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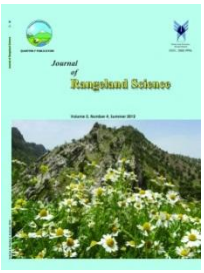

Full Length Article:

Comparison of Experts and Rangers' Opinions on Prioritizing Barriers in Participation of Rangers in Range Plans (Case Study: Tehran Province- Lar Moor)

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Abstract. There are some barriers for rangers to take part in range plan projects and evaluation. Their participation is very useful for range managers to plan and provide solutions for solving problems. This study aims at comparing barriers of participating from rangers and experts point of view in Lar moor rangelands, Tehran, Iran. In this research, data were collected based on documentation-library and field working. The statistical populations of the study were 410 rangers and 43 experts that arranged based on Cochran formula, 178 rangers and 35 experts had answered the distributed questionnaires. Validity and reliability of questionnaires were assessed by a preliminary test using SPSS software and Cronbach alpha coefficient. The results of Mann-Whitney U test showed that the opinions of two groups on both the effects of legislative initiatives, economic, social-cultural and educational barriers and non-participating rangers in the range projects of Lar moor are the same. But comparing the experts and rangers` opinions on the effects of management factors on non-participating rangers showed that the experst`s view of on the effects of this factor are more agreeable than those of rangers. Also, the results of this test showed that participation rate of rangers in range projects is the same in terms of both ranger and expert groups. Prioritizong results showed that from the viewpoint of rangers, economic, legal, educational, social and cultural barriers have contributed to non-participation of rangers in the range projects. But from the viewpoints of experts, legal, educational, administrative, socio-cultural and economic barriers are the reasons of rangers' non-participation.

Key words: Range plan, Mann-Whitney U test, Prioritize, Barriers.

Introduction

To develop the ranges, one of the fundamental factors is the individual participation in all of its stages. According to the theorists' opinions, participation is an important tool to achieve the development and it has been greatly emphasized the participation of rangers in their practices and activities because the people are directly or indirectly affected by the benefits of what will be done (Kargar and Abedi Sarvestani, 2001). Lar moor is one of the highest areas of watershed in, Tehran, Iran, and it is completely mountainous with relatively steep slopes. Lar rangelands are about 60571 ha equivalent to 82% of the total Lar area where range projects are implemented. Currently, almost 410 households are doing rangeland activities in these areas (during summer). Most of them are engaged in different tribal structures in the place. Almost 60% of the beneficiaries have 400 AU of cattle and 20% of the rest belong to one to four-member families, institutions or army. Livestock in the region is 134858 AUM1 that is almost 2.5 times the allowed utilization capacity of the pasture (Technical Office of Rangeland of Forests, 2010).

The fundamental question of this research is what barriers and obstacles exist for the rangers participating in range projects of Lar moor with regarding to the economic, social-cultural, administrative, educational, legal and personal fields and to what extent each of these cases influences the participation of rangers in range projects.

Shahidi Zandi (1996) investigated the factors having effects on the participation of rangers in the revival of ranges. The results have shown that occupation, income, number of livestock, rural population, educational classes and existence of fuel have significant relationships with the participation of rangers. But there were no relationships between education level, grazing permission and participation of rangers. Abedini (2001) investigated social factors that influence the participation of rangers in range projects of Damavand, Lar watershed. The results have indicated that the ownership, job security and economic status are associated with the rangers' participation. Also, a relationship has been identified between rangers' participation in extension courses, rangers' communications with experts and their information. Also, a significant relationship has been found between the number of domesticated animals, the range extent and rangers' participation. Pagdee *et al.* (2006) in their study "factors leading to the success of forest management community" concluded that such variables as job security, clear ownership, effective enforcement of laws and regulations, supervision, imposing fine, strong leadership via local organization, benefit expectations among community members, public and shared interests among local community members and local authorities influence the success of forestry community. Rice and Stuart (1967) found that if the required information on social issues and systems could be provided to achieve a better indicator, it would be integrated in rural development planning process and then would lead to a better efficiency. Also, the most important economic-social indicators for rural planning are considered as population, health, education, culture, employment and social welfare.

