



Identify Variables Affecting Rural Participation in Forest Cooperatives (A case study of Ilam city)

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Abstract

The current research is an applied research, which uses field data and descriptive-correlation and causal-correlation design to analyzing the relationships between variables. This study was an attempt to identify variables affecting rural participation in cooperatives forest by-products in Ilam. Population of this research is exploiters of forests in Ilam. The number of cooperatives and number of members were 38 and 1300 people. Based on Krejcie and Morgan tables, 297 members were selected for this study through stratified random sampling. A questionnaire, which an expert panel guaranteed the validity of it, was data collection instrument. By using Cronbach alpha, the reliability of the questionnaire was measured. Cronbach alpha coefficient was 0.91. The results of Spearman's coefficient of correlation indicated that there is a significant correlation between age, work experience, level of education, ownership of agrarians, extension contacts, attitude to cooperative, trend to participation, distance to nearest agriculture services, social capital, legislation and support legal, cooperative management, level of income, capital, the use of resources of information, and social status with their participation. The results of step-wise multivariate regression showed that age and level of education, ownership of agrarians, extension contacts and social status totally indicate 51.2 % of changes in people's participation.

Keywords: Forest cooperatives, Ilam city, Rural Participation

1. Introduction

A significant part of renewable resources are made of forests and yet life of a large number of people depends on forests. Local human communities use forests in different ways, and forests products are kind of effective in supplying food, employment and other products. Therefore in the presented programs about exploitation of these resources, role of population and local participation in these programs should be considered. If there wouldn't be effective and conscious participation of people and residents of forest areas, then there would be no hope to legal and appropriate exploitation of these resources and possibility of illegal and irregular harvest will increase. The concept of public participation in forestry has been defined as various forms of direct public involvement where people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of specific forestry issues. Merriam Webster defines participation as "association with others in a relationship (as a partnership) or an enterprise usually on a formal basis with specified rights and obligations" (Merriam Webster, 2018). Business dictionary defines Participation as "Joint consultation in decision making, goal setting, profit sharing, teamwork." (Business dictionary, 2018).

Habibi et al (2014) In the study titled of considering amount to partnership of forestment in management of forest and how to improve partnership through multivariable regression found that: variables such as income arise from forest, awareness level and forestmen cognizance of benefits of forest, age and educational level has played a positive role in forest men amount of activities regarding correct management of forest. The above mentioned variable affect about 44% of variable variance depending on upon forest men activates regarding correct management of forests.

Ehsani et al (2012) in a research title considering effective factors on the partnership of agricultural cooperatives members in Ilam province, conclude that there is a meaningful relationship between variables such as age, educational level, area of farm land, income, persuasive contacts, amount of using informative resources, economic, psychological, social features and members partnership in agricultural cooperatives.

Coulibaly Lingani et al (2011) investigated effective factors on the people's partnership in the forest management program in the western Africa. Results indicate that collaborative management programs could be improved by changing administrative structure of forest management group in other to empower members in decision making process. Moreover increase in the women's

partnership and balancing collaborative management program.

Hasannejad et al (2010) in their research examined effective factors on partnership of member of rural development groups in supportive, persuasive activities operated by international projects of carbon sequestration in Hossein Abad Gheenab region located in Sar Bishe County of southern Khorasan province. Results of this research indicated that the most important effective factors on partnership of members of rural development group in supportive, persuasive activities include: marital status, habitation, age, number of family members, annual income of family and the area of the lands that belong to family, in other words, possibility of partnership of member of development group in the mentioned activities increase, as the annual income of family, the member of family members and permanent residents increase. While, increase in age and area of the lands the family have and among married people decreases possibility to partnership of development groups member in supportive and persuasive activities.

Heydarpoor Tootkraleh et al, (2009) in a survey under the title of the role of membership in cooperatives on the exploitation of forest resources of western part of Mazandaran conclude that: there is a meaningful difference between partnership rates of member in exploitation of forest resources. Analysis of correlation in this research indicated that there is a meaningful and positive relationship between the amount of social participation, audiences' participation rate in regeneration participation rate of beneficiaries in the development of forest resources and beneficiaries partnership in exploitation of forest resources.

