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The Factors Influencing the Effectiveness of Education-Extension Activities in Revival of Natural Resources of Saravan County

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ABSTRACT

This descriptive-correlational research aims at studying the factors influencing the effectiveness of the education-extension activities in revival of the natural resources of Saravan County. The population includes all beneficiaries of Saravan'snatural resources who are 1175 people (n=1175), 280 of which were selected through stratified proportional random sampling as the sample data, using Cocharan's formula (n=280) which finally 270 questionnaires were analyzable. The research tool was a questionnaire that its justifiability was confirmed by the expert panel and its validity coefficient was calculated between 0.81 to 0.71 using SPSS software. The results from correlation test show that there is a positive and significant relation between variables like education, agricultural activity background, the size of agricultural fields, number of the livestock, annual income, the income from agriculture, level of participation in social institutions, level of benefiting from different educational courses, level of satisfaction with elements of the held educational plans and the attitude toward revival, preservation and development of natural resources with effectiveness of education-extension activities in revival of the natural resources. Also, according to the results from the step by step multiple regression of variables like level of benefiting from different educational courses, the agricultural income, education level, the attitude toward revival, preservation and development of natural resources and participation in social institutions, explain 43% of the changes in effectiveness of education-extension courses in revival of natural resources.

KEYWORDS: Education-extension Activities, Revival of Natural Resources, Saravan.

INTRODUCTION

Forests and pastures are considered as the vastest environmental resources of the earth and because of their role in controlling the surface waters, fighting the air pollution, fighting soil erosion, preventing noise pollution, climate adjustment, preventing landslides, producing pharmaceutical and industrial materials and keeping the balance of the ecosystems etc., they are considered as the basic factors in sustainable development process (Arayesh and FarajollahHoseini, 2010). Forests and pastures are the most important renewable natural resources which in case of being utilized more than their production capacity they will gradually lose their revitalization capacity and natural balance and will be destroyed soon (IrannejadParizi, 2002; MahboubiGholami and Zolfaghari, 2003; Department of Natural Resources of Isfahan Province, 2005).

Although there have beenlots of discussions over the importance of natural resources and their decisive role in sustainable development, but still this category has not been accepted tangibly and seriously by the people of our country specially the ones who are in close contact with this resources and direct and indirect utilization of them (Pazouki, 2001; Kardovani, 1992).

The main part of the fodder needed to feed the livestock is gained from the pastures. At the time being, pastures of our country produce over 21 million tons of dry harvestable fodder, 50 percents of which are harvestable (Forests and Rangelands and Watershed Management Organization of the Country, 2005). Also, the pastures have effective roles in soil preservation and water preservation. Where ever there are dense vegetations or rich pastures, the soil erosion by water or the wind rarely take place and during heavy rains, fewer floods happen, also the vegetation increases the water permeability of the soil by slowing the water movement on the ground (Department of Natural Resources of Isfahan Province, 2005). Considering the role and importance of the vegetation of the pastures in water and soil preservation and feeding the livestock, but unfortunately still the villagers and the ranchers use plant as fuel. Annually 5.4 million cubic meters of the pasture shrubs are harvested illegally for providing energy (The Forests, Rangelands and watershed Management Organization of the Country, 2005; MahboubiGholami and Zolfaghari, 1992; Pazouki, 2001). At the time being, utilization of

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pastures in Iran is not according to the scientific criteria at all and the pastures are not viewed as capitals but as windfalls, easy profits and free treasures (Pazouki, 2001; Kardovani, 1992).

People destroy the pastures directly in different ways including turning the pastures into rain fed and irrigates agricultural lands, providing fodder for the live stocks, untimely grazing of the live stocks, providing fuel from the pastures, providing constructional materials and etc. (The Forests, Rangelands and Watershed Management Organization of Iran, 2005). John and William (2000) state that, grazing of the live stocks may cause topsoil compaction and destruction of the soil surface. Also, excessive livestock grazing causes inappropriate conditions for root growth and decrease of water permeability of the soil (Eskandari, 1996). At the time being, the number of the live stocks have been estimated 1.5 times more than the capacity of the pastures of the country (The Forests, Rangelands and Watershed Management Organization of the Country, 2005). Other factors that have a role in destruction of the natural resources are (Makhdoum, 2001; Kouchaki, 1997; IrannejadParizi, 2002):

- Increasing population growth and as a result, utilization of the resources more than their potency.
- Uncontrolled expansion of the cities and destruction of the natural areas for housing.
- Lack of knowledge and awareness of different units of the society and beneficiaries of the natural resources about the importance of the natural resources.
- Lack of systematic planning by the top managers about preservation of the natural areas.

