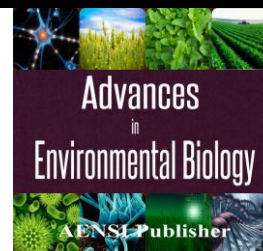




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Status Determination of Privatization in Agricultural Extension Services in Kermanshah Province using the SWOT-AHP Combined Method

¹Abdolhamid papzan, ²Leyla sharafi and ³Mohana shahmoradi

¹Associate Professor and member Academic Delegation College of Agriculture, Razi University, Kermanshah, Iran

²Master of Agricultural Extension and Education, College of Agriculture, Razi University, Kermanshah, Iran

³PhD student of Agricultural Development, College of Agriculture, Razi University, Kermanshah, Iran

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ABSTRACT

In our country and consequently, the Kermanshah province, cultivation of government agriculture has faced many challenges such as: fund resources limitation, no covering of vast majority of farmers, inefficiencies of the existing structure. These problems result in low efficiency in agriculture. So far, no comprehensive research in relation to the privatization of agricultural extension services in Kermanshah province and even the country has been done. This research has been done to find out the effective parameters on promotion of privatization, analyzing the problems, choosing the most suitable technique and administrative policies with respect to current situation and future prospects by qualitative approach. The analysis has been done with Meta-analysis procedure (17articles) and the AHP - SWOT technique by the use of Expert Choice software. The results indicated that the main advantages facing the promotion of privatization of agriculture in Kermanshah are: commercialization of production, promotion of rural life quality and technologies, quality enhancement and entrepreneurship development and employment in the agricultural sector. The main drawbacks are: lack of attention to subsistence farmers, their culture and social problems, lack of funds, equipment and management, low levels of empirical and experimental knowledge of experts and producers. Furthermore, having the educational, research facilities and infrastructure, government support for privatization, interoperability, motivations and incentive, are the most important opportunities on the privatization of agricultural extension services in Kermanshah. Moreover, insufficient cultural and social support for agriculture role, unidirectional communication, non-cooperative service supply circuit, time-consuming and troublesome administrative rules and regulations, are the most important threats for extension of privatization of agricultural services in the Kermanshah.

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INTRODUCTION

New directions in global policy, economic and financial strategies, policies and technological advances in recent years, led to the emergence of major developments such as reduction of the public sector, decentralization in decisions, more participation of local governments and private Inserts, more legitimacy of market economy in the vast majority of the world and encouragement in private initiatives and activities. These developments promote and influence on the agricultural sector and consequently agriculture extension at the different ways. So that despite the critical importance of agriculture in employment, production, income and community needs assessment, agricultural extension services that were done by the public sector ever, has been widely criticized because of the inability to perform assigned functions, lack of efficacy and costs efficacy [20].

Challenges in the current conditions, influenced public extension deals, in fact are signs indicative of broader forces, reflecting changes-resulting in socio-economic aspects [11]. Although the nature and extent of the forces of changes are varies in different countries, but many experts believe that the most important determining factor in global agriculture extension at this time and in line with the globalization process is specialization of activities, advanced technology requires, review of the financial resources necessary to provide effective extension services and how to control and monitor of costs. Accordingly, several theories have been proposed regarding the restructuring of agricultural extension. The same concepts, strategies and policies such as "privatization", "commercialization", "economic sustainability" and "cost reduction" as one of the major

Corresponding Author: Abdolhamid papzan, Associate Professor and member Academic Delegation College of Agriculture, Razi University, Kermanshah, Iran
E-mail: papzanAbdolhamid89@gmail.com

issues in academic and policy circles has been promoting in the international scale. The privatization of extension services was considered as latest strategy of the 1980s.

Financial and economic crisis, governments budget cuts, poor performance of public extension programs, agricultural dependence to more specialized knowledge and technology, lock of defects and failure of the government extension programs, enhancing the quality of services and reduction in costs are basic reason for considering privatization of state agricultural extension services in different countries that is emphasized by authors such as Proost and Roling [23], Rivera and Cary [27], Chandra Shekara [4], Saravanan *et al* [30], fami *et al* [11], Dinpanah *et al* [7].

