



## Obstacles of ranchers` participation in implementing the pastures management plans in Kohgeloyeh township of Iran

Farhad Lashgarara

*Department of Agricultural Extension, Science and Research Branch, Islamic Azad University, Tehran, Iran*

Article published on August 09, 2014

**Key words:** Natural resources, pastures, pastures management, ranchers, participation.

### Abstract

Pastures are one of the natural resources` important having a key role in each country's water and soil protection. They, in Iran, are considered as one of the most important resources. This study is aimed at identifying the obstacles of ranchers` participation in implementing the pastures management plans in Kohgeloyeh Township. This is applied study. The methodology of this research is non experimental (descriptive) and correlation and it has been done in 2011. A questionnaire, as the main study tool was designed. The statistical population of the study was 197 ranchers working in Kohgeloyeh of which 110 persons were selected by simple random sampling. Results showed that the lack of participation of the studied person's majority was in moderate level. Prioritizing the items of ranchers nonparticipation based on the mean statistic showed that averages of 4.57, 4.39, and 4.21 includes nonparticipation of ranchers in seeding, sowing, and water piping, respectively. Also findings indicated that educational and social factors have determined about 54% the lack of participation of ranchers. Removing educational and social obstacles would increase the level of rancher's participation.

\*Corresponding Author: Farhad Lashgarara ✉ [f\\_lashgarara@srbiau.ac.ir](mailto:f_lashgarara@srbiau.ac.ir)

## Introduction

Pastures are one of the natural resources` important of the sustainable development of any country having a key role in each country's water and soil protection. They, in Iran, are considered as one of the most important resources, which, if used properly with improvement and restoring operations, can have an important role in water and soil protection and providing the country's needs of protein products (Abouyeh, 2001).

Nowadays, Iran pastures have not a suitable situation and if nothing are done to improve and reclaim them, in a little while, the vegetation will be lost, soil erosion will happen and this granted by God resources will be completely destroyed. This will have economical and social damages, so protection, improvement, reclamation, and improvement of these resources are necessary and negligence will cause many losses for the country (Kazemi-Roudi, 2005).

Irregular use of pastures, especially in the recent decades, increased the soil erosion process in the countries, as about 1 million hectares of Iran's pastures, annually, are quantitatively and qualitatively destroyed and become unproductive; according to some of the country's natural resources authorities, this problem would be resolved by a public cooperation and participation (Sabounchi, 2006).

Saadi (1998) showed that the obstacles of participation can be evaluated from two dimensions:

a) Beneficiaries of the natural resources (illiteracy or lack of literacy of the natural resources` beneficiaries, dispersal of the beneficiaries, and cultural problems),

b) Experts and planners (inability to make a constructive relation with people, lack of sufficient believes of experts to participation importance in marinating and reclaiming the resources.

Shaeri and Saadi (2003) concluded that there is direct relationship between people's nonparticipation and economical, social (unawareness, illiteracy, lack of literacy, and etc), and traditionalism limitations.

Abouyeh (2001) showed that there is a significant relationship between attracting the animal breeder participation for maintaining and reclaiming the pastures and rate of the animal breeder awareness in relation to pastures management plans nature, rate of participation in the educational courses, rate of contact with the extension agents, size of the pastures under the authority of the animal breeder, and the need of forage.

Molaei (2001) evaluated the effectiveness of the extension courses for the pastures mangers for maintaining and reclaiming the pastures of Zanjan province and concluded that there is a significant relationship between the educational courses` effectiveness and the variables of age, literacy, participation in the educational courses, visiting the premier plans, and times of contact with the extension agents.

Zarei (1999) showed that there is a relationship between the lack of responsibility, unawareness, self-orientation and selfishness, and lack of sympathy with lack of personnel participation in the handling of affaires.

Shahid zandi (1997) concluded that the village conditions regarding the amenities, holding education courses of pastures management, social base, and village conditions regarding the agriculture have the maximum effect on the animal breeder participation, respectively.

