



Factors Affecting Attitude of Iranian Pistachio Farmers toward Privatizing Extension Activities: Case of Kerman Province

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DOI: 10.22099/iar.2018.27090.1258

ARTICLE INFO

Article history:

Received **27 October 2017**

Accepted **7 April 2018**

Available online **8 January 2020**

Keywords:

Attitude
Farmers
Extension Privatization
Kerman

ABSTRACT- Agricultural extension, as an informal educational system, is one of agricultural development tools that lean on human capitals. Inefficiency of public bureaucracy on the one hand, and managerial problems on the other hand, as well as neglecting real needs of beneficiaries in planning, have determined responsible to transfer administrative tasks to the private sector and reduce government's tenure. This survey was conducted in Kerman as the first ranked province of pistachio production in Iran to investigate attitudes about extension private services among pistachio farmers. A questionnaire was used as the research tool for data collection. Face validity of the questionnaire was verified by extension experts and Cronbach's alpha computation showed that reliability of the questionnaire was between 0.8 and 0.89. The study ran among pistachio farmers of five counties (Rafsanjan, Sirjan, Zarand, Kerman and Ravar). Random cluster sampling method, with a sample size of 382 respondents was applied. Finally, the collected data were analyzed using SPSS software. Results revealed that several factors such as education level, participating in extension activities, innovation acceptance, membership in associations, cosmopolitan, positive attitude toward knowledge and information, applying numerous information resources, pistachio yield per hectare, area of the pistachio garden and satisfaction of the private consultants had relation with attitude toward privatization of extension. Also, the level of participation in extension activities and attitude toward the public extension could explain 24.8 percent of changes in attitude toward private extension.

INTRODUCTION

In the 1980 and 1990 decades, due to large-scale reductions in public costs and public services alongside displeasure at the 'top-down' development approaches, non-governmental organizations had dramatic development (Banks et al., 2015). According to the theoretical basis of development, over the past three decades' agenda, the global development has placed different emphases on the relative roles of the state, the market, and civil society (Hulme, 2013). On the other hand, from the political perspective, privatization could be called public choice theory (Boubakri et al., 2009).

Global new political movements, economic and financial approaches and policies, and recent technological advancements have caused remarkable developments such as reduction in governmental services, decentralization in decision making, more participation of local governments and private

beneficiaries associations, and encouraging innovations and private activities. All these developments have affected agriculture, and as a result, extension from different aspects (Hoseini, 1996).

Rivera (1997) suggested three principal developments for agricultural extension in future: 1) reconstruction and reformation of extension systems, 2) decentralization in extension systems, and 3) privatization. Also, Saravanan et al. (2000) defined the extension privatization as the services offered in an agricultural region through which personnel who work in private agencies link various subjects for farmers who pay for these services, and this can be an alternative or a complimentary for governmental extension. In fact, extension privatization means a set of policies, approaches, activities and strategies for reconstructing

and organizing management of agricultural extension (Shivalinge Gowda and Saravanan, 2001).

Generally, two important issues make the use of private extension inevitable: 1) covering issue: the necessity of answering numerous needs of increasing farmers most of whom are deprived from effective extension services, 2) resources issue: serious limitation of financial resources, equipment, facilities and governmental section personnel (Hu et al., 2009).

The organization of agricultural extension in Iran is taken from the conventional approach of extension and has a fully governmental structure. Since the beginning (except in 1950s), it has been grappling with financial shortage, misuse of human resources and unsuitable institutional structure. Hence, it is urgent to study inefficiency of extension and seek for a strategy to achieve the new goal. These days, privatization plays an important role in agriculture and due to its successful experiments, it has been publically accepted (Farrokhi and Seddighi, 2005). The question of the target audience of extension services became overshadowed both in the scientific literature and in public debate by new issues raised by the privatization trend that deeply transformed national extension services. (Labarthe and Laurent, 2013).