Experts propose different definitions for privatization of agricultural extension. In this context, Bloom defined private extension as involvement of the private sector in providing consulting services for agricultural workers. However, according to Vanden Bon and Hawkins [40], farmers participating in the responsibility of providing all or part of the agricultural extension services, it is what is expected of privatization of agricultural extension. Saravanan and Gowda [31] also refers to the privatization of agricultural extension, as services in agriculture area as well as various topics presented by staff in private agents for farmers who pay and it can be a complement or substitute for public extension services.

The privatization of agricultural extension mostly refers to increased participation of the private sector not necessarily mean moving public property to private section, so private as well as public extension service may promotes a wide range of data transfer and facilitate the process of human development.

Although different countries have different approaches to privatization of agricultural extension applied, but in the meantime, three major policy be followed by governments and farmer organizations in order to promote privatization include:

1. The government is responsible for funding only in some ground services that directly associated with the public interest (prioritizing policies for sustainable agriculture and food security and health).
- 2) direct responsibility for some specific services and operational guidance (in the form of improved income, etc.).
- 3) The apportionment and distribution costs shared between the government and private sector partners to provide extension services, while the benefits are shared in a fair way [12]. The basic objective of applying this strategy are increasing stability and financial accountability in order to promote and enhance the professional link between the advocate and agriculture.

Therefore, the privatization of agricultural extension services deployment could reduce a lot of structural issues and problems raised in public agriculture extension and is more responsive and has a more stable performance compared with the public as well as having better way to satisfying audiences. However, a review of the experience of countries that have privatized approach to suggests that private extension is not succeeded in all eras but some negative effects in some cases such as lack private extension services of against all classes of to farmers, lack of service for poor and conservative farmers, disregarding the needs of small farmers, failure to provide appropriate services to exploitation of living, neglect of the environment and natural Resources and reduction in extension contacts with farmers [27,19,32,33,7]. In many cases, the private development of extension depends on technology type, farming systems and socio-economic conditions in different countries. One of the fundamental challenges facing the promotion of privatization in many countries is Lack of appropriate bed and the low level of farmers' awareness of the benefits of privatization and the lack of information explaining the objectives of promoting private operators and manufacturers. In contrast, some researchers, in order to avoid negative consequences of privatization of agricultural extension, proposed various approaches for privatization including; direct payment of money in exchange for work done, approach of Agriculture Organization (establishing of education and extension units by public services), agricultural advisory approach (transfer of part of the promotional activities and education to experts in consulting Services), supply of input approach (integration of education and extension services in other activities related to input delivery), cost-sharing approach, indirect taxes approach (Consultation fee in the form of excise).

Fami [10] believes that privatization strategies somewhere is successful that along a portion of the cost of extension services to farmers, prepare crop marketing facilities for them in order to provided cost of paying in other way, otherwise it may lead to a reduction in the level of coverage extension.

Others, including Rivera [27] Swanson [37] and Shaker [36] argue that small farmers can be in the form of group not individual use of private extension services, as a group, in the form agricultural organizations and associations make it possible payment for services for small farmers. In countries such as Zimbabwe, Brazil, France, New Zealand, Argentina, smallholder farmers through agricultural community could benefit from a private extension services. In Estonia and Netherlands, advice to farmers with subsidies over a ten-year program, private extension services provided to small farmers [22,37,12,23]. In Argentina, Brazil, Colombia, Mexico, Uruguay, Korea and Taiwan private consulting firms have an important role to play in providing private extension services and fix many global extension issues such as low accountability [6].

In Iran, regard to policies and programs in the economic, social, political, and given the need to respond to the different needs of farmers (mostly small farmers and disadvantaged effectively from extension services) and

serious restriction of financial resources, equipment and personnel of government extension lead to privatization promoted more be considered than before. However, according to the survey conducted in socio - economic condition of the country's agricultural sector, the privatization policy was less successful in achieving its goals

The results of Farokhi and Seddighi research [9], in assessment attitudes of farmers and experts in Ilam province towards privatization of agricultural extension, showed some impediments in the way of implementing this program. These problems were poor financial status of farmers, the lack of precise knowledge of agents from the type and manner of farmers, incomplete understanding of the imperfections in their instructional methods, trivial extension of farmers' views, farmers' lack of knowledge of the characteristics of private extension and farmers' perception of improper promotional activities.