The forests of Sistan-o-balouchestan province has been lately subject to numerous damages that cause elimination of the forests or their regression. This is not only due to the drought factors but also because of the pressure from human activities including irregular and excessive grazing of the live stocks, utilization of the mines, lopping and etc during the years (Forests and Rangelands Organization of Sostan-o-baluchestan, 2013). At the time being, over hundred thousands of families with 850 thousands of live stocks, practice ranching most of which are traditional and this livestock number is more than allowed capacity of utilization of the natural resources.

Investigation of violates and aggressions to areas of national resources shows that, the mean reason of violation and incorrect utilizations is due to lack of knowledge and loss of awareness about methods of optimal utilization of the natural resources and how to protect them (Salehnasab, 2008). So, increase of cognition and awareness about how to utilize the natural resources properly will cause the individuals to become one of the main guardians of national resources themselves (Abbasi, 2009). Notification of people of the society about importance and sensitivity of the natural resources and guiding them in preservation and appropriate and systematic utilization are the goals of extension of natural resources (Sedighi, 2005).

Generally, education is a regular and continuous current that aims at development of physical, cognitive, mental, moral and social growth or generally individual's personality development for acquisition of socially acceptable norms (Seif, 2009). Hence, extension can play the most important role in utilization, preservation and revival of natural resources through education and performing the role of notifying the public that certainly will have other positive effects like sustainable development and creating an acceptable and appropriate environment in society. Also, it can transfer necessary proficiency and knowledge to the beneficiary and try to increase his awareness level and managerial abilities through changing the insight of the beneficiaries. There have been researches regarding abovementioned research topics as follows:

Arayesh and FrajollahHoseini (2010), regarding the factors influencing the public participation in preservation, revival, development and utilization of renewable natural resources have concluded that, there is a significant relationship between variable like the political-legal, social-cultural, capabilities of advocates of the natural resources, construction and planning of extension organization, economic and psychological variables with non-cooperative behavior of people. Also, among variables of factors like political-legal, social-cultural, economic, psychological capabilities of the advocates of natural resources, the contents of natural resources' extension plans and extensional planning, only the social-cultural factors play role in public participation.Roudgarmi et al (2011), believe that there is a negative and significant relation between the width of agricultural fields owned by the farmers and level of pasture destruction. Faham et al (2007) believe that, providing the background for public membership and cooperation with non-governmental organizations, cooperation in holding education-extension courses of natural resources and participation in holding the symbolic ceremonies like natural resources week, are considered as the areas of public participation attraction regarding extension and development of the natural resources. Hasanshahi et al (2009), during a study aimed at analyzing the sustainable management of the natural resources proved that, variables like level of agricultural income, agricultural background, number of literate members of the family, participation in extensional courses and level of non-agricultural income have the ability to explain 83% of the changes in sustainable management of the natural resources variable by the farmers. Shariti et al (2003), concluded that there is a positive and significant relation between the literacy level, knowledge level about the importance and benefits of forests , participation in educational-extensional courses, using extensional journals and magazines, educational films, lecture sessions and educational plans on radio and television, the number of contacts with promoters and guardians of the honor and fuel provision by government with the level of villager's participation in forest

preservation. MalekMohammadi and Mirbod (2005) proved that in comparison of the success level in each activity of natural resources management extension, respectively, extensional educations about awareness, preservation, development, revival and utilization of natural resources have the first to the fifth priorities. Mabbutt (1984), concluded through his research that the beneficiaries' lack of knowledge in the field of appropriate utilization of natural resources has a great role in desertification.

Therefore, to deal with the challenge of destruction of natural resources, basic activities like education and extension seem inevitable because a huge part of this destruction is due to lack of public awarenesstoward the natural resources and not having enough skills in optimal use of these resources. So, this research aims at assessing and studying the effectiveness of educational and extensional activities in revival of SaravanCounty's natural resources with the following objectives;

- To describe the individual, agricultural and economic characteristics of the beneficiaries of SaravanCounty's natural resources.
- To study the effectiveness of education-extension activities in revival of SaravanCounty's natural resources.
- To study the participation level of the beneficiaries in social institutions, utilizing the information sources, level of benefiting from different educational courses, the satisfaction level of elements of the held educational plans and the attitude toward revival, preservation and development of SaravanCounty's natural resources.
- to study explanation level of dependent variable changes (the effectiveness of the education- extension activities in revival of natural resources of Saravan County) by independent variables of the research.

