery	3.50	1.079	0.308	5
The distribution of inputs (fertilizer, pesticides) by the public sector and Providing technical consultation by the private sector	3.41	1.075	0.315	6
The lack of stability and job security in private sector of agricultural services provider	3.63	1.224	0.3371	7
Unsuitable credits (too much work, High cost, low-income, The lack of affordable of most contracts because of the great costs and The lower tariffs )	3.51	1.198	0.3413	8
Mere executor of the private sector and non-interference of private sector in decision-making	3.33	1.199	0.3600	9
The Lack of local experts in remote areas and impossibility of presence and accommodation of experts from other areas	3.24	1.169	0.3608	10

### 3.3. Factor Analysis of Barriers to the private sector in providing agricultural services to manufacturers of agriculture

Using the SPSS software, a confirmatory factor analysis was performed to identify the effective barriers to the public sector in providing agricultural services to manufacturers of agriculture and also the KMO test was estimated to be 0.85 for possible variables in this regards at significance level of 0.00; on the other hand, it was signified that the factor analysis with 2 factors, is the best factor analysis. The coefficients of 9 variables relative to barriers to the private sector in providing agricultural services to manufacturers of agriculture are presented in Table (3). The total explained variance by these 2 barriers in providing agricultural services to manufacturers of agriculture were 56.44 percentage and the rest of the mentioned variance were explained by other barriers which were unavailable for this research.

**Table 3.** Ranking of effective Barriers to the private sector in providing agricultural services to manufacturers of agriculture.

<i>Factors (Barriers)</i>	<i>Variable based on the priority</i>	<i>Factor special amount</i>	<i>Variance by factor</i>
The constraint of facilities, equipment, investment and financial resources	The lack of stability and job security in private sector of agricultural services provider, Failure to timely allocation of credit to the private sector (Lack of timely payment of funds for agricultural projects, Lack of providing credit in the long term), Unsuitable credits (too much work, High cost, low-income, The lack of affordable of most contracts because of the great costs and The lower tariffs ), Lack of appropriate facilities and equipment (Lack of liquidity, lack of resources and funding, Transportation problems, Lack of appropriate training places in villages)	3.012	30.118
Planning and organizational barriers	The distribution of inputs (fertilizer, pesticides) by the public sector and Providing technical consultation by the private sector, Inappropriate vision to private sector, Lack of financial support until the customer acquisition and income generation, especially the initial brought for agency contracts the distribution of agricultural inputs and machinery, Mere executor of the private sector and non-interference of private sector in decision-making	2.632	26.322
	Total	-	56.44

#### 4. DISCUSSION

The results of the factor analysis of effective barriers to the private sector in providing agricultural services to manufacturers of agriculture showed that, factor1 namely " The constraint of facilities, equipment, investment and financial resources " has a much higher correlation with query " The lack of stability and job security in private sector of agricultural services provider " with the factor loading 0.833.

The results of the factor analysis showed that, factor 2 namely " Planning and organizational barriers " has a much higher correlation with query " The distribution of inputs (fertilizer, pesticides) by the public sector and Providing technical consultation by the private sector " with the factor loading 0.775.

At the end, according to the above mentioned issues, the following suggestions are presented in order to improve of providing agricultural services to producers in agricultural sector, In the future:

- More attention to local conditions, capacity building and network building in agriculture in cooperation with both public and private sectors.
- Comprehensive cooperation of the public sector to remove any of administrative and financial barriers to against of development of private sector and improving the culture in public sector to recover the viewpoint of this sector to activities of private sector With the aim of increasing support of public sector of private sector.
- Designing and formulation of new patterns of agricultural services due to the economic current situation in Iran and requirements for the future, and attempts to redefinition of agricultural services, according to the present and future needs of agriculture in Iran.

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