The results of the study of Dinpanah *et al* in investigation of the consequences, obstacles and feasibility of privatization of agricultural extension, showed that 14.5 percent of respondents are poorly believed in privatization, 52.2 and 33.3 percent of respondents are moderately and strongly believed in privatization, respectively.

Based on Behkish [3], following reasons were mentioned for the failure of privatization programs in Iran and the way of accelerating the process is achieved by notice to them:

- The rights of the privatization process mostly focus on manufacturer of the goods and the privatization of services has not been considered.
- Lack of proper space for privatization and the lack of precise assessments of abilities, financing and private sector management.
- Lack of comprehensive laws on privatization.
- Lack of separating in social and economic objectives of privatization.
- The privatization process in the country, many applicants' transferable units are institutions that are belonged to government, so the privatization process has become transfer ownership from one state to another state.
- Lack of appropriate systems for pricing, etc.

Accordingly, in our country and in the Kermanshah province, state agricultural extension has faced different challenges in terms of limitations and issues related to finance, lack of coverage and lack of efficiency in the vast majority of farmers and low agriculture productivity. Therefore, not comprehensive research has been taken regarding the privatization of agricultural extension services in Kermanshah province and even in the country. This research were conducted aimed to identify factors affecting the process of privatization of agricultural extension services, barriers and problems the in selection of best strategy and administrative policies of privatization regards to situation and future prospect area. Agricultural policy makers and managers of this section could achieve the results of this study.

This study has the following objectives:

- 1) Investigation of strengths, weaknesses, opportunities and threats of privatization of agricultural extension services in Kermanshah.
- 2) Providing guidelines for the privatization of agricultural extension services.

Research method:

Since this study sought to identify privatization Strategies of agricultural extension services, this research was performed by combines' quantitative- qualitative procedures and naturalistic approach utilizes of meta-analytic method based on paradigm. In this method, first, all the articles related to the topic of the study were collected and then 17 more relevant article to the subject under study were selected. Each article were analysed using content analysis. In the first stage of data analysis using open coding, line-by-line of data and their main concepts were extracted from the literature review. Then all submitted concepts became condensed meaning units and turned into codes. After this, each concept and terms resulting in one of the four factors of SWOT (strengths, weaknesses, opportunities and threats) were classified. Then using axial coding, primary codes of each SWOT factors were reduced to categories. The researchers compared the coded data and turned that into clusters or categories that fit together. After that, each category was compared with other categories to ensure that categories are distinct (inclusive and exclusive of categories). In the next stage, SWOT matrix was formed based on the results of axial coding (cluster formation or large categories). SWOT matrix was formed using the confluence of four factors, strengths, weaknesses, opportunities and threats. The next step was to choose a strategy for decision making among existing strategies and prioritize strategies, using Analytical Hierarchy Process (AHP). All information collected at this stage were performed through judgment of six managers and experts in the form of paired comparisons questionnaire. To implement the technique (AHP) Expert-Choice software was used.

RESULTS AND DISCUSSION

Firstly, in order to clarify the current situation regarding the privatization of agricultural extension services and strategic planning in the Kermanshah Province, according to the basic themes of open coding, list of

strengths, weaknesses, opportunities and threats of the privatization of agricultural extension services, were identified. Then, data obtained, in order to better coherence and order, the data encoded in each group of factors (strengths, weaknesses, threats and opportunities) were compared with each other and classes were created with the new concepts by integration of matches (axial coding). To sum up, based on findings from the study, four, five four and three classes were extracted as strengths, weaknesses, threats and opportunities respectively, illustrated as SWOT matrix in the table below (Table 1).

Table 1: SWOT matrix.