MATERIALS AND METHODS

The Study Area

Saravan is a county of Sistan-o-balouchestan province, located in the extreme south-east of the vast Iran Country, in vicinity of Khash, Iranshahr and Sarbaz counties and in neighboring of Pakistan. According to the last population and housing census in 1385 population of Saravanwas 270 thousands of people. The area of this county is 28408 square kilometers that include 15.2 percents of the total area of the province. Its altitude is 1173 meters and its highest place is BirakMountain with altitude of 2490 meters from the sea level. The main occupation of people of this area is farming and ranching and its major agricultural products are date, wheat, barley, corn, alfalfa etc. the climate is dry and hot, desert, wilderness and the rainfall is low. In winter, the weather is temperate and the average annual rainfall is 100mm. lots of the villages have high-quality and fertile soil. BiragZaboli Mountains, SefidgashtMountain and SorkhMountain in Bamposht are considered as the highest mountains of this county. SiahanMountains are the longest mountains of this county that start from Taftan's vicinity and are continued to Nahouk on Pakistan domain. MashikRiver is Saravan's most important river originating from the south range of Saravan near Khash and it waters south of Sib-o-Soran and north of Bamposht, south of Esfandak and Koohak after crossing the Zaboli region. Vegetation of this area includes herbs like: Gisher, Kona, Zirouk, Bereshtouk, Daz, Golmarvak and Panirbad. Daz- Decoction of this plant is used for curing chest pain. Golmarvak- This plant has pharmacological properties like pain relieving and detoxification when a biting animal like snake bites a person; this plant is used for detoxification. Panirbad- This type of bush is a part of the main vegetation of the Gashtregionthat has green fleshy leaves and it is curative. It also preserves the soil from storm. Tamarisk- The old and thick trees that have grown in this area are very resistant to storm and drought and they prevent dust. Forests and Rangelands Organization of Sistan-o-balouchestan province (2013).

Research Method

This research if of qualitative research types in terms of the nature, it is non-experimental by the variable control level, by the goal it is among the applied researches and it is considered correlational by the method. Population of this research include whole beneficiaries of natural resources of Saravan County that equal 1175 people (n=1175). The sample mass has been determined 280 people using Cocharan's formula (n=280), then considering the size of each level of the population (suburbs of Bamposht and Jalagh counties) this sample was randomly taken from each level, using stratified proportional sampling. After collecting the questioners, 270 of them had the capability to be analyzed. The main tool for data collection was a questionnaire including 3 sections that were designed and edited through reviewing the previous posts and considering the research goals and hypotheses.The first section of the questionnaire was devoted to measurement of dependent variable (Effectiveness of education-extension courses in revival of natural resources)(8 items). The second section studied the participation level of the beneficiaries in social institutions (5 items), using the information sources (8 items), the level of benefiting from different educational courses (6 items), level of satisfaction with components of the held educational plans (8 items) and attitude toward revival, preservation and development of the natural resources (11 items) and finally in the last section, the personal, agricultural and economic

characteristics of the beneficiaries were discussed using short and closed questions. To determine justifiability of the questionnaire, professors of extension sciences and agriculture education and experts of natural resources of Saravan County were provided with several versions of the questionnaire and necessary corrections were done considering their suggestions. To determine the stability of the research tools, the preliminary tests were taken and using the resulting data and special formula of Cronbach's alpha coefficient in SPSS software, the stability of variables of the questionnaire was obtained between 0.71 and 0.81 that shows the stability appropriate for the research tool. To analyze the data, descriptive and analytic statistics were employed. The data were described using circumstantial evidences like frequency, frequency percentage, mean, standard deviation and coefficient of the analytical changes. To test the hypothesis, Spearman's correlation test and multiple regression were applied.