Shirazi (1997) found that the age, animal breeding experience, main job, and using bank facilities have not any effect on the animal breeder participation while the educational level and life method of the people affect this participation

Hosseinpour (1993) showed that there is a relationship between unawareness of the plan content and nonparticipation of people in the watershed management activities. Paying attention to the values, cultures, and local tradition increase the participation, too.

Unfortunately, currently, about 1.5 million hectares of lands are added to the deserts, annually and 200 tons of the farms, pastures and forests' soil are heading for to seas, lakes, and behind the dams, every minute annually, in Iran, about 15 ton/ha of soil is continuously scoured by water erosion. Per capita consumption of 140 kg corns for each person in 2011 is 13440000 tons for 96 million persons, but the water resources limitation for providing this quantity of foodstuff is a basic barrier. According to the studies carried out by the forests and pastures organization, important floods from 1952 to 1991 can be an alarm concerning the natural resources protection meaning that the suitable vegetation of the country is going to be destroyed (Shahidi, 1998).

Kohgeloyeh and Boyer Ahmad province, after the north of the country, is the first province having forest cover with beautiful plant diversification, so it is considered as one the most beautiful provinces. Natural resources area of Kohgeloye city is 569108 hectares of which 373201 and 295907 hectares are forests and pastures, respectively. The mentioned problems are also seen in this city affecting the participation of ranchers. This participation is not possible but by resolving the obstacles such as historical grounds, political conditions, economical situations, social and cultural obstacles, and etc (Mirza Ali 1999).

According to the important role of pastures in this region, factors affecting the participation of the ranchers in programs should be identified and, using the gained results and experiences, protection and reclamation of the city's pastures should be initiated. Thus, this study is aimed at identifying the obstacles

of ranchers' participation in implementing the pastures management plans in Kohgeloyeh Township.

### Materials and methods

This is applied study. The methodology of this research is non experimental (descriptive) and correlation. Geographic area of this study includes the Kohgeloyeh city and it has been done in 2011. A questionnaire, as the main study tool, was designed in seven sections. Obstacles of ranchers' participation in executing the pastures management plans, individual factors, social factors, economical factors, policy making factors, educational factors, and the respondents' personal characteristics were included in the first to the seventh section, respectively. Content and face validity were established by a panel of experts consisting of faculty members and some specialists in the mentioned province. Minor wording and structuring of the instrument were made based on the recommendation of the panel of experts. A pilot study was conducted with 30 persons who had not been interviewed before the earlier exercise of determining the reliability of the questionnaire for the study. Computed Cronbach Alpha score was 85.0%, which indicated that the questionnaire was highly reliable. Totally, Cronbach's coefficient alpha for the study tool was between 0.74 and 0.93.

The statistical population of the study was 197 ranchers working in Kohgeloyeh of which 110 persons were selected by simple random sampling. The dependent variable of the study is the nonparticipation of the ranchers in implementing the pastures management plans (protection, reclamation, and development). 8 items, in the form of Likert scale, were used to identify the rate of the ranchers' nonparticipation in executing the pastures management plans, so, based on the very much score (5) and very little score (1), the maximum and minimum scores for each respondent were  $40=5 \times 8$  and  $8=1 \times 8$ , respectively. Then, all items were computed together and recoded; scores were classified as 8-13 (very little), 14-20 (little), 21-27 (moderate), 18-34 (much) and 35-40 (very much).

Independent variables of the study are individual and psychological, social, economical, policy making, and educational factors.

According to results, average age of the studied people is 55.7 years, the youngest is 40 and the oldest is 72 years. Most of the respondents (40, 9%) were illiterate.

*Findings*

*- Description of personal characteristics*

This study is aimed to identify the obstacles of ranchers` participation in executing the pastures management plans in Kohgeloyeh city and its results are evaluated in two descriptive and deductive sections.

*- Description of level of rancher's nonparticipation*

Findings showed that rate of nonparticipation of majority of the studied persons was in moderate level (77.6 percent) and only 2 percent of them have a high rate of participation (Table 1).