Contemporary attitudes toward the privatization reforms of the 1990s demonstrate in clear terms an overwhelming support for the revision of privatization. Based on the 2006 Life in Transition Survey, over eighty percent of respondents in 28 transition countries believe that privatization should undergo some sort of revision. The growing literature on attitudes toward privatization demonstrates that the transition experience is very diverse (Dower and Markevich, 2014). But recent studies in Iran show that extension personnel and farmers have a relatively positive attitude toward privatization, which is in line with global trend and confirmed with recent inner and outer studies. Sadighi and Biglarian (2004) reported a high level of positive attitude of direct or sand deputies of Agricultural Organizations of Iran to privatization of extension section. Farrokhi and Sadighi (2005) studied the attitude of farmers and experts of Ilam province toward privatization of agricultural extension and showed that more than half of experts and about 70 percent of farmers had a negative or relatively negative attitude to this issue. Using the technique of focus groups among participators, Ghaderi et al. (2011) showed that low level of technical knowledge needed by farmers, no adequate experience in figuring the customers' needs out, and lack of adequate financial strength of companies are the most important obstacles for privatization of consulting extension services. Studying extension experts for different strategies suitable for private extension servicing, Lashgaraara and Hoseini (2008) suggested three strategies as the most important ones in extension servicing; namely, farmers' extension organizations, private consultants and paying subsidies to farmers. HoseinMohammadi (2008) investigated features of Wheat Observer Engineers (a form of private extension) in Fars province and reported that near half

of farmers do not have a positive or relatively positive attitude toward these observers. Among the variables related to farmers, farmers' attitude toward wheat observer engineers has the most important role in predicting the variations of beneficiaries' assessment to the success of observers. Although variables such as paying remuneration to observers, the distance to the agricultural service center, the average yield and the average age of the farmers have also predicted, to some extent, these variations (HoseinMohammadi, 2008).

There is a significant positive relationship between farmers' participation in extension activities and their attitude to privatization of agricultural extension (Farokhi and Sadighi, 2005). Privatization of Agricultural Extension Services has various advantages, like providing demand driven services, increasing voice of the farmers in the extension services, more cost effective with efficient and quality services, more clientele accountable, and increased staff professionalism. It may also lead to promotion of benefit in relatively good for higher value crops and commercial crops (Jiyawan et al., 2009).

On the other hand, pistachio is one of the important commercial products of Iran. By production of pistachio in Iran (235000 tons), statistics show that this country is in first place in the world. Kerman province with most areas cultivated and 65.10 percent of total pistachio production has the first place among all provinces of Iran. (Agriculture Organization of Khorasan Razavi, 2015). This study investigated attitude of pistachio farmers, as an important population of farmers in Iran, toward privatization.

MATERIALS AND METHODS

A survey research was conducted in which a questionnaire was used as the research tool and its face validity was confirmed by three extension experts. The reliability of the questionnaire was also calculated through Cronbach Alpha and turned out to be 0.80-0.89. The index of attitude toward agricultural information was measured using 14 statements.

The study population included five counties (Rafsanjan, Sirjan, Zarand, Kerman and Ravar). Random cluster method was used as the sampling method. First, some extension service centers were selected randomly and then in each cluster, samples were determined randomly and interviewed. Finally, 11 services that were chosen relative to pistachio farmers and service centers were selected from five counties by this method. The sample size was determined using Kerjci and Morgan (1970) table and estimated up to 382 persons (see Table 1).

Conceptual and Operational Definitions

Attitude: Attitude is the assessment, feeling and the person's pleasant or unwilling intention about an idea or object (Lizawati et al, 2012).

In this research, we mean the attitudes, opinion, perceptions and priorities that gardeners have to

privatize agricultural extension activities. This variable was evaluated with agreed and opposed tests.

Privatization of Agricultural extension: privatization is usually a part of politics and one aspect of economic liberalization for the purpose of extension privatization; a set of policies, strategies, activities and strategies for restructuring and organizing the financial and management of agricultural extension, including the transfer of financial and service responsibilities to extension private sector organizations, farmers' organizations, agricultural production and distribution companies and conversion and marketing units of agricultural products (Rezvanfar et al., 2007).

In this research, the privatization of agricultural extension refers to services provided by extension staff in agriculture and other related areas in the centers or private organizations for those farmers who are expected to pay the costs of the service, as well as complementary public extension services.

RESULTS AND DISCUSSION

Distribution of pistachio farmer's attitude toward extension privatization indicated that in total 48 percent of respondents had positive and 52 percent had negative attitude. Details of results are presented in Table 2.

The average age of respondents was 49.5 years and the youngest and oldest ones were 22 and 90 years old, respectively. Due to the skewness value (4.375) and proximity and conformity of average (49.5 years), mode (50 years) and median (50 years), it can be concluded that the sample has a normal distribution. About 95 percent of respondents were male, whose experience of pistachio farming ranged between 1 to 60 years (average 24 years and mode 30 years for 21% of respondents). The pistachio orchard area changed from minimum value of 0.25 hectare to maximum of 200 hectare (average 6.7 hectare).