Materials and Methods

This study has been performed in Lar moor located in 84 km of northeastern Tehran. Latitude of this region is 35°55′ 36" and longitude is 51°25′ 26" and the altitude is

[1] Animal Unit Month

2470 m above sea level. Lar moor is a very mountainous region with relatively steep slopes. The area is reached from north and south to Kadan, Kaboud and Sorkhak mountains and Lavasanat region and Jajroud River (Latiyan field) from east and west to Damavand mount and Plour region and the catchment of Karaj and Jajroud, respectively. This study is objectively practical and applies a field method. Based on data collection, it is regarded as a cross-sectional correlation survey. This study is considered as a deductive research, since it compares the opinions of experts and rangers on the barriers of rangers' participation in range plans of Lar. Methods of data collection are documentary – library and field. The measurement tools of this study are questionnaires and the statistical population consists of 410 rangers of Lar moor and 43 experts that contribute to range plans of Lar. The rangers and experts' sample size has been determined using Cochran formula and census as 118 rangers and 35 experts who have answered the questionnaires using simple random sampling. A pilot test was utilized to determine the validity and reliability and then, data were analyzed using SPSS software and Cronbach's Alpha coefficient indicating that the questionnaires are of high validity. Also, Mann Whitney U test was applied to compare the ideas represented by the experts and rangers. In this study, dependent and independent variables include the participation rate of rangers in range plans and personal characteristics (age, educational level, rangeland history, range area, range quality and number of animal units) and economic, social-cultural, administrative, educational and legal barriers.