FINDINGS AND DISCUSSIONS

Personal, Agricultural and Economic Characteristics of the Beneficiaries

The average age of the beneficiaries is 54 with standard deviation of 13, majority of which (27.80%) are in 51-60 age groups and the average of the background of respondents' agricultural activity is 19 with standard deviation of 9. The background of agricultural activity of most beneficiaries (92 people or 42.6%) is between 21 to 30 years. The respondents most of which (81.5%) are owners, practice agriculture in average of 2.76 acres of fields. The main occupation of majority of the beneficiaries (95.4%) is farming and sub-occupation of most of them is ranching (68.9%), while majority of the respondents (36.1% or 78 of them) breed 21 to 30 heads of livestocks in traditional methods and use the private farms or the pastures to feed them (table1). The average annual income of the beneficiaries was calculated 45 million rials with standard deviation of 12.21 and the highest frequency (123 people or 57%) also belong to 41.60 million rials income category. The results of the research show that the average income of the beneficiary farmers is 23 million rials with standard deviation of 7.82 and the income from agriculture of most of them (98 people or 45.4%)is between 21 to 30 million rials (table1).

In terms of education level, majority of the beneficiaries (137 people or 63.4%) are illiterate. Majority of the respondents (199 people or 92.1%) are men and the rest (17 people or 7.9%) are women. 29 of the beneficiaries (86.6%) reside in cities and 187 of them (86.6%) live in villages.

Table1. Description of Personal, Agricultural and Economic Characteristics of the Beneficiaries (n=270)

Variable	mean	Standard Deviation	Minimum	Maximum
age (years)	54.02	13.40	23	78
background of agricultural Activity(years)	19.00	9.05	1	37
size of agricultural fields (acres)	2.76	3.68	2	18
number of livestocks (heads)	19.03	2.44	5	45
annual income (million rials)	45	12.21	15	65
agricultural income (million rials)	23	7.82	5	40

(Source: Research findings)

Effectiveness of Education-extension Courses in Revival of Natural Resources

Effectiveness of education-extension courses in revival of natural resources was evaluated in form of 8 items and the beneficiaries were asked to specify their answers based on Likert's 5 sectional scale, from very low(1) to very high (5). Results of table 2 imply that "the impact level of the courses in creating positive attitude toward pasture revival" with variation coefficient of 4.39 (M=1.52; SD=0.08) is more important than other items and owns the first priority and the "effectiveness level of the courses in prevention of conversion of renewable natural resources to agricultural lands" with variation coefficient of 44.72 (M=1.44, SD=0.50) is in the last priority.

Table2- Prioritization of Effectiveness of Education- ExtensionCourses in Revival of Natural Resources (n=270)

Item	Mean*	Standard Deviation	Variation Coefficient	Rating
Level of effect of the courses on creation of positive attitude toward revival of the pastures	1.52	0.08	4.39	1
Impact level of the courses on fencing the pastures	2.25	0.43	19.11	2
impact level of the courses on revival of the pastures after their utilization	4.19	0.84	20.04	3
The effect level of courses on guiding the member to group cooperation to revive the natural resources	2.51	0.51	20.31	4
The effect level of the courses on segmentation of the pastures	33.35	0.99	28.04	5
The effect level of the courses on production,transfer and planting of saplings	1.42	0.50	35.21	6

Effect of the courses on using the ideas of villagers for reviving the natural resources	1.48	0.51	34.45	7
Effect of the courses on prevention of converting the renewable natural resources to agricultural lands	1.44	0.50	44.72	8

*Very Low= 1, Low= 2, Average= 3, High= 4, Very High= 5 (source: research results)

Level of Participation in Social Institutions

To evaluate participation in social institutions, the beneficiaries were requested to answer 5 questions in form of Likert's 5 sectional spectrum (very low=1 to very high=5). The results of table 3 imply that, the item of "cooperation level with the rural cooperative" with variation coefficient of 15.36 (M=4.23; SD=0.65) have the first priority and the item of "cooperation with Basij (Mobilization) base" with variation coefficient of 75.40% (M=1.22; SD=0.92) is the last priority.