Internal factors	External factors
Strengths (S) S1: Commercialization of product S2: Improvement of the quality of rural life S3: updating and quality enhancing of information technologies S4: Entrepreneurship development and employment in the agricultural sector	Opportunities (O) O1: Having educational and research infrastructure and O2: Government support for privatization O3: Mutual communication O4: Strengthening of the incentive and encouraging factors
Weaknesses (W) W1: Failure to subsistence farmers W2: Lack of attention to the socio-cultural aspects of farmers W3: Lack of financial, material and management W4: Being poor means of communication experts and producers W5: Low level of theoretical and practical knowledge of experts	Threats (T) T1: Poor time-consuming rules and regulation and bureaucracy T2: One-way communication and delivery-based non-participatory services T3: Inadequate protection of the cultural and social importance of agriculture

Source: study results

Although the most important SWOT analysis of internal factors (strengths and weaknesses) and external (opportunities and threats) could nicely summarize and affect the future of the system [29,34,26], if used properly, can be a good base for strategy formulation. However, with a look at the documents in relation to the analysis of SWOT, considerably are just series of descriptions and explanations, which are not alone able to determine the importance of various factors and evaluation of strategic options based on these factors. In other words, SWOT analysis possesses deficiencies in the measurement and evaluation of weaknesses. In fact, by increasing the process of planning and decision-making will by addition the number of interdependent criteria, usefulness of using SWOT analysis will be decrease [41]. Following the disclosure of the limitations of SWOT analysis, efforts to address these shortcomings was undertaken. Kurttila *et al* [19] proposed a combined approach to address weaknesses offered measurement steps and evaluation of SWOT analysis. The method introduced by these researchers, who analysed using techniques based on analytic hierarchy process (AHP) in SWOT analysis, was introduced first by Tumas L Saaty in 1980 and became known as A.WOT. This technique can include both qualitative and quantitative criteria in the evaluation criteria for the decision options [29]. In fact, by combining SWOT analysis and analytic hierarchy process (AHP), the preferences specified for the operating SWOT analysis in decision-making will be included and it can be measured. Therefore, according to the above and in order to increasing efficiency in the strategic planning process, the most important strategy proposed in this paper is integration of SWOT and AHP models.

Based on this, the steps of employing analytic hierarchy process (AHP) in SWOT analysis is as follows:

Step One: First, we transform the problem into a hierarchical structure that can be measured by AHP (Figure 1). In this diagram, the target "choice of best strategy" is located in first level, SWOT groups (strengths, weaknesses, threats and opportunities) on the second level, SWOT agents in the third level and strategic options were located in fourth one.

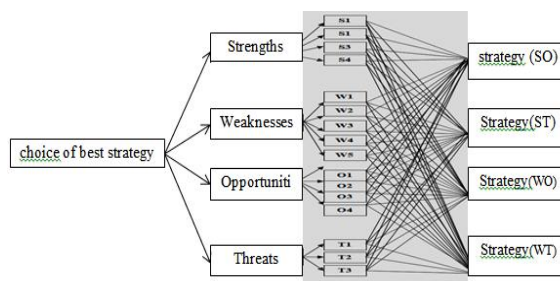


Fig. 1: AHP model structure for choice of best strategy.

Second step: In this step, SWOT groups (strengths, weaknesses, opportunities and threats) based on the degree of importance and influence were to achieve the target weight (calculated as 21 W). The weight of the paired groups are classified together on the basis of Table 9 of Saaty quantity (Table 2).

Table 2: Saaty index.

1	3	5	7	9	2-4-6-8
Equally importance	A little more important	More important	Very more important	Incredible more important	Central values

Source: Saaty and Takizawa, 1986

All information at this stage were collected from six people consensus judgment of Kermanshah Province Agriculture organization's director and experts as paired comparisons questionnaire format. The data obtained from paired comparisons were made to the process of analysing and determining the degree of importance of each group by Expert Choice software (AHP software).

Table 3: paired comparisons matrix of SWOT groups.

SWOT grups	Strengths (S)	Weaknesses (W)	Opportunities (O)	Threats (T)	Relative importance (W21)
Strengths (S)	1	2	0.25	2.51	0.296
Weaknesses (W)		1	0.5	1.58	0.180
Opportunities (O)			1	2.28	0.392
Threats (T)				1	0.131

CR=0.02

Step Three: At this stage, paired comparisons between SWOT factors for each of the groups were selected to obtain the relative importance of each of these factors and shaping to the gaol (calculation of W32).

Table 4: pair comparison matrix of SWOT sub factors for Strengths.