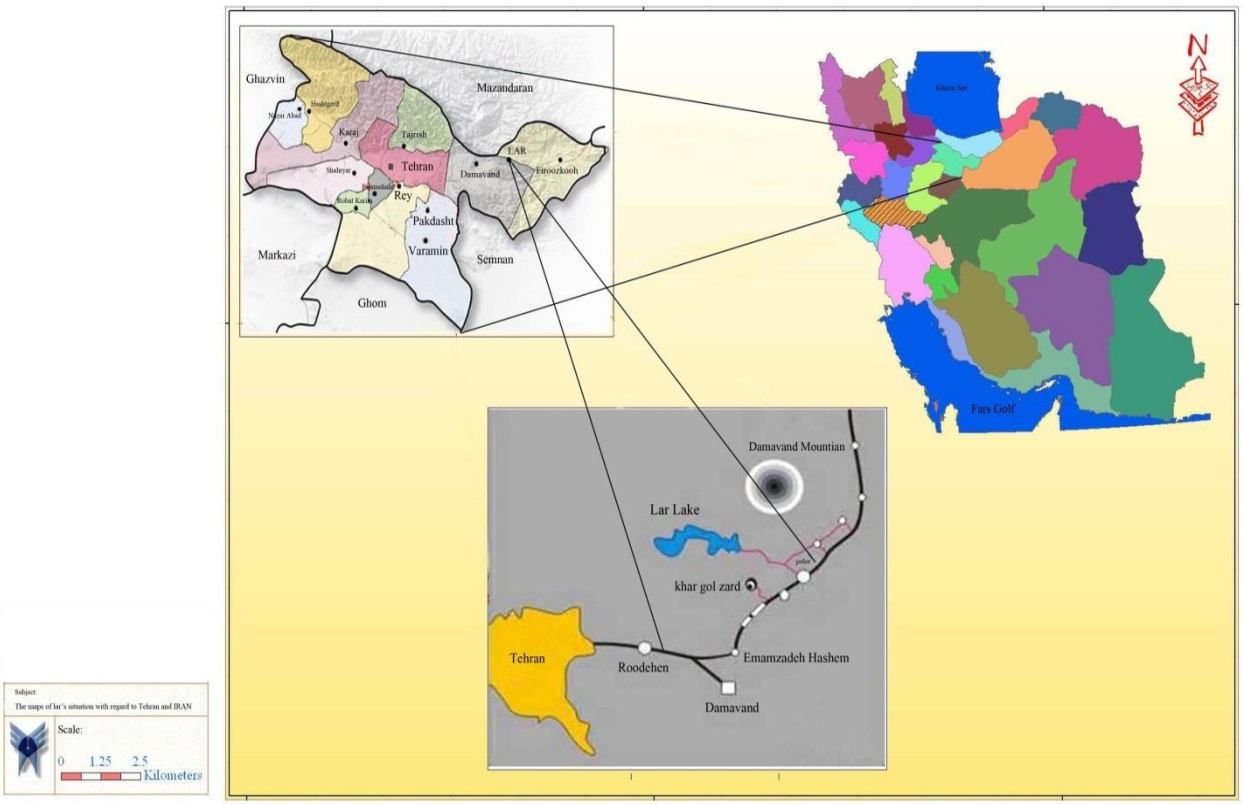

Fig. 1. The maps of Iran, Tehran and Lar moor

Results

Population characteristics

The average age of rangers was 48.5 years and the highest frequency was related to 41-50 age categories. Most of the rangers in this study were illiterate and a few percent were high school graduated that were suitable for this subject. The average of rangeland history is 26 years and the highest frequency is ranged as 11-20 years that shows rangers' good experience in this domain. Results have showed that the lowest and the highest range area is 300 ha and 7900 ha, respectively. Most of rangers with the highest frequency have almost 1001 to 2000 hectare range. The study showed that with regard to the range quality, 34, 32.5 and 33.5% of ranges have been considered as very good, good, medium, poor and very poor. The mean number of animal units is 274 head and 32.9% of rangers in this study with the highest frequency have 101 to 200 animal units. In this research, the age mean of experts was 41 years and the highest frequency was related to the age interval of 41-45 years. The experts' sexuality variable includes 91.5% male and 8.5% female. Approximately, 83% and 11% of experts were married and single, respectively. The studies showed that almost 61.8%, 20.6% and 17.6% of experts had B. A, M. A and top diploma degree. The experts' mean experience was 16 years and mean service cooperation of experts with the range plans of Lar was about 10 years showing that the experts were experienced in this field. Results showed that according to the opinions of rangers and experts, the participation rate of rangers in range plans is moderate to low. Tables 1 and 2 show the opinions of rangers and experts on the participation rate of rangers in the range plans of Lar.

Table 1. Prioritization of rangers' opinions on participation rate in range plans of Lar moor

Buoy of Participation	No.	Mean	SD	CV%	Rank
Observed entering the trap	175	3.08	1.19	38.64	1
Observed going out the trap	173	3.12	1.22	39.10	2
Diet balance of livestock and pasture	174	3.26	1.28	39.26	3
Farm operations for forage production in pasture	172	3.06	1.29	42.16	4
Failure to observe the grazed area	173	2.82	1.22	43.26	5
Observing the proper season of grazing	174	2.93	1.29	44.03	6
Pile work	173	2.98	1.33	44.63	7
Preventing erosion caused by pasture	174	3. 02	1.40	46.36	8
Construction of watering-trough and restoration of fountains	172	2.86	1.34	46. 85	9
Participating to reserve precipitation	174	2.83	1.34	47.35	10
Observed planting and development of suitable plants in the region	173	2.76	1.31	47.46	11
Preserve	175	2.98	1.52	51.01	12
Seed scattering	173	2.69	1.39	51. 67	13
Application of fertilizer in ranges	173	2.62	1.40	53.44	14
Crucible planted	174	2.22	1.39	62.61	15

SD = Standard Deviation, CV= Coefficient of Variation

Table 2. Prioritizing the experts' opinions on participation rate in range plans of Lar moor

Buoy of Participation	No.	Mean	SD	CV%	Rank
Pile work	32	3.34	0.90	26.95	1
Observed going out the trap	32	3.06	0.91	29.74	2
Observing the proper season of grazing	32	3.00	0.95	31.67	3
Construction of watering-trough and restoration of fountains	33	3.03	0.95	31.67	4
Failure to observe the grazed area	33	2.90	1.01	34.83	5
Diet balance of livestock and pasture	34	2.73	0.96	35.16	6
Preventing erosion	34	2.70	0.97	35.93	7
Observed entering the trap	34	2.85	1.10	36.60	8
Type of suitable trap for the range	33	2.81	1.04	37.01	9
Seed spray	33	2. 96	1.13	38.18	10
Preserve	33	2.60	1.02	39.23	11
Application of fertilizer in the ranges	34	2.88	1.20	41.67	12
Farm operations for forage production in pasture	33	2.60	1.11	42.69	13
Crucible planted	33	2.12	1.02	48.11	14
Observed the planting and development of suitable plants in the region	33	2.51	1.25	49.80	15
Participating to reserve the precipitation	32	2.68	1.35	50.37	16

Prioritizing the effective economic barriers on non-participating rangers in range plans

Results have showed that from viewpoints of experts and rangers, the effects of economic barriers on non-participating rangers in range plans of Lar are moderate. Prioritizing the experts and rangers' opinions on the effective economic barriers on non-participating rangers in range plans of Lar moor has been shown in Tables 3 and 4.