Table3- Priority of Cooperation in Social Institutions (n=270)

Item	Mean*	Standard Deviation	Variation Coefficient	Rating
Cooperation level with the rural cooperative	4.2	0.65	15.36	1
Cooperation level with parents and teachers association of school	3.32	0.58	17.46	2
Cooperative level with the mosque	2.02	0.71	35.14	3
Cooperative level with the library	1.58	0.76	48.10	4
Cooperation level with Basij base	1.22	0.92	75.40	5

*Very Low=1, Low=2, Average=3, High=4 and Very High
(Source: Findings of the Research)

Level of Using the Information Sources

Using 8 Items in the form of Likerts's 5 sectional spectrum (Very Low=1 to Very high), the beneficiaries were requested to specify their usage level of the information sources. According to results of the item "neighbors and colleagues" with variation coefficient of 34.26 (M=3.21; SD=1.10) is the last priority (Table4).

Table4- Priority of Using Information Sources (n= 270)

Item	Mean*	Standard Deviation	Variation Coefficient	Rating
Neighbors and colleagues	4.80	0.39	8.12	1
Family	4.76	0.42	8.82	2
Experts of natural resources and farmers	4.32	0.51	11.80	3
Workshops and education courses	4.37	0.57	13.04	4
Scientific Visit	4.42	0.61	13.8	5
Radio and Television	4.17	0.90	21.58	6
Books and publications	3.73	1.06	28.41	7
Internet	3.21	1.10	34.26	8

*Very Low= 1, Low= 2, Average= 3, High= 4 and Very High= 5
(Source: Findings of the Research)

Level of Benefiting from Different Educational Courses

To evaluate the level of benefiting from different educational courses, 6questions in form of Likert's 5 sectional spectrum (very low:1 to very high:5) were applied. The level of benefiting from firefighting training with variation coefficient of 23.18 (M=3.45; SD=0.80) is the first priority and level of benefiting from excavation and sowing education with variation coefficients of 91.46 (M=1.64; SD= 1.50) is the last priority.

Table 5- Prioritization of Level of Benefiting from Different Educational Courses (n=270)

Item	Mean*	Standard Deviation	Variation Coefficient	Rating
Level of benefiting from fire fighting training	3.45	0.80	23.18	1
Level of benefiting from replacement of ossil fuels with firewood	3.44	0.93	27.03	2
Level of benefiting from training of preserving the natural resources	2.50	0.87	34.8	3
Level of benefiting from planting training	2.26	0.84	37.16	4
Level of benefiting from training regulations of natural resources	1.55	1.39	89.67	5
Level of benefiting from excavation and sowing training	1.64	1.50	91.46	6

*Very Low= 1, Low= 2, Average=3, High= 4 and Very High=5
(Source: findings of the research)

The Level of Satisfaction with Elements of the Held Educational Programs

To assess the level of satisfaction with elements of the held educational programs, 8items in form of Likert's 5 sectional spectrum (very low:1 to very high:5) were applied and the respondents were requested to specify their answers in form of 5 mentioned spectrums. The results show that, satisfaction with the place of holding the

courses, with variation coefficient of 15.97 (M=4.32; SD=0.69) is the most important item and owns the first priority and level of satisfaction with time of holding the courses with variation coefficient of 30.79 (M=3.28; SD=1.01) is the last priority (Table6).

Table6- Prioritization of Level of Satisfaction with Elements of the Held Educational Programs (n=270)

Item	Mean*	Standard Deviation	Variation Coefficient	Rating
Level of satisfaction with place of holding the courses	4.32	0.69	15.97	1
Level of satisfaction with teaching methods of the trainers	4.32	0.70	16.20	2
Level of satisfaction with contents of the presented programs	4.10	0.70	17.07	3
Level of satisfaction with educational aids	4.18	0.76	18.18	4
Level of satisfaction with duration of the Courses	3.82	0.85	22.25	5
Level of satisfaction with class discussions	2.43	0.61	25.10	6
Level of satisfaction with teacher's behavior to the learners	3.12	0.90	28.21	7
Level of satisfaction with time of holding the courses	3.28	1.01	30.79	8

*Very Low= 1, Low=2, Average=3, High=4, Very High= 5
(Source: Findings of the research)

Attitude toward Revival, Preservation and Development of the Natural Resources

To assess the attitude toward revival, preservation, and development of the natural resources, 11 items were applied and the beneficiaries were requested to specify their answers based on Likert's 5 sectional spectrum from very low (1) to very high (5). The results of table7 imply that item of "indiscriminate utilization of the natural resources will cause its destruction" with variation coefficient of 8.01 (M=4.74; SD=0.38) have the first priority and the item of "attending the educational courses" is not useful always and under all conditions" with variation coefficients of 38.17 (M=1.86; SD=0.71) have the last priority.