Strengths	S1	S2	S3	S4	Relative importance (W21)
S1	1	2.44	0.33	1.41	0.232
S2		1	0.32	0.5	0.114
S3			1	1.73	0.444
S4				1	0.209

CR=0.04

Table 5: pair comparison matrix of SWOT sub factors for Weaknesses.

Weaknesses	W1	W2	W3	W4	W5	Relative weights
W1	1	2	2	1	0.70	0.243
W2		1	1	0.71	0.5	0.136
W3			1	1	1.41	0.188
W4				1	1	0.204
W5					1	0.228

CR=0.04

Table 6: pair comparison matrix of SWOT sub factors for Opportunities.

Opportunities	O1	O2	O3	O4	Relative importance of subfactors
O1	1	1.02	2.22	2.01	0.332
O2		1	2	2.11	0.335
O3			1	0.70	0.153
O4				1	0.182

CR= 0

Table 7: pair comparison matrix of SWOT sub factors for threats.

Threats	T1	T2	T3	Relative importance of subfactors
T1	1	3.25	0.40	0.3
T2		1	0.27	0.128
T3			1	0.572

CR=0.06

Importance vector of SWOT factors can be seen in figure 2:

Step Four: The Ultimate Priority of SWOT factors was calculated by multiplying depending priorities of each of the SWOT groups (21W) « was calculated in second step " on the relative priorities of SWOT factors «was calculated in step (W32) »(table 8).

Calculation of the priorities of the sub-groups of SWOT in the AHP model showed that, up to date information and quality enhancement technologies was the first priority in the strength group (final weight =0.131). Also in weakness group, lack of attention to subsistence farming (final weight =0.043), low level of theoretical and practical knowledge of experts (final weight=0.041) and weak communication methods of experts and producers (final weight=0.036) were the highest priority, respectively. However, government

support for privatization (final weight=0.131), having an educational and research facilities and infrastructure (final weight=0.130) and motivation and incentives factors (final weight=0.059) were identified as major opportunities privatization of agricultural extension services in Kermanshah province. Additionally, in the threat groups, inadequate social and cultural supports in agricultural sector (final weight=0.074), poor time-consuming rules and regulation and bureaucracy (final weight= 0.039) and one-way communication and delivery-based non-participatory services (final weight=0.016), were considered as the most important threats to the privatization of agricultural extension services.

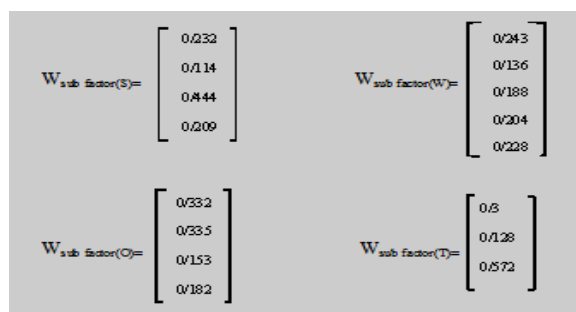


Fig. 2: Importance vector of each SWOT factors.

Table 8: calculation of final priority of SWOT factors.

SWOT groups	Priorities of SWOT groups	SWOT factors	Relative Priorities of factors	Final Priorities of factors
Strengths (S)	0.296	S1	0.232	0.068
		S2	0.114	0.033
		S3	0.444	0.131
		S4	0.209	0.061
Weaknesses (W)	0.180	W1	0.243	0.043
		W2	0.136	0.024
		W3	0.188	0.033
		W4	0.204	0.036
		W5	0.228	0.041
Opportunities (O)	0.392	O1	0.332	0.130
		O2	0.335	0.131
		O3	0.153	0.045
		O4	0.182	0.059
Threats (T)	0.131	T1	0.3	0.039
		T2	0.128	0.016
		T3	0.572	0.074

Source: the results of this research

Thus, by combining the results of the SWOT matrix in AHP model and ultimate priority strengths, weaknesses, opportunities and threats, the information needed to develop a clear approach was found (Table 9).