Sayfi Khodashahri (2009) in his research conclude that there is a relationship between participation in educational-persuasive courses, awareness of principles and regulations of cooperative, cooperatives satisfaction, literacy, membership background, stock price and economic performance with partnership rate.

Baghaei et al. (2008) in a research considered the individual and social factors which are effective on the partnership of rustics in watershed projects at watershed area of zar cheshmeh in shahreza. Finding of Pearson correlation test showed that there is a positive and meaningful relationship between variables such as age, social status, social participation rate, attitude rate toward participation, modernism rate, reliance rate, to different people, inclination rate toward team work and partnership of rustic in watershed projects. In the multi linear regression test variables such as age, social participation rate, attitude toward partnership, modernism rate, reliance rate, to different people, inclination rate toward team work have been able to explain 75.7 percent of

variations related to partnership rate in watershed projects.

Akhavan et al (2007) in his study under the title of considering effective factors of partnership of water cooperative members in management of agricultural water resources of Ghazvin province, concluded that there is a positive and meaningful relationship between farms distance to agricultural service centre, area of agricultural land, amount income, the amount of using informative resources, persuasive contacts rate and farmers who are a water users cooperative in the management of water.

Hejazi and Arabi (2007) in a study considered the effective factors on attracting partnership of non- governmental organizations in conserving natural environment. Result of regression analysis indicate the ability to predict 48.8 percent variance between variables such as educational level, environmental activities background, social factors(providing required base for social activities, mutual relationship between beneficiaries and responsible personnel) and informative factors(familiarity with process and collaborative method and awareness of collaborative capacities of people).

Motavali (2006) in a research under the title of considering obstacles and problems of conserving natural resources in Semnan province with persuasive approach concludes that: there is a reserved and meaningful relationship between variables such as cooperation of government organizations and providing fuel for rustics by government with amount of the problems which exist on the way to conserve natural resources. But there is no meaningful relationship between variable such as experience, cooperation of public organizations and attention to popular partnership in projects and amount of available problems on the way to conserve natural resources.

Shariati et al (2005) in the examination of effective factors on partnership of rustic forest men in conservation of northern and western forests of Iran conclude that; among variables such as literacy level, awareness of importance and benefits of forests, participation in educational- persuasive classes, using persuasive publications and magazine, using educational films, using lecture meetings, using educational programs of radio, using TV frequent contact with promoters, frequent contact with volunteer guards and providing fuel by government, have a meaningful and positive relationship with rustics amount of partnership in conservation of forests. In this research no meaningful relationship between variables such as age, using literacy movement, the number of visiting and awareness of the rule related to conservation, support of forests with partnership was reported. They also conclude that independent variables of providing fuel by government,

awareness of importance and benefits of forest using radio and TV, literacy level, number of contacts with volunteer guard and participation in educational-persuasive class has had the largest effect on the dependent variables (participation in conserving forests).

Khaleghi and Hasan Ghasemi(2004) in their research under the title of considering the effect of economic and social issues on the participation rate of stakeholders in range management projects conclude that: variables such as age, literacy, transportation vehicle, family distance, animal unit, pastoralism experience, hydroponic hectare, dry land hectare and partnership have been considered.

Dedi (2004) believes that homogeneousness of members and stability of small groups has critical effect on the success of cooperative. He also emphasized on the role of participation in exploitation of resources and success of companies.

Joens (2003) in a study under the title of evaluation of Honduras forestry cooperatives concluded that different advantages are attainable via the possibility of more employment, stronger economy, reduction in cutting trees and correct management of forest.

Ned and Franklin (2003) in a study referred to gender as one of the drives of partnership in activities related to conserving forest resources, findings of this study indicate that there is positive relationship between these variable and collaborative activities. Also other researchers (Malek mohammadi, 1995; Azkia, 2001) distinguished mental factors (such as: belief in correct partnership beneficiaries' commitments, attitude toward team work) effective in conservation, regeneration, development and exploitation of renewable natural resources.