Table7- Prioritization of the Attitude toward Revival, Preservation and Development of the Natural Resources(n=270)

Item	Mean*	Standard Deviation	Variation Coefficient	Rating
Indiscriminate utilization of the natural resources will cause its destruction	4.74	0.38	8.01	1
Attending the education-extension courses cause satisfaction of the beneficiaries	4.70	0.45	9.57	2
The educational courses caused improvement in condition of the natural resources	4.33	0.62	14.31	3
Preservation and revival of the natural resources is a difficult job and the local people cannot manage it	4.21	0.61	14.48	4
The educational courses, cause improvement in attitude of the beneficiaries in field of preservation, revival and development of areas of natural resources	4.18	0.69	16.50	5
I have no desire to attend the educational courses in natural resources' field.	4.05	0.67	16.45	6
The educational courses increase knowledge of thebeneficiaries about preservation, revival and development of the areas of the natural resources.	3.85	0.75	19.48	7
Participation in educational courses cause optimal utilization of the natural resources	3.98	0.88	22.11	8
the beneficiaries have low literacy levels so, the educational courses have not much effect	3.38	0.87	25.73	9
I encourage the others to participate the educational courses	2.24	0.81	36.16	10
Participation in educational courses is not useful always and under all conditions	1.86	0.71	38.17	11

*Very Low=1, Low=2, Average=3, High=4 and Very High=5
(Source: Findings of the research)

Correlation between Effectiveness of Education-Extension Courses in Revival of the Natural Resources and the Research Variables

The results of table8 show that there is a positive and significant relationship in level of 99 percent between the education and effectiveness of education-extension courses in revival of the natural resources. Shariat et al (2003) confirm the mentioned results.

Also, there is a positive and significant relation in level of 95 percent between agricultural background and effectiveness of education-extension courses in revival of the natural resources(table8). HasanShahi et al (2009) obtained the same results from their research.

The results of table 8 imply that there is a positive and significant relationship in 99 percents level between size of the agricultural fields and effectiveness of the education-extension courses in revival of the natural

resources. Roudgarmi et al (2011), obtained opposite of the mentioned results. There is a positive and significant relationship in 99 percents level between the annual income and effectiveness of the education-extension courses in revival of the natural resources (table8). Arayesh and FarajollahHoseini (2010), Hasnshahi et al (2009), also emphasize the mentioned results in their researches.

Also there is appositive and significant relationship in 99 percents level, between the income from agriculture and effectiveness of the education-extension courses in revival of the natural resources (table8). Arayesh and FarajollahHoseini (2010), Hasanshahi et al (2009), also confirm these results.

There is a positive and significant relation in 99 percents level between the cooperation level in social institutions and effectiveness of the education-extension courses in revival of the natural resources (table8). Arayesh and FarajollahHoseini (2010), Fahamet al (2007) also achieve the same results in their research.

The results from table8 show that there is a positive and significant relationship in 99 percents level, between the level of benefiting from different educational courses and effectiveness of the education-extension courses in revival of the natural resources. Faham et al (2007), Hasanshahi et al (2009), Shariati et al (2003), MalekMohammadi and Mirbod (2005), also confirm the mentioned results.

There is appositive and significant relationship in 99 percents level between attitude toward revival, preservation and development of the natural resources and effectiveness of the education-extension courses in revival of the natural resources. Mabbut (1984) has also confirmed the results.

Table8- Relation between Effectiveness of the Education-extension Coursesin Revival of the Natural Resources with Other Variables of the Research (n=270).