**Table 1.** Frequency distribution of lack of participation of ranchers (n=110).

Rate of lack of participation	Frequency	Percent	Valid percent	Cumulative percent
Little	10	9.1	20.4	20.4
Moderate	38	34.5	77.6	98
Much	1	0.9	2	100
Non respond	61	55.5	-	-
Total	110	100	100	

Mode: Moderate

Prioritizing the items of ranchers nonparticipation based on the mean statistic showed that averages of 4.57, 4.39, and 4.21 includes nonparticipation of ranchers in seeding, sowing, and water piping, respectively.

classified as 6-10 (very little), 11-16 (little), 17-22 (moderate), 23-28 (much) and 29-34 (very much). Findings showed that the majority of the studied persons (60.6 percent) believed that the effect of individual and psychological factors on the ranchers` nonparticipation is much (Table 2).

*- Description effect of individual and psychological factors on the ranchers` nonparticipation*

8 items, in the form Likert scale, were used to identify the effect rate of individual and psychological factors on the ranchers` nonparticipation, scores were

**Table 2.** The rate influence of psychological factors on lack of participation of ranchers (n=110).

Rate of influence	Frequency	Percent	Valid percent	Cumulative percent
Little	1	0.9	1	1
Moderate	32	29.1	30.8	30.8
Much	63	57.3	60.6	60.6
Very much	8	7.3	7.7	7.7
Non respond	6	5.5	-	-
Total	110	100	100	-

Mode: Much

Prioritizing the items based on the mean statistic, the maximum effect of individual and psychological

factors on the ranchers` nonparticipation with the averages of 4.165, 4.157, and 4.101 includes the

beneficiaries` intendency to team and group work, lack of motivation to participate in executing the pastures management plans, and unconformity of the plans with the villagers needs, respectively.

*- Description effect of social factors on the ranchers` nonparticipation*

10 items in the form of Likert scale, were used to identify the effect rate of social factors on the

ranchers` nonparticipation, then, all items were classified as 10-17 (very little), 18-26 (little), 27-35 (moderate), 36-44 (much) and 45-53 (very much). Findings showed that the majority of the studied persons (53.8 percent) believed that the effect of social factors on the ranchers` nonparticipation is much (Table 4).

**Table 3.** The rate influence of social factors on lack of participation of ranchers (n=110).

Rate of influence	Frequency	Percent	Valid percent	Cumulative percent
Much	37	33.6	46.2	46.2
Very much	43	39.1	53.8	100
Non respond	30	27.3	-	-
Total	110	100	100	-

Mode: Very much

Prioritizing the items based on the mean statistic, the maximum effect of social factors on the ranchers` nonparticipation with the averages of 4.630, 4.613, and 4.607 includes the beneficiaries` distrust to natural resources officials and plan executers, unavailability of health and welfare amenities, and inappropriate dealing of the governmental officials with the ranchers, respectively.

*-Description effect of economic factors on the ranchers` nonparticipation*

6 items in the form of Likert scale were used to identify the effect rate of economical factors on the ranchers` nonparticipation, then, all items were classified as 6-10 (very little), 11-16 (little), 17-22 (moderate), 23-28 (much) and 29-34 (very much).

**Table 4.** The rate influence of economic factors on lack of participation of ranchers (n=110).

Rate of influence	Frequency	Percent	Valid percent	Cumulative percent
Little	5	4.5	4.8	4.8
Moderate	68	61.8	65.4	70.2
Much	31	28.2	29.8	100
Non respond	6	5.5	-	-
Total	110	100	100	-

Mode: Moderate

Prioritizing the items based on the mean statistic, the maximum effect of economical factors on the ranchers` nonparticipation in executing the plans

Findings showed that the majority of the studied persons (65.4 percent) believed that the effect of economical factors caused an average level of the ranchers` participation (Table 4).

with the averages of 4.092, 3.927, and 3.615 includes the financial inability for participation, seasonality of

occupations, and lack of credits for executing the plans, respectively.

*- Description effect of political factors on the ranchers` nonparticipation*

8 items in the form of likert scale, were used to identify the effect rate of political factors on the ranchers` nonparticipation, then, all items were

classified as 8-13 (very little), 14-20 (little), 21-27(moderate), 28-34 (much) and 35-41 (very much). Findings showed that almost all of the studied persons believed that the effect of political factors caused a much and very much level of the ranchers` participation (Table 5).