Owubah et al., (2001) in their studies conclude that partnership of local residents in forest management programs based on social, economic and population backgrounds such as gender, family distance, literacy level, income, age, marital status and area of the land they owned, forest and ranges by products include flower, leave, stem, root, fruit, peel, gum, resin of some plants which have pharmaceutical, eatable and industrial usage. Harvesting by-products of forest sand ranges of Iran has been common since long time ago. Due the importance of these products and their role in treatment, nutrition and industry. With regard to importance of forests by products role in rustic families economy and also importance of exploitation cooperatives in optimum use of by-products, this research focus on identification of effective variables in rustics partnership in exploitation cooperative of forests by-products.

The most important aspects of inviting people to participate in renewable resources are:

implementing forestry, afforesting and parks projects operation, wood industry, pasturing and desert greening (Sadeghi Garmaroodi, 2000).

In addition to managerial role of people, their participation in protecting forest resources is very important. After participating in conservation and forest resources, people become capable of providing fuel nutritive, industrial requirements of themselves (Khattak, 1998).

Sam Aram(1995) in his research under the title of reasons for partnership of Ghleno Varamin members of cooperative conclude that literacy of members area of agricultural land, experience, more income and planting cereal, separately affect the amount of partnership in the cooperatives affairs.

George (1992) illustrates that more partnership of people is expected in case that there would be more agreement between peoples need and objectives of project, knowledge whether implementing a project can remove rustics and beneficiaries needs and to what extent and what will be its rate in the approval and identification of projects features is the determinant of the relationship and effect of partnership in this stage of project.

According to the Oxford English Dictionary, a cooperative is "a society or union for the production or distribution of goods, in which profits are shared (frequently in the form of dividends on purchases) by all contributing members". Thus the main characteristic of a cooperative is that profits resulting from its activities are shared among all its members or participants(Kilander and Kilander Kjell, 2000). Forestry cooperatives are less common than agricultural cooperatives. However, as developing countries give increasing importance to the contributions that forestry can make to rural development through people's participation in forestry and tree-growing programmes, the concept of cooperative forestry enterprises is gaining increasing attention. A cooperative is a special case of enterprising. At the risk of oversimplifying, it is useful to review the general structure of enterprising according to today's economic theory. An "enterprise" has one or several owners, who might be either members or participants. An essential basis for the enterprise is its own assets: hardware, real property, legal rights, and capital. All assets can be measured in terms of money.(Kilander and Kilander Kjell, 2000)

The involvement of communities in forestry is now a major component of internationally supported forestry programs and a significant (and increasing) feature of forest policy and practice in countries throughout the world (Brown, 1999; Warner, 2005).

A key to the successful implementation of a cooperative project is a thorough analysis of

motivations and incentives. This should be developed on the basis of draft objectives for the venture and an initial description of social and economic conditions. The analysis should also do some groundwork for organizing activities to come (Kilander and Kilander Kjell, 2000). Participation is not a static process; it is dynamic in nature and can hardly be measured by any known parameter. Participation originates and shapes experiences of individuals participating in decision-making processes for a collective developmental purpose. Despite efforts geared towards community participation for development of the rural areas, there have been some challenges faced by the local officials, planners and citizens alike. This process is oftentimes mired by limited time for implementation and other resources like finance. In some situations, the feedback process for approval for the continuation and/or stoppage of the development effort could take a while to complete (Brown and Wocha, 2017).

Concern with problems of 'participation' in rural development has been growing in recent years. Ever more documents and pronouncement proclaim the virtues of participation. The UN's Economic and Social Council has recommended that governments should 'adopt popular participation as a basic policy measure in national development strategy' and should 'encourage the widest possible active participation of all individuals and national non-government organizations, such as trade unions, youth and women's organizations, in the development process in setting goals, formulating policies and implementing plans'(Cohen, and Uphoff, 1980).

Forest cooperatives are generally created to assist forest owners in obtaining the best value for goods and services. They help forest owners participate in activities such as afforestation, tending and protection; produce and distribute superior planting stocks; provide members with up-to-date technical information and training; and collect, grade, process, pack and distribute forest products. They contribute to local skills and business development, mentoring and employment, and can also promote democracy and good governance (ICA, 2003).

With regard to the results of the previous surveys related to the subject of research in order to reach this objective, the following specific objectives are considered:

Evaluation of individual, economic, social and educational features of the rustic members of exploitation cooperative.