Results showed that 177 respondents (48 percent) have participated in at least one extension activity (classes, visits, fields, etc.). About 285 respondents (75%) are members of at least one association. The variable of "activity level" (range of 0 to 20) showed

that pistachio farmers have a very weak level of activity (average 2.39) in associations. About 15 percent of respondents who reported they are member of at least one association stated that they have been just a member, with no activity. The maximum value obtained for taking part in extension activities was 12.5.

Acceptance of innovation was measured by summing score of five questions (using insurance for garden, doing soil tests, doing water test, doing leaf tests and applying pressurized irrigation) and had the range of 0 to 5. Findings showed that pistachio farmers of this study had a weak tendency to accept innovations and just 5.7% of respondents had a favorable condition and gained a score of 4 or higher. One third of the respondents (33.5%) did not accept any of the five above-mentioned activities.

The variable of cosmopolitan which is measured by the number of domestic and foreign travels is an indicator of innovation acceptance (Rogers and Shoemaker, 1990). Findings of this study show that the average number of travels of respondents in a year was 3.6 for domestic travels and 2.4 for the foreign ones. About 90 percent of the respondents had 5 travels or fewer per year. Also, about 91.4% of the respondents had 5 foreign travels or fewer (for business or recreation) in their life time.

Findings of this research showed that 193 respondents (51.7 percent) had a negative attitude to agricultural extension privatization and the rest (48.3%) agreed with private extension. Although spatial distribution of positive and negative attitudes toward extension privatization had a significant difference ($\chi^2 = 23.978, P = 0.000$) among pistachio farmers, there was a significant relationship (Cramer's $V = 0.254, P = 0.000$) between farmers' attitude to privatization and the location of the counties under study (Table 2). Hence, less than half of the respondents in Kerman and Sirjan (42.2% and 46.7% respectively) and more than half of them in Ravar, Zarand and Rafsanjan (86.2%, 66.7% and 53.9%) had a negative attitude toward privatization.

Table 1. Names of counties, centers of promotion and services of agriculture Jihad and number of research samples

Name of counties	centers of promotion and services, Jihad Agriculture	Number of samples	Number of completed questionnaires	Questionnaires Percent
Rafsanjan	Annar, Kashkoyeah, Bahraman and the suburbs	200	200	52.4
Sirjan	Zeidabad and Malek Abad	30	30	9.7
Zarand	Yazdanabad and the suburbs	60	59	15.4
Ravar	Central	30	29	7.6
Kerman	Central and Chetrod	65	64	16.7
Total	11 centers	385	382	100

Table 2. Distribution of Pistachio farmers attitude toward extension privatization (percent) (n = 373)

Attitude toward Privatization City	Kerman	Sirjan	Ravar	Zarand	Rafsanjan	average
Positive	57.8	53.3	13.8	33.3	46.1	48.3
Negative	42.2	46.7	86.2	66.7	53.9	51.7
total	100	100	100	100	100	100
Chi2 = 23.978	Cramer's V =0.254		P = 0.000			

Attitude toward extension privatization had a significant positive relationship with the education level (Cramer's V = 0.159, P = 0.009), participation in extension activities (Phi = 0.245, P = 0.001) and the experience of employing private consulting engineer (Phi = 0.322, P = 0.001) and had no relationship with having another job other than pistachio farming (Phi = 0.053, P = 31.3) (Table 3). Results showed that about 63.9 percent of respondents who had an education higher than diploma showed a positive viewpoint toward private extension, while this value was 43 percent for respondents with an education level lower than diploma. In other words, higher levels of education could increase the percentage of positive attitude toward privatization. Besides, most of pistachio farmers (61.5 percent) who had participated in extension programs of agricultural organization showed a positive attitude to private extension. Also, in this context, there was a significant difference between pistachio farmers who had the experience of employing private consultant engineers and those who did not have so that 81.8 percent of farmers with this experience had a positive attitude toward privatization. There was no significant difference between farmers who had just farms and those who had non-farm jobs too (Table 3).

As it is shown in Table 4, farmers who agreed or disagreed with extension privatization did not have a significant difference in age, garden area, total farm and attitude toward public extension. Pistachio farmers who agreed with extension privatization had significantly less average experience of farming (22.46 years) compared to those who disagreed, with average experience of farming about 25.34 years (t = -2.177, P = 0.030). Farmers who had a positive attitude toward privatization were also significantly different in accepting innovations from those who disagreed with privatization and accepted innovation more (t = 2.586, P = 0.010).