Table 3. Prioritizing the rangers' comments about effective economic barriers on non-participating rangers in range plans of Lar moor

Economic Barriers	No.	Mean	SD	CV%	Rank
Lack of supportive commitments from government	173	3.60	1.12	31.11	1
Lack of pasture ownership	174	3.41	1.12	32.84	2
Lack of banking facilities for participating in range plans	174	3.35	1.10	32.84	3
Lack of financial incentives of rangers for participating in range plans	176	3.31	1.10	33.23	4
Lack of supportive facilities for participating	173	3.48	1.17	33.62	5
Economic inequalities and unfair distribution of services	173	3.28	1.12	34.15	6
Seasonal rangeland job in the region	174	3.26	1.15	35.28	7
Low economic power of rangers to participate in range plans	173	3.22	1.33	41.30	8
Non- profit range plan for rangers	173	3.12	1.33	42.63	9

Table 4. Prioritizing the experts' comments about effective economic barriers on non-participating rangers in range plans of Lar

Economic Barriers	No.	Mean	SD	CV%	Rank
Lack of banking facilities for participating in range plans	34	3.44	0.89	25.87	1
Economic inequalities and unfair distribution of services	33	3.21	0.89	27.73	2
Lack of pasture ownership	33	3.39	1.17	34.51	3
Low economic power of rangers to participate in range plans	32	3.53	1.31	37.11	4
Lack of supportive facilities for participation	32	3.37	1.26	37.39	5
Seasonal rangeland job in the region	34	3.17	1.19	37.54	6
Lack of supportive commitments from government	33	3. 48	1.41	40.52	7
Lack of financial incentives of rangers for participating in range plans	32	3.03	1.49	49.17	8
Non- profit range plans for rangers	34	2.64	1.43	54.17	9

Prioritizing the effective cultural-social barriers on non-participating rangers in range plans.

Results have showed that from viewpoints of rangers, social-cultural barriers have moderate effects on non-participating rangers and from the perspective of experts its effects have been moderate. While considering both groups, non-compliance component with the protocol of villagers has no impacts on the participation of rangers in the range plans. Tables 5 and 6 show the prioritizing of rangers and experts' opinions on effective cultural-social barriers on non-participating rangers in the range plans of Lar moor.

Table 5. Prioritization of rangers' opinions on effective cultural-social barriers on non-participating rangers in range plans of Lar moor.

Social-Cultural Barriers	No.	Mean	SD	CV%	Rank
Mistrust and wariness of rangers about the range plan	174	3.21	0.99	30.84	1
Dependence on government and expectations from government for doing range plans	172	3.50	1.08	30.86	2
Lack of attention to needs of different groups of rangers and tribes	171	3.21	1.16	36.14	3
High number per house holds	173	3.44	1.27	36.92	4
Different tribal cultures in region	173	3.06	1.23	40.20	5
Illiterate rangers	171	3.20	1.39	43.44	6
Existence of local strong enjoyment of social base	172	3.15	1.41	44.76	7
High number of people per house hold	172	3.01	1.35	44.85	8
Unhealthy and uncontrollable competition in range exploitation	171	3.12	1.45	46.47	9
Seeking personal benefits and seeking immediate of rangers	174	3.04	1.47	48.36	10
Lack of public awareness about objectives of plan and its operational characteristics	172	3.02	1.53	50.66	11
Lack of plan conformity with rural customs	174	2.83	1.59	56.18	12

Table 6. Prioritizing the experts' opinions on effective social-cultural barriers on non-participating rangers in range plans of Lar moor