Determination and description of rustic's partnership rate in cooperative which exploit forests by-products.

Understanding the relationship between individual features of rustic's people and their

partnership rate in activities related to exploitation cooperative of forests by-products.

Understanding the relationship between social features of rustic people and the amount of their partnership in activities related to exploitation cooperatives of forests by-products.

Understanding the relationship between economic features of rustic people and their partnership rate in related to exploitation cooperatives of forests by-products.

Understanding the relationship between educational features of rustic people and their partnership rate in related to exploitation cooperatives of forests by-products.

According to the review of the literature of this research and the specific objectives which are mentioned in the previous part, conceptual model of the research is presented in Figure 1.

2. Material and methods

Ilam Province is one of the 31 provinces of Iran. It is in the western part of the country, bordering Iraq. Its provincial center is the city of Ilam. This province covers an area of 19,086 square kilometers. Ilam is situated in the cold mountainous region of Iran at a height of 1,319 metres (4,330 ft) above mean sea level. It is located in the west of Iran at a latitude of 33° 38' north and longitude of 46° 26' east. Although this city is surrounded by mountains, its climate is also affected by deserts from the west and the south. According to census of Iran's statistics centre, population of Ilam in 2011 has been 199,819. Area of the national field's of Ilam is equal to 196,500 hectare (which 92 percent of city's area), area of forests is 102,724.21 hectare, ranges are 70,484.43 hectare and desert areas are 23,292 hectare. Vegetation of Ilam province, due to the special continental, edaphic and topographical status is various. Based on the previous studies 1000 herbal species have been identified in Ilam province. 50 species of them are herbal and the reminders are bush, gramineous and yearling, and around 150 species are industrial and pharmaceutical.

According to the report presented by Ilam's watershed management organization, there are 110 cooperatives of exploiting by-products of forest and rang Ilam province, these cooperatives work on the conservation, regeneration, development and exploitation of natural resources. According to the Ilam range organization's report (2016), cooperative in this city have 1300 members.

The method of research is applied and data collecting has been done in survey research, and in terms of controlling the variables of the research is non-experimental. Its objective is identifying effective variables on the rustic people partnership in cooperative which are in change of exploiting forests by-products.

Population of this research is exploiters of forests in Ilam. The number of cooperatives and number of members were 38 and 1300 people. Based on Krejcie and Morgan tables, 297 members were selected for this study through stratified random sampling. A questionnaire, which an expert panel guaranteed the validity of it, was data collection instrument. By using Cronbach alpha, the reliability of the questionnaire was measured. Cronbach alpha coefficient was 0.91. Independent variables of research include individual features (age, educational level, job experience, the number of family members, gender), economic features (annual income, risk taking, capital, the area of the land which they have, job type, satisfaction of cooperatives performance), social features (attitude toward cooperatives, social status, social capital, government, legislation, and legal supports, cooperatives management, desire toward partnership, awareness of benefits and importance to cooperatives), educational features (the amount of using information resources, distance to the closet agricultural services centre, the amount of persuasive contacts) and dependent variable of partnership research (partnership in decision making, partnership in planning, partnership in investment) in the cooperatives which exploit forests by-products.

In order to analyse the data descriptive statistical methods such as average, mean, mode, variance, standard deviation and frequency percentage were used and in the analytical statistical section spearman correlation coefficient, mann-whitney, analytical test and multiple regression has been used stepwise.

3. Results and Discussion

According to the information obtained from the research average age of the respondent was 49.5 and more than 48% of the studied cases were older than 55 years old. Finding also indicated that the oldest person has been 74 years old and the youngest was 19. Findings of the research showed that 24% of respondent were female and the others (76%) were male. According to the findings of research it was known that 85% of the studied cases have been married and the others (15%) single.