Regarding the membership in associations, farmers who agreed (M=1.63) showed a significant difference (t = 2.082, P = 0.038) compared to the ones who disagreed (M=1.35). Besides, in terms of the level of activity in associations the former farmers' average score was 2.07 (in the range of 0 to 20) which was significantly different from (t = 2.372, P = 0.018) the latter ones' with an average score of 1.54. In other words, farmers who agreed with privatization not only participated in more associations, but also were more active than those who did not agree to privatization in those associations.

According to various investigations, cosmopolitan had a correlation with acceptance of innovation (Rogers and Shoemaker, 1990). Pistachio farmers who agreed with privatization were significantly different compared to those who disagreed, both in terms of the number of domestic travels in a year (t = 2.113, P = 0.036) and the foreign travels in their life span (t = 2.705, P = 0.008).

There was a significant difference between farmers' attitude toward private extension from an economic viewpoint so that the former group had an average income of 68 million rials per hectare compared to 55 million rials of the latter group (t = 2.667, P = 0.008). The pistachio yield of these two groups was also significantly different (t = 2.045, P = 0.042). Results showed the difference of 1173 kg/ha vs. 984 kg/ha pistachio production, for farmers who respectively agreed and disagreed with privatization. The average value of attitude toward agricultural knowledge and information was 13.41 among pro-privatization and 12.61 among farmers against that (t = 2.253, P = 0.025). Variety of information sources among pro-privatization group (average 10.71) was significantly different from that of the other group (8.95) (t = 3.405, P = 0.001).

According to Table 4, attitude toward private extension had a significant difference between pro- (14.9) and against- (9.10) privatization groups (t = 14.62, P = 0.001). Since some farmers had the experience of employing agricultural experts as the extension private consultant and had paid them for this, the satisfaction of farmers from these consultants was significantly (t = 2.471, P = 0.017) different and changed from 15.85 for pro- compared to 12.6 for against- privatization groups.

Stepwise assessment of the regression method for explaining the farmers' attitude toward private extension showed that through two steps, a couple of variables ("level of participation in extension activities" and "attitude toward the public extension") were significantly (F=14.184, P=0.000, F=9.178, P=0.003) entered the regression equation. These two variables can totally explain 24.8 percent of changes in attitude toward private extension (Tables 5 and 6). The regression equation is accordingly as below:

$$Y = 0.415X_1 - 0.414X_2$$

Y: attitude toward private extension

X₁: level of participation in extension activities

X₂: attitude toward the public extension

Table 3. Distribution of pistachio farmers' attitude toward extension privatization (Percent)

Attitude toward privatization	Education Level			Occupation type		Access to public extension		Experience of private extension		Average
	Under diploma	diploma	Higher than diploma	Pistachio farming	Having another job	Yes	No	Yes	No	
Positive	43	48.2	63.9	46.2	51.5	61.5	37	81.8	40.2	40.2
Negative	57	51.8	36.1	53.8	48.5	38.5	63	18.2	59.8	59.8
	Chi2=9.423 V Cramer's=0.159 P = 0.009			Chi2=1.017 Phi =0.053 P = 0.313		Chi2= 1.549 Phi=0.245 P = 0.000		Chi2=31.135 Phi =0.322 P = 0.000		

Table 4. Mean comparison of socio- economic variables and attitude toward private extension and