**Table 5.**The rate influence of political factors on lack of participation of ranchers (n=110).

Rate of influence	Frequency	Percent	Valid percent	Cumulative percent
Much	48	43.6	50	50
Very much	48	43.6	50	100
Non respond	14	12.7	-	-
Total	110	100	100	-

Mode: Much & Very much

Prioritizing the items based on the mean statistic, the maximum effect of political factors on the ranchers` nonparticipation in executing the plans with the averages of 4.70, 4.591, and 4.529 includes the imposition of the governmental management and ignoring the people's traditional and usual styles,

concentration of the decision-making authority, and the government's inattention to the role of NGOs, respectively.

**Table 6.**The rate influence of educational factors on lack of participation of ranchers (n=110).

Rate of influence	Frequency	Percent	Valid percent	Cumulative percent
Moderate	47	42.7	52.8	52.8
Much	40	36.4	44.9	97.8
Very much	2	1.8	2.2	100
Non respond	21	19.1	-	-
Total	110	100	100	-

Mode: Moderate

*- Description effect of educational factors on the ranchers` nonparticipation*

5 items in the form of Likert scale were used to identify the effect rate of educational factors on the ranchers` nonparticipation, all items were classified as 5-8 (very little), 9-13 (little), 14-18 (moderate), 19-23 (much) and 24-29 (very much). Findings showed that the majority of the studied persons (52.8 percent) believed that the effect of educational factors on the ranchers` nonparticipation is moderate (Table 6).

Prioritizing the items based on the mean statistic, the maximum effect of educational factors on the ranchers` nonparticipation with the averages of 4.387, 4.059, and 3.660 includes the lack of enough contact with the natural resources agents, lack of intention to the educational needs of the ranchers, and non-holding of suitable extension-educational courses to participate in the pastures management plans, respectively.

- *Determination of effective factors on lack of participation of ranchers*

Pearson coefficient of correlation and multiple regression analysis were respectively used to determine the relationship between the independent variables on the dependent one; results are illustrated below. Study's data showed that there is a positive and significant relationship at 0.99% level (sig 0.000) between the ranchers' nonparticipation in executing the pastures management plans and the individual and psychological, social, educational, economical, and political factors. Using stepwise regression, to identify the explaining variables, two variables of educational and social factors were entered in the stepwise regression, respectively.

Educational factor (x1) was the first variable entered in the equation meaning that this variable has the highest effect on the ranchers' nonparticipation. In this stage, the correlation coefficient and the adjusted coefficient of determination were 0.678 and R2 0.435, respectively. Considering the coefficient of determination, this variable has determined 43.5% of the dependent variable's variance.

At the second stage, variable of social factor (x2) was entered in the equation. The correlation coefficient and the adjusted coefficient of determination were R-0.759 and R2-0.536, respectively. Based on the findings, this variable has explained 53.6% of the dependent variable's changes (Table 7).

**Table 7.** Stepwise regression of lack of participation of ranchers.

Variables	R	R Square	Adjusted R Square
Educational factors	0.678	0.459	0.435
Social factors	0.759	0.577	0.536

Regression variables coefficients are illustrated in Table 8.

**Discussion**

This study showed that the lack of participation of the studied person's majority was in moderate level. This

is due to several factors, especially educational and social factors. In addition, the educational and social factors had the major role in explaining the ranchers' nonparticipation.

**Table 8.** coefficients of lack of participation of ranchers.

Variables	B	Beta	T	Sig.
Educational factors	1.264	0.518	3.303	0.003
Social factors	0.444	0.378	2.411	0.025
Constant	-11.139	-	-	-

Thus, the linear regression equation, based on  $\beta$ , is:

$$Y = 0.518 X_1 + 0.378 X_2$$

Educational factor is the most important variable affecting the ranchers' nonparticipation in implementing the pastures management plans in Kohgeloyeh city. As most of scholars consider the education as the main core of participation process, holding training course can improve the capabilities of clientele to have a optimize participation in preserving the pasture.