The information from the research indicated that 25.3% to the respondents were illiterate, 33.4% had primary literacy, 36.3% had primary school degree and only 5% of the respondents had diploma and higher degree. Data analysis shows that more 50% of studied cases have been illiterate or unlearned, it is necessary that responsible agents provide the required facilities in order to promote literacy level. Findings of the survey proved that farmers and animal husbandry have the highest frequency among respondents and a few people have other kind of jobs such as worker, clerk or self-employment. The mean amount of farm land that studied cases have is 7

hectare, and more than half of them have had 1 to 5 hectare. Most of the population in this study (70%) had personal ownership and the others exploit the farmer which were endowed, joint, rental and divided. Results of the study concerning the annual income of the studied cases indicate that about 40% of studied people have had income around 45 million rials and less, 30% between 45 to 85 million rials (table 1). In table 2 beneficiaries opinions about partnership in management of exploitation cooperatives of forests by-products has been evaluated. Tendency to consult with experts and government agents in order to preserve forests tree is a priority in their opinion. In table 3 beneficiaries opinions about partnership in planning at exploitation cooperatives of forests by-products has been considered. At it is shown in the table, tendency to express needs and demands, ideas and beliefs about cooperatives of forests by-products is a priority in their opinion. In table 4 beneficiaries ideas about partnership in implementing and

administering exploitation cooperatives of forests by-product are examined. As it is shown in the table, beneficiaries' tendency to provide equipment and machinery to harvest forests by-products is a priority. In this section in order to do inferential data analysis, correlation analysis (Spearman's Rank correlation coefficient) has been used. Results of spearman's correlation coefficient in table 5 indicate that there is meaningful, reserved relationship between beneficiaries' age and partnership in cooperatives, and there is positive and meaningful relationship between education, job experience their partnership rate in cooperatives to forests by products. Results obtained from spearman's correlation coefficient in table 6 indicate that there is a positive and meaningful relationship between annual income, area of the land which belongs to beneficiaries, capital and their risk taking with their partnership in cooperatives to forests by-products.

Table 1. Frequency distribution of individual characteristics of respondents

Characteristic	Frequency	Percent	Cumulative Percentage
Age			
<25	22	7.44	7.44
26-30	21	7.10	14.54
36-45	32	10.81	25.35
46-55	98	33.10	58.45
>55	123	41.55	100
Gender			
Male	225	76	76
female	71	24	100
Education			
Illiterate	75	25.3	25.3
Primary school	100	33.4	58.7
High school	106	36.3	95
diploma and higher degree	15	5	100
Job			
Animal husbandry	132	44.6	44.6
Farmer	109	36.8	81.4
Worker	37	12.5	93.9
Others	18	6.10	100

Table 2. Prioritization of Rustic Opinions about Participation In The Management Exploitation Cooperatives of Forests by- Products.

Priorities	Average	Standard divination	Variance coefficient
Cooperation with experts and government agents to conserve forest trees	3.85	1.65	0.42
Participation in financing machinery and converting industries by beneficiaries	1.73	1.56	0.90
Participation to collaborate with other beneficiaries in harvesting forests by-products	3.48	1.75	0.50

Table 3. prioritization of beneficiaries' ideas about partnership in planning at exploitation cooperatives of forests by-products.

Items	Average	Standard deviation	Variance coefficient
Tendency to participate in the cooperatives meeting	4.32	1.41	0.32
Tendency to collaborate with government agents in decision making exploitation cooperatives	3.66	1.56	0.42
Tendency to share ideas with other beneficiaries in the cooperatives of forests by-products	4.10	1.60	0.39
Tendency to provide local information for government agents	4.43	1.78	0.29
Tendency to express needs, and demands, ideas and beliefs about cooperatives of forests by-products	4.17	1.23	0.29

Table 4. prioritization of rustic ideas about partnership in implementation and administration of exploitation cooperative of forests by-products.

Items	Average	Standard Deviation	Variance Coefficient
Tendency to provide equipment and machinery to harvest forests by-products	1.90	1.68	0.88
Tendency to share part of their land to construct factories to convert forests by-products	2	1.78	0.89
Tendency to do financial support in construction of alternant industries' or conserving forests trees	1.98	1.85	0.93
Tendency to collaborate with beneficiaries in harvesting products	2.39	2.12	0.88

Table 5. relationship between personal features with rustic's ideas about partnership in exploitation cooperatives of forests by-products

Variable	r	sig
Age	-0.673**	0.000
Education level	0.562**	0.000
job experience	0.335**	0.031

Table 6. relationship between economic features of beneficiaries and rustic people partnership in exploitation cooperatives of forests by products.