Social-Cultural Barriers	No.	Mean	SD	CV%	Rank
Mistrust and wariness of rangers about range plan	34	3.23	0.85	26.32	1
Dependence on government and expectations from government for doing range plans	34	4.05	1.22	30.12	2
Seeking personal benefits and seeking immediate of rangers	34	3.70	1.19	32.16	3
Illiterate rangers	34	3.67	1.22	33.24	4
Unhealthy and uncontrollable competition in range exploitation	35	3.57	1.24	34.73	5
High number of people per household	34	3.52	1.26	35.80	6
High number per households	34	3.73	1.37	36.73	7
Lack of attention to needs of different groups of rangers and tribes	34	3.44	1.28	37.21	8
Lack of public awareness about objectives of plan and its operational characteristics	34	3.20	1.32	41.25	9
Different tribal cultures in region	34	2.91	1.21	41.58	10
Existence of local strong enjoyment of social bases	34	3.05	1.30	42.62	11
Lack of plan conformity with rural customs	34	2.85	1.30	45.61	12

Prioritizing the effective management barriers on non-participating rangers in range plans

Results showed that from viewpoint of rangers, the effects of management barriers are moderate and the experts believe that the effects of management barriers on non-participating rangers in range plans of Lar moor were moderate to high. Tables 7 and 8 show the prioritizing of rangers and experts' opinions on effective management barriers on non-participating rangers.

Table 7. Prioritizing the rangers' opinions on effective management barriers on non-participating rangers in range plans of Lar moor

Management Barriers	No.	Mean	SD	CV%	Rank
Centralizing government planning and making decision from top to bottom	172	3.52	1.19	33.81	1
Lack of formation of independent groups and leaders in range plans	171	3.27	1.19	36.39	2
Poor coordination between research organization, education and administration of plan	171	3.44	1.28	37.21	3
Lack of supervision on grazing permission	172	2.98	1.12	37.58	4
Lack of cooperation of rangers	172	3.16	1.20	37.97	5
Lack of control on grazing permission	173	3.16	1.20	37.97	6
Changes of configurations in directory systems	172	3.23	1.23	38.08	7
Focus of administrative units on the centers far from operational regions	173	3.01	1.15	38.21	8
Formation of public companies to exert range	174	3.02	1.18	39.07	9
Short-term and tactical management decisions	171	3.18	1.31	41.19	10
Low connection of officials of range plans with rangers	173	3.27	1.39	42.51	11
Lack of competent management to get people to participate in the plans	173	3.31	1.46	44.11	12

Table 8. Prioritizing the experts' opinions about effective management barriers on non-participating rangers in range plans of Lar moor

Management Barriers	No.	Mean	SD	CV%	Rank
Poor coordination between research organization, education and administration of plans	33	4.30	1.01	23.49	1
Lack of competent management to get people to participate in the plans	33	4.18	1.04	24.88	2
Lack of control of grazing permission	33	3.84	1.00	26.04	3
Low connections of officials of range plans with rangers	34	3.61	1.07	29.64	4
Changes of configurations in directory systems	33	3.60	1.08	30.00	5
Lack of supervision on grazing permit	34	3.97	1.31	33.00	6
Short-term and tactical management decisions	33	3.36	1.11	33.04	7
Focus of administrative units on the centers far from operational regions	33	3.42	1.19	34.80	8
Formation of public companies to exert tenure of range	34	2.91	1.11	38.14	9
Centralizing government planning and making decision from top to bottom	34	3. 85	1.50	38.96	10
Lack of cooperation of rangers	33	3.36	1.36	40.48	11
Lack of formation of independent groups and leaders in range plans	33	2.96	1.51	51.01	12

Prioritizing the effective educational barriers on non-participating rangers in range plans

Results showed that from viewpoint of rangers, the effects of educational barriers on the participation in range projects of Lar are medium and from viewpoint of experts, their effects were moderate to high. Tables 9 and 10 show the prioritizing of rangers and experts' opinions about effective educational barriers on non-participating rangers in range plans.