Table 9: developed approaches regards to final priority of SWOT factors.

approach	Explain
(SO) ₁	Commercialization of agriculture in the international level
(SO) ₂	Providing the opportunities and conditions for entrepreneurship development and employment in the agricultural sector
(ST) ₁	comprehensive of laws and breakdown of social, cultural and economic objectives of privatization
(ST) ₂	development of farm clinics and access to information and new developed technologies
(ST) ₃	Providing organizations and associations of agricultural extension services as groups
(WO) ₁	Creation of appropriate conditions and opportunities for farmers and accurate assessment of capability, financial resources and private sector management
(WO) ₂	Giving consulting subsidies to small farmers
(WT) ₁	Integration of services, education and extension activities related to the supply of inputs and the establishment of educational and extensional services by grassroots organizations
(WT) ₂	Private promote legal oversight by a body composed of representatives from universities, private organizations, public and private extension

Step Five: Finally, the ultimate priority strategic options, for the selection of most suitable approach, was calculated by multiplication of SWOT factor eigenvalue in the important degree matrix of alternative strategy.

According to obtained weights, invasive or development strategy (SO) with the ultimate priority of 0.314 as best strategy was selected for the privatization of agricultural extension services in Kermanshah Province.

Conservative or review strategy (WO) with the ultimate priority 0.204 was chosen as an alternative strategy (Figure 3).

SO	0/314
ST	0/204
WO	0/122
WT	0/94

Fig. 3: Final priority of strategic options.

Results:

Nowadays, global directions and policies of agriculture extension are affected as concept, structure, policy by series of forces and social, economic and political factors, self-effects, and symptoms of excessive force in the community. The result of these conditions are the series of topics, issues and directions related to role of private and public extension that requires precise evaluation to understand. Governmental agricultural extension has been seriously criticized by economic and political circles over the past decade in many countries including, industrialized and developing countries, in terms of limitations and issues related to finance, lack of required performance, the lack of equitable distribution of programs related to the needs of the audience and not to cover a wide range of farmer. So that many experts believe that agricultural extension as a fundamental component of agricultural development, to have not been able to achieve their goals (Human Resource Development and Technology Transfer for Rural Families) so that ought to be [27]. Pursuant to changes, agriculture extension need to change too in mission and develop a new perspective on the future and develop of the discipline in programs. In this context, biased toward the construction of a modified extension system, flexible and private agricultural extension services is the evident issue [12].

In Iran also regards to economic, social and political programs, as well as considering the needs and requirements of evolving technology, agriculture and natural resources, diverse needs of agriculture and industry, the requirements of the Ministry of Agriculture, serious inadequate and low efficient of governmental extension, needs to focus limited resources on the majority of smallholder farmers, according to the State Administration Council resolution, 1991, is predicted to delegating tasks and responsibilities of the Ministry of Agriculture in the agricultural extension and education sector. [13], But in practice, the system of agricultural extension faced with many problems. Therefore it is necessary that privatization of agriculture extension to be studied further. Therefore, any comprehensive research regarding the privatization of agricultural extension services in Kermanshah province and even the country has not been taken until now. This research, as a qualitative perspective by AHP-SWOT method, were conducted aimed to identify factors affecting the process of privatization of agricultural extension services, barriers and problems the in selection of best strategy and administrative policies of privatization regards to situation and future prospect area.

The results of this study (Table 8), in group of strengths, showed that some factors including; increasing the quality of information and technology (with a final weight of 0.131), the commercialization of production (final weight= 0.068) and entrepreneurship development and employment in agriculture sector (with a final weight of 0.061) were most important strengths the privatization of agricultural extension services in the province of Kermanshah, respectively.

These findings is correspond to some studies including Antholt Saravanan and Rasmy [31] Saravanan *et al* [30] Lashgarara and Pishbin [20] and Clich and Kadkhodae.

Sarvanan *et al* are believed that since most private extension takes shape based on the roles of "more profit", so will be focused on the roles include: provision of farm advisory services to increase audience interest, provide timely inputs to increase production, to develop information and knowledge about the market, the process of audience manufacture, marketing products and increased credit facilities for farmers [30].

Clich and Kadkhodae emphasis the creating the appropriate context for the growth and development of agriculture as an industry to creation job and development of entrepreneurship as strength of the private sector.