Variable	N	average	Min.	Max.	Groups	Average	SD	t	Sig.	df
age	362	49.45	22	90	Agree	48.16	13.5	-1.599	0.111	360
					Disagree	50.53	14.6			
Membership in association (0 to 8)	373	1.48	0	6	Agree	1.63	1.2	2.082	0.038	396.6
					Disagree	1.35	1.4			
Being active in association (0 to 20)	373	2.39	0	12.5	Agree	2.07	2.2	2.372	0.018	371
					Disagree	1.54	2.1			
Experience of Pistachio farming (year)	335	24.10	1	60	Agree	22.46	11.7	-2.18	0.030	333
					Disagree	25.34	12.5			
Acceptance of innovation (0 to 5)	355	1.2	0	5	Agree	1.37	1.3	2.586	0.010	341
					Disagree	1.04	1.1			
Domestic travels in a year	311	3.65	0	5	Agree	4.44	8.6	2.113	0.036	233.3
					Disagree	2.82	4.3			
Foreign travels	249	2.41	0	12	Agree	2.85	2.94	2.705	0.008	162.3
					Disagree	2	1.69			
Foreign travels	249	2.41	0	12	Agree	8.56	18.1	1.896	0.059	349.2
					Disagree	5.13	16.2			
Average yield (kg/ha)	272	1066	250	6000	Agree	1173	825	2.045	0.042	270
					Disagree	984	698			
Salary (Million Rial)	254	60	10	240	Agree	68	4	2.667	0.008	252
					Disagree	55	3.8			
Total land area (ha)	105	12.35	0.5	200	Agree	17.8	35.8	1.669	0.098	95.04
					Disagree	7.4	27.2			
Attitude toward agricultural knowledge (0 to 20)	329	12.91	1.43	20	Agree	13.41	3.37	2.253	0.025	327
					Disagree	12.61	3			
Information sources (0 to 20)	314	9.80	0	20	Agree	10.71	5.2	3.405	0.001	270.6
					Disagree	8.95	3.8			
Attitude to public extension (0 to 20)	363	14.70	1.67	20	Agree	14.43	2.9	-1.751	0.081	357.9
					Disagree	15	3.4			
Attitude toward private extension (0 to 20)	365	11.89	0	20	Agree	14.9	3.4	14.62	0.000	355.8
					Disagree	9.10	4.1			
Satisfaction from private consultants (0 to 20)	46	15.3	6	20	Agree	15.85	3.3	2.471	0.017	44
					Disagree	12.6	2.1			

Table 5. Results of regression model for explaining Pistachio farmers' attitude toward private extension

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	9.956	.676	-	14.726	.000
	level of participation in extension activities	3.072	1.014	.323	3.029	.003
2	Constant	17.692	1.959	-	9.029	.000
	level of participation in extension activities	3.954	.947	.415	4.174	.000
	attitude toward the public extension	-.535	.129	-.414	-4.159	.000

Table 6. Rsquare results of regression

Model	R	R Square	Adjusted R Square	Std. Error
1	.323(a)	.104	.093	4.53521
2	.516(b)	.267	.248	4.12927

Due to the lack of consistency of the scale variables, the above equation has been written using β coefficient and standardized form, and shows that each unit change in standard score of attitude toward public extension will cause -0.414 unit change in attitude toward private extension. Also, a unit change in standard score of level of participation in extension activities will cause +0.415 unit change in attitude toward private extension.

According to the results of this research, the average age of pistachio farmers was around 50 years and more than half of them had another job, specially a public one. The garden areas changed in a range of 0.25- 200 hectares (average 6.7 hectare). This is an appropriate range of garden area in Kerman city and Iran. Paying more attention to the findings, it seems that participation of farmers in extension activities and membership at one association was above the average, and had a good status. The statistical population of this research did not show an appropriate tendency to accept innovation. Also, the average domestic and foreign travels (cosmopolitan indices) between them were low.

An important finding of this research is the fact that about half of the sample had positive attitudes toward extension privatization, while the other half looked negatively at that. This is consistent with HoseinMohammadi (2008) research. Results of Farrokhi and Sadighi (2005) showed that 72.5 percent of respondents had a negative attitude toward extension privatization. Hejazi and Soltani (2006) showed that farmers would agree to pay for agricultural extension if only an explicit contract guarantee the profitability of services. However, Ebrahimi (2002) showed that 29.7 percent of Fars province disagreed with private extension, 27 percent did not say anything about that and 43.3 percent were pro-privatization. In comparison with other studies in Iran, this sample was more desirable to accept private extension. So, it is expected that privatization of extension would be more successful in this region.

Attitude toward extension privatization had a positive significant relationship with education level, level of participating in extension activities, and experience of employing private consultant engineers, but had no relationship with having another job other than farming. This is in line with Hanchinal et al. (2001), Saravanan et al. (2000) and Farokhi and Sadighi (2005). In order to be more successful in private extension, it could be recommended to try to increase the level of farmers participating in extension activities as well as to prepare more experience of employing private consultants for farmers.

Age, garden area and total farming area did not have a significant difference between the two groups of farmers. Farrokhi and Sadighi (2005) also showed that differences in age, education level and irrigated land were not significant between these two groups. In

contrast, Hejazi and Soltani (2006) showed that age and farm area in cotton farmers were factors which affected farmers' tendency to pay for extension services.

Findings of this research revealed that there was a significant difference between farmers' attitude toward private extension, depending on whether they agreed or disagreed with private extension. Also, there was a significant difference in satisfaction from employing consultant engineers between these two groups so that pro-privatization farmers showed a higher level of satisfaction.