variable	r	sig
income	0.424**	0.000
Land ownership	0.355**	0.000
capital	0.134*	0.030
risk taking	0.130*	0.021

Table 7. relationship between social features of beneficiaries and rustic people about partnership in exploitation cooperatives of forests by- products

Variable	r	sig
Attitude toward cooperative	0.432**	0.000
Tendency to participation	0.230**	0.000
Social status	0.330**	0.000
Social capital	0.138*	0.021
Government support	0.132*	0.003
legislation and legal support	0.141**	0.001
management to cooperatives	0.202**	0.022

Table 8. Relationship between educational features of beneficiaries and rustic people about Partnership in exploitation cooperatives of forests by- products.

Variable	r	sig
Amount of using information resources	0.228**	0.000
Extension contacts	0.366**	0.001
Distance to the nearest agricultural service center	0.123**	0.002

Table 9. Mann Whitney test between groups of beneficiaries by gender

Mann Whitney	19968
Wilcoxon	146724
Z	-5.139
Sig	0.255

Table 10. Chi-square test statistic among group of exploiters according to type of job

Independent Variable	Groups	Frequency	Mean Rank	Chi-Square	Sig
Job type	Farming	165	8.170	11.9	0.004
		85	7.156		
	others	29	6.120		

Table 11. Multivariate regression results in stepwise method

Independents variables	B	Beta	t	Sig
Constant	13.80		3.95	0.000
Extension contacts	0.188	0.425	4.70	0.009
Level of Education	0.142	0.70	3.58	0.000
Land ownership	0.042	0.627	5.89	0.000
Social status	0.115	0.259	2.47	0.016
	R ² =0.511	R=0.611	F=23.15	P=0.000

Results obtained from spearman's correlation coefficient in table 7 indicate that there is a positive and meaningful relationship between attitude toward cooperative, tendency to partnership, social status, social capital, government, legislation and legal support, management to cooperatives and their partnership rate in cooperatives of forests by-products. Results obtained from spearman's correlation coefficient in table 8 indicate that there is a Positive and meaningful relationship between the amount of using information resources, the amount of persuasive contacts, distance to the closest agricultural service centre and their partnership rate in cooperatives of forests by-products. According to the value of Z test (-5.139) with %5 standard deviation it can be said that partnership rate between men and women has been meaningful difference, in other words, participation rate is affected by this variable(table 9). According to the value of Chi-Square (11.09) with %5 standard deviation which has been meaningful, it can be said that there has been meaningful relationship according to their job type and partnership rate(table 10). In order to identify independent variables role compared to dependent variable stepwise multiple regression was applied. Stepwise method is a method in which the strongest variable enter into equation one by one, therefore, at first variable which are related to partnership of cooperatives members in exploitation of forests by-products are identified and inferred and then enter into regression equation. It is essential to mention that Durbin-Watson index (variance independence index) which is 1.606 indicate that data are appropriate for regression. Results are shown in table 11. In order to compare independent variable role to dependent variable, standardized coefficient (Beta) has been applied. As it is shown in table 9. Regression analysis has progressed 4 steps.

It should note that in the first stage variable which was related to area of the land which they had entered into equation. This variable has had the highest effect. In this stage, regression coefficient is equal to $R=0.44$ and its identification coefficient is equal to $R^2=0.42$ and standard coefficient (Beta) is equal to 0.62. Therefore it can be said that there are of the lands which belong to it include around 0.42 of changes in dependents variable.

In the second stage, variable related to persuasive contacts entered into equation. In this stage, correlation coefficient of it is equal to $R=0.589$, identification coefficient is equal to $R^2=0.58$ and standard coefficient (Beta) is equal to 0.42. Therefore it can be said that there are of the lands which belong to it and amount of persuasive contacts include around 0.58 of the changes in dependents variable. In the third stage, educational level enters into equation.

In this stage, correlation coefficient of it is equal to $R=0.71$, its identification coefficient is equal to $R^2=0.65$ and standard coefficient (Beta) is equal to 0.70. Therefore it can be said that 3 variables including the area of the lands which belong to it, the amount of persuasive contacts and educational level include around 0.65 of the changes in dependents variable. In the fourth stage, social base entered into equation, which its correlation coefficient