Table 9. Prioritizing the rangers' comments about effective educational barriers on non-participating rangers in range plans of Lar moor

Educational Barriers	No.	Mean	SD	CV%	Rank
Lack of organization and lack of communication and information infrastructure	173	3.50	1.17	33.43	1
Lack of information about needs of rangers in field of range	174	3.45	1.19	34.49	2
Low number of educational experts- agents and lack of their use	173	3.64	1.28	35.16	3
Lack of effective use of mass media (including radio, television, etc.)	174	3.42	1.22	35.67	4
No plans to held training classes about range plans	173	3.38	1.26	37.28	5
Lack of compilation of survey programs for rangers	173	3.33	1.29	38.74	6
Low correlation of experts with rangers	173	3.30	1.34	40.61	7
Lack of documented educational packages about range plan (video, book, etc.)	175	3.32	1.36	40.96	8
Non-held of professional seminars about range plans	173	2.98	1.30	43.62	9

Table 10. Prioritizing the experts' comments about effective educational barriers on non-participating rangers in range plans of Lar moor

Educational barriers	No.	Mean	SD	CV%	Rank
Low number of educational experts- agents and lack of their use	33	4.39	1.05	23.92	1
Lack of information about needs of rangers in field of range	34	3.94	1.09	27.66	2
Low correlation of experts with rangers	33	3.78	1.08	28.57	3
Lack of organization and lack of communication and information infrastructure	33	4.00	1.17	29.25	4
No plan to held training classes about range plans	34	3.85	1.20	31.17	5
No holding professional seminars about range plans	33	3.36	1.14	33.93	6
Lack of compilation of survey programs for rangers	33	3.42	1.17	34.21	7
Lack of effective use of mass media (including radio, television, etc.)	34	3.23	1.15	35.60	8
Lack of documented educational packages about range plans (video, book, etc.)	33	3.27	1.25	38.23	9

Prioritizing the effective legal barriers on non-participating rangers in range plans

The results showed that from viewpoint of two groups of experts and rangers, the effects of legal barriers on non-participating rangers in range plans of Lar moor were moderate to high. Tables 11 and 12 show the prioritizing of rangers and experts' opinion about effective legal barriers on non-participating rangers in range plans.

Table 11. Prioritizing the rangers' opinion about effective legal barriers on non-participating rangers in range plans of Lar moor

Legal Barriers	No.	Mean	SD	CV%	Rank
Lack of good and useful rules	172	3.62	1.04	28.73	1
Absence of rules to guarantee of investments and security in part of tore	174	3.67	1.35	36.78	2
Unbalanced judging instruments in doing the rules about tore	173	3.54	1.35	38.14	3
Lack of experience for responses to conditions	174	3.27	1.25	38.23	4
Absence of laws and institutes to supervise the vicissitude in tore plans	173	3.36	1.30	38.69	5
Unclear rules and comments about viewpoints of experts	172	3.44	1.35	39.24	6
Loss of rules for acting instruments for engagement methods to attract organizations and systematic institutions(finding partner organizations)	173	3.31	1.33	40.18	7
Lack of rewards and immunity for participants in plans	174	3.07	1.34	43.65	8
No adaptive rules with customs, tradition and structures	172	3.06	1.34	43.79	9

Table 12. Prioritizing the experts' comments about legal barriers on non-participating rangers in range plans of Lar moor

Legal Barriers	No.	Mean	SD	CV%	Rank
Unbalanced judging instruments in performing the rules about tore	34	4.05	0.91	22.47	1
Loss of rules for acting instruments for engagement methods to attract systematic organizations (finding partner organizations)	35	3.74	0.98	26.20	2
Loss of good and useful rules about range	35	3.60	0.97	26.94	3
Unclear rules and comments about viewpoints of experts	34	3.67	1.06	28.88	4
Lack of encouragement and immunity for participants in plans	34	3.52	1.02	28.98	5
Absence of rules to guarantee of investments and security in parts of range	34	3.91	1.19	30.43	6
No experience for responses about conditions	34	3.44	1.23	35.76	7
No adaptive rules with customs, tradition and structures	33	3. 30	1.21	36.67	8
Absence of laws and institutes to supervise the vicissitude in plans of ranges	33	3.24	1.22	37.65	9

Additionally, reviewing the views on the prioritizing of effective barriers on lack of participation shows that economic, law, management, training and social-cultural obstacles are the main reasons for the lack of participant in range plans of Lar zone.