Shahid Zandi (1997) and Abouyeh (2001) concluded that holding the pastures management educational courses and the pastures managers' participation in the extension courses has the major effect on the ranchers' participation. Khatoun Abadi *et al* (2001) showed that the most important factors of the ranchers' participation in pastures reclamation are education and awareness variables. Parawansa (2002), Molaei (2001), Saadi (1998), and Shahid Zandi (1997) have confirmed the role of educational factors in the nonparticipation.

In the second step, as the social factor was added, two variables of the educational and social factors explained 53% of ranchers' nonparticipation in executing the pastures management plans.

Considering to social factors in general and attracting trust of beneficiaries to the natural resources, along with the others mentioned factors has this potential

to guarantee the participation of ranchers in protecting of pastures.

Ansari (1994) concluded that factors causing the failure of participation plans are related to the experts and planners' inattention and lack of support to the local people and ranchers. Others such as Shaeri and Saadi (2003), Parawansa (2002), Zarei (1999), Saadi (1998), Shahid Zandi (1997) and Hosseinpour (1993) confirmed the social factors' role in the beneficiaries' nonparticipation.

Suggestions are provided based on the findings and results of the study and to participate the ranchers in executing the pastures management plans in Kohgeloyeh city.

According to the results of prioritizing the items of pastures managers' nonparticipation,

1. It is suggested that the organization of pastures and forests provides the needed seed for the ranchers so that they would participate in seeding and sowing.

2. Based on the effect of the educational factors, it is suggested that natural resources agents have enough contacts with the ranchers, pay attention to the educational needs of the ranchers, and hold suitable educational-extension courses for the ranchers' participation in the pastures management plans.

3. Based on the effect of the social factors, it is suggested that the governmental officials and plan beneficiaries have a suitable dealing with the ranchers, provide the necessary healthy and welfare amenities for the ranchers, and try to increase the trust of beneficiaries to the natural resources officials and plan executers by actualizing the organization's promises.

## References

**Abouyeh FD.** 2001. Relationship between some of the influencing factors in attraction participation of animal husbandries in protection and reclamation

pastures of Semnan province. Msc thesis of Science and Research Branch, Islamiz Azad University, Tehran, Iran, chapter 2, p.52.

**Hoeinpour A.** 1993. Participation necessity and educational needs assessment of animal husbandries in protection of soil and watershed management. Msc thesis of Tarbiat Modares university, Iran.

**Kazemi Roudi M.** 2005. Investigation effects of pastures management projects on incomes ranchers. Msc thesis of Science and Research Branch, Islamiz Azad University, Tehran, Iran, chapter 2, p.39.

**Mirza Ali, A.** 1999. Identifying and evaluating preventing factors in pastures reclamation. Msc thesis of Sanati university, Iran.

**Molaei R.** 2001. Assessing effectiveness of extension education in protection and reclamation of pastures in Zanjan province. Msc thesis of Science and Research Branch, Islamiz Azad University, Tehran, Iran, chapter 2, p.43.

**Saadi H.** 1998. Study on obstacles of people participation in natural resources and providing extension-education patterns for improving participation affairs. Jangal and Marta 42.

**Sabouni A.** 2006. Influencing factors on rural ranchers participation in pastures reclamation projects of Kermanshah Province. Msc thesis of Science and Research Branch, Islamiz Azad University, Tehran, Iran.

**Shaeri A.M , Sadi H.A.** 2003. Manual guide of participation and natural resources extension. Tehran: Pouneh publication. chapter 2, p.12.

**Shahid Zandi K.** 1997. Effective factors on animal husbandry participation in pastures reclamation. Msc thesis of Tehran university, Iran.

**Shahidi M.** 1998. Investigation some effective factors on participation in irrigation projects

perceived by farmers of west province in Iran. Msc thesis of Tehran university, Iran, chapter **2**, p.32.

**Shirazi M.** 1997. Investigation methods of attracting animal husbandries participation in pastures management plans in Saveh region. Msc thesis of

Science and Research Branch, Islamiz Azad University, Tehran, Iran.

**Zarei H.** 1999. Investigation on participation obstacles in administrative systems. Tahavol edari 24.