Regression model assessment showed that a couple of variables ("level of participation in extension activities" and "attitude toward the public extension") were significantly entered the regression equation. These two variables can totally explain 24.8 percent of changes in attitude toward private extension. Farrokhi and Sadighi (2005) also confirmed that participation in extension activities is the most important variable affecting the farmers' attitude. It seems that inefficiency of public extension is truly felt by beneficiaries and this has affected their attitude toward public extension.

Results revealed that about half of the population were opposed to privatization of extension system; therefore, privatization of extension for this target group without providing impeccable expectations and preparing the needed conditions such as cultural infrastructure and socio-economic factors, would not be accompanied by welcome and full success. However, findings showed that the commercial potential of this group of farmers have had favorable conditions than the other groups studied (in terms of attitudes, socioeconomic status and history of private experts, etc.) and relatively higher potential for acceptance of private extension system.

Attitude plays an important role in human behavior. According to the research findings, different factors such as education level, participating in the extension activities, innovation acceptance, membership in associations, cosmopolitan, positive attitude to knowledge and information, employing various resources, pistachio yield per hectare, had relationships with privatization. Different measures can make a better situation for privatization, e.g. increasing the domestic and foreign educational visits, organizing farmers in professional and local associations, developing knowledge and information resources, technical educations and so on. In total, having a favorable level of economic, educational and social factors among farmers could advance and improve attitude toward accepting and using private extension, so more attention to enhance these conditions is recommended.

ACKNOWLEDGEMENTS

This research has been carried out in cooperation with Management of Agricultural Extension in Kerman province. Thanks and appreciation for this sincerely.

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بررسی عوامل مؤثر بر نگرش کشاورزان پسته‌کار ایران به خصوصی‌سازی فعالیت‌های ترویج کشاورزی: مورد مطالعه استان کرمان

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اطلاعات مقاله

تاریخچه مقاله:

تاریخ دریافت: ۱۳۹۶/۸/۵

تاریخ پذیرش: ۱۳۹۷/۱/۱۸

تاریخ دسترسی: ۱۳۹۸/۱۰/۱۸

واژه‌های کلیدی:

نگرش
کشاورزان
خصوصی‌سازی ترویج
کرمان

چکیده- ترویج کشاورزی به‌عنوان یک نظام آموزشی خارج از مدرسه، یکی از ابزارهای توسعه کشاورزی است که بر سرمایه‌های انسانی تکیه دارد. ناکارایی نظام دولتی از یکسو و مشکلات مدیریتی و اعتباری از سوی دیگر و مضاف بر آن بی‌توجهی به نیازهای واقعی بهره‌برداران در برنامه‌ریزی‌ها، متولیان امر را مصمم به واگذاری امور اجرایی به بخش خصوصی و کاهش تصدی‌گری دولت نموده است. تحقیق حاضر در استان کرمان به عنوان رتبه نخست تولید پسته ایران، با هدف بررسی نگرش پسته‌کاران به خدمات خصوصی ترویج انجام شد. از پرسشنامه به‌عنوان ابزار تحقیق برای جمع‌آوری داده‌ها استفاده گردید. روائی صوری آن توسط کارشناسان ترویج تأیید شد و به روش کرونیخ آلفا، پایایی شاخص‌های آن بین ۰/۸۰ تا ۰/۸۹ محاسبه گردید. جمعیت مورد مطالعه شامل پسته‌کاران پنج شهرستان پسته خیز استان کرمان شامل رفسنجان، سیرجان، زرنده، کرمان و راور بود. روش نمونه‌گیری بصورت نمونه‌گیری خوشه‌ای تصادفی بوده و حجم نمونه ۳۸۲ نفر تعیین شد. تحلیل داده‌ها با استفاده از نرم‌افزار آماری SPSS انجام گرفت. نتایج تحقیق نشان داد که عوامل متعددی همانند سطح تحصیلات، شرکت در فعالیت‌های ترویجی، نوپذیری، عضویت در تشکلهای، جهان‌شهری بودن، نگرش مثبت نسبت به دانش و اطلاعات، بکارگیری منابع متعدد اطلاعات، عملکرد تولید پسته در هکتار، مساحت باغ پسته و رضایت از مشاوران خصوصی با نگرش نسبت به خصوصی‌سازی خدمات ترویج کشاورزی ارتباط دارند. همچنین میزان مشارکت در فعالیت‌های ترویج و نگرش نسبت به ترویج دولتی توانستند ۲۴/۸ درصد از تغییرات در نگرش نسبت به خصوصی‌سازی ترویج را تبیین نمایند.