Results of Mann-Whitney U Test

Comparing the viewpoints of both groups about economic, social-cultural, educational and law snags has showed that there was no significant difference at 5% probability level and considering the obtained mean ranking, opinions of both groups were the same. But the results of Mann-Whitney U test showed that the views of experts and rangers about the effects of management snags on the lack of participation in those plans had a significant difference at 5% level and the experts emphasize the effects of management obstacles on the lack of participation more than rangers in this case. Comparing their views has showed that there was no significant difference between two groups.

Table 13. Results of Mann-Whitney U test

Dependent variable	Median		Nonparametric Test		Sig
	Expert	Ranger	U	Z	
Economic barriers	97.81	103.31	2602	-0.515	0.606
Social-cultural barriers	113.64	99.74	2421	-1.28	0.199
Management barriers	123.64	97.95	2043.5	-2.34*	0.019
Education barriers	114.67	100.24	2362.5	-1.32	0.184
Law barriers	112.38	100.59	2495.5	-1.11	0.264

* =The test is significant at 5%

Discussion

Results showed these groups' participation in those plans at low levels because of problems and barriers indicating that rangers are not heartily satisfied to participate in these plans. These results have indicated that the effects of economic, social-cultural, and law barriers are relatively high from the viewpoint of experts and rangers. When the ranger finds out that there is no effective law about range or that the laws are contrary to their tradition and customs with no support from the government and no financial assists which cannot meet their needs leading to non-controlling competition to exploit the rangelands, they are not willing to participate in these plans anymore. These results have showed that the effects of management and education barriers on these plans are almost medium and from perspective of experts, these barriers' effects are high to medium. This difference of view with rangers is not important and has no effects on those plans. But these two barriers' differences for participation show that experts believe that management and educational snags can considerably affect and reduce the participation of rangers in plans. Results have showed that age has no effects on the participation rate. Studies of Ghasemi (2001) also confirm this fact that due to high information of rangers in this regard, the age factor could not affect their participation in these plans. But a research done by Saboonchi (2006), Shirazi (1997) and Javanmard (2007) indicated that age has relatively high effects on the participation in the range plans comparing to the others and the participation experiences in these plans are more effective. These studies showed that education level has impacts on the participation level of rangers. Studies performed by Abedini (2001), Saboonchi (2006), Shirazi (1997), Asgari (2006), Ghaffari (2001), Javanmard (2007) and Effati (1992) also confirm this fact. Because of an increment in the understanding and knowledge of people, the effects of these programs on the rangers' participation will be better and rangers can use tour capacity sufficiently to implement the management and range plans, guarantee the next generation usage and cause a stable supply. Results obtained by comparing the viewpoint of two groups of experts and rangers using Mann-Whitney U test in the field of participating in the plans of tour and supporting them have showed that the views of two groups have no significant differences meaning that their views on the participation level of rangers in these plans are the same. This result has indicated that the background of range has a positive effect on the participation level. Saboonchi (2006) and Javanmard (2007) reported the same results. This fact is probably related to this point that data and background can present new solutions, prevent the renewal of fault experience and lead to a better management. Results have showed that in this regard, the area of tore has no effects but the results obtained by Saboonchi (2006) did not confirm this point and reported that the area affects the level of participation because local geographies of two zones are different and the zone where Saboonchi has done his research is more extensive than Lar zone and because of range ownership, rangers have participated in the plans more than the rangers of other zones. Therefore, there is a positive relationship between the participation level and rangeland quality. Number of traps has no effects on the participation. But studies done by Shahidi (1996) and Abedini (2001) showed that number of traps is an effective factor. Because these two studied regions that have many differences such as zone topography, ranger population and number of traps. Results showed that economic barriers of participation are of diverse

effects. Results reported by Abdollahpoor (1994), Abedini (2001), Dadrasi (1999), Moghaddam (1986), Soltani (1994) and Rice and Stuart (1967) also confirmed these findings. Because of economic and financial problems, lack of government support and ineffective programming related to the banking loans, the rangers are not encouraged to participate in the range plans. Management obstacles can also decrease the participation rate. Research done by Abdollahpoor (1994), Tangestani (1999) and Holt (1989) confirmed this fact. Because they are separated from the plans and they are not asked to express their ideas, they do not participate in these projects.

Given the significance of this problem, it is proposed to investigate the barriers and obstacles of rangers' participation in the range projects in the other areas of country and ask the experts to seek new ways to resolve the problems of rangelands and rangers' participation in the range projects.

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