First Variable	Second variable	Correlation Coefficient	r	P
age	Effectiveness of the education-extension courses in revival of the natural resources.	Spearman	0.067	0.328
education	Effectiveness of the education-extension courses in revival of the natural resources	Spearman	0.298**	0.000
background of agricultural activities	Effectiveness of the education- extensioncourses in revival of the natural resources.	Spearman	0.146*	0.016
Size of Agricultural fields.	Effectiveness of the education-extension courses in revival of the natural resources.	Spearman	0.299**	0.000
Number of the livestock	Effectiveness of the education- extensioncourses in revival of the natural resources	Spearman	0.136**	0.000
Annual income	Effectiveness of the education-extension courses in revival of the natural resources	Spearman	0.300**	0.000
Agriculture income	Effectiveness of the education- extensioncourses in revival of the natural resources.	Spearman	0.391**	0.000
level of cooperation in social institutions	Effectiveness of the education- extensioncourses in revival of the natural resources.	Spearman	0.331**	0.000
level of using information Sources.	Effectiveness of the education- extensioncourses in revival of the natural resources.	Spearman	0.897	0.425
Level of benefiting from different educational courses.	Effectiveness of the education- extensioncourses in revival of the natural resources.	Spearman	0.594**	0.000
Level of Satisfaction with elements of the held educational programs	Effectiveness of the education- extensioncourses in revival of the natural resources	Spearman	0.320**	0.000
attitude toward revival , preservation and development of the natural sources	Effectiveness of the education- extensioncourses in revival of the natural resources	Spearman	0.159**	0.019

*Significant Level of 95 Percents
**Significant Level of 99 Percents
(Source: Findings of the research)

Multiple Linear RegressionAimed at Edition of the Equation of Effectiveness of Education- Extension Courses in Revival of the Natural Resources

In this research, for explaining and determining the linear equation of the regression of education-extension courses' level in revival of the natural resources, (Y) is applied as independent variable through the significant predictor variables (X) of the analysis of linear multiple regression, using step by step method.

The amount of β shows the importance of independent variables in explanation of dependent variables. In this regression, level of benefiting from differenteducational courses (β=0.0458; t=7.836; p≤ 0.000), the income from agriculture (β=0.150; t=2.536; p≤ 0.012), education (β= 0.146; t=2.540; p≤0.012) and attitude toward revival, preservation and development of natural resources (β= 0.111; t= 2.169; p≤ 0.031), respectively are the most important variables that had the greatest role in changes of dependent variables. Therefore, these variables have remained in the ultimate model and rest of the variables was omitted. The results show that the predictor

variables explain 34% of the fluctuations in the dependent variable and the others are related to the factors that have not been discussed in present research. Table9 shows the information about this analysis.

Table9- Analysis of Step by Step Multiple Regression;
Dependent variable (Effectiveness of the Education-extensionCourses in Revival of the Natural Resources)
(n=270)

Dependent Variable	B	Beta	t	Sig
Constant	2.497	….	16.610	0.000
Level of benefiting from different educational courses	0.132	0.458	7.836	0.000
Income from agriculture	3.727	0.150	2.536	0.012
Education	0.024	0.146	2.540	0.012
Attitude toward revival, preservation and	0.082	0.111	2.169	0.031
development of the natural resources.				
Level of participation in social institutions.	0.054	0.118	2.050	0.042

Considering theresults of table9, the resulted linear equation from regression analysis is as follows:
Y= 2.497 + 0.132x1+ 3.727x2+ 0.024x3+ 0.082x4+ 0.054x5

Conclusion and Suggestions

Average of the beneficiaries' age is 54 and majority of them are in 51-60 age group. Also, the average of agricultural activity background of the respondents is 19. The respondents practice agriculture in average of 2.76 acres of lands and majority of them (81.5%) are owners. The number of live stocks of the respondents is averagely 19 heads, average annual income of the beneficiaries is 45 million rials and average agricultural income of the beneficiaries is 23 million rials. Also, in terms of education, most of the beneficiaries are illiterates. The results of correlation test show that, there is a positive and significant relationship between variables like education, agricultural activity background, size of agricultural lands, number of live stocks, annual income, the income from agriculture, participation in social institutions, level of benefiting from different educational courses, level of satisfaction with elements of the held educational programs and attitude toward revival, preservation and development of the natural resources. Also, according to the results from the step by step multiple regression of the variables of benefiting from different educational courses, the income from agricultural education, attitude toward revival, preservation and development of the natural resources and participation in social institutions explain 43% of the changes of education-extension courses' effectiveness in revival of the natural resources. The following instances are suggested based on the results from present study;

- Considering that the beneficiaries had the least satisfaction with the time of holding the educational courses, therefore it is suggested that the time of holding the programs be reconsidered and the educational programs be held on times that the beneficiaries have more chance to participate the educational programs.

- The results of multiple regressions imply that the variables of "benefiting from educational courses" is the most effective variable in revival of the natural resources. So, it is suggested that the officials consider arrangements for the beneficiaries to have more participation in educational programs and the programs be held in order to be have more applications for the beneficiaries.

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