It should be noted that, the privatization of agricultural extension in addition to positive consequences, has negative consequences including regards the economics of big owner farmers, not paying attention to the small scale and the increasing distance of social level. In this research, lack of attention subsistence farmers (with a net weight of 0.043), low level of theoretical and practical knowledge of experts (final weight=0.041) and poor communication method of experts and producers (final weight =0.036), were identified as the most important weaknesses of privatization of agricultural extension services in Kermanshah. Rivera and Cary Karla and Virk Satapathy and Mangaraj [32], Karami amd Mirrahimi [18] Sedeghi and Baglarian [33] Hossein of Gebleh [16], Shahvalipour and Nouripour sisakht [35] and Dinpanah *et al* [7] noted the weaknesses of privatization of

agricultural extension services and believed that extension services by the private sector is on cash crops, so the private sector cannot have role in agricultural extension services leading to high feeding levels and agriculture improvement which is known as basic objectives of development. Therefore, in some cases, have negative effects including lack of extension services to all segments of private farmers, lack of services for poor and conservative farmers, disregarding the needs of small farmers, failure to provide appropriate services to exploitation of living as well as to pay attention to protect the environment and reduction in extension contacts with farmers.

Karami and Fanaei [18] and Asadi and Amani [1] mentioned "Lack of private sector service providers" as one of the most obvious weaknesses privatization of the agricultural sector across the country. Hejazi and Soltani believed that poverty and deprivation of around 2.4 million farmers, introduced privatization of agricultural extension as an issue. Therefore, these measures may lead to a general denial of the agricultural extension service.

Therefore, it must be noted that not all of privatization of extension is necessarily useful; it must be before any action, the negative effects and how to deal with.

However, government support from privatization (final weight =0.131), having teaching and research facilities (final weight= 0.130), motivation and incentives factors (final weight=0.059) were the most important opportunities about privatization of agricultural extension services in Kermanshah province.

However, although the privatization and outsourcing of government has emphasized recently as one of the most important strategies for improving agricultural extension, but experiences has shown that beside all the benefits of privatization, there are many problems in action. Therefore, understanding of Preconditions, necessary planning and internal strategic planning are essential to achieve the objectives of privatization of agricultural extension.

Inadequate social and cultural supports in agricultural sector (final weight=0.074), poor time-consuming rules and regulation and bureaucracy (final weight= 0.039) and one-way communication and delivery-based non-participatory services (final weight=0.016), were considered as the most important threats to the privatization of agricultural extension services.

Sedighi and Baglarian [33] evaluated managers towards privatization of agricultural extension of agricultural organizations and identified cultural conditions of the rural as population as problem of implementation of the privatization of agricultural extension. On the other hand, Hajimirrahimi and Karami [13], Hosseinl [15] and Farokhi [9] found some factors such as low risk of small-scale farmers and their economic situation as threat of privatization of agricultural extension services in a way that most farmers unable to pay for any new information or technical help by experts.

Obviously, the role of some factors such as low ability of information production, the nature of the structural and institutional of organizations, poor management practices, inadequate funding, lack of applying modern participatory approaches in extension activities and weak links between research and extension activities could not be ignored as barriers to privatization of agricultural extension. Todehroosta [39] Rezai and Rahmani [25], Hejazi [14] Soltani and Dinpanah *et al*, in their researches consider political, economic, social and cultural barriers in privatization of agricultural extension.

Regarding the political, economic, social and cultural promotion of privatization, policymakers, officials and experts should be decentralized their plans and make it bottom to up. They should give importance to the needs of farmers in the process of privatization programs in order to planning and inconsistent laws not to be approved. In addition, the policy relevance of research relation, extension and farmers, cultivation area and farmers' incomes, economic, social and cultural rights of farmers should be considered in policies.

The results of this study indicate that in Kermanshah province and nationally, still there is no appropriate conditions to move towards privatization of agricultural extension. In these circumstances, private extension should complement and strengthen the governmental extension in relation to the strategic product and commercial farmers. In other words, private extension should be limited to areas, which have high agricultural economy, and farmers who realize the importance and key role in increasing production and are willing to pay for the services. Therefore, the governmental extension will have greater opportunities to provide services to underserved populations in rural communities. Increasing motivation of smallholder farmers for giving extension services is another consequence of this approach because they will see other farmers (large landowners) that are ready to pay a lot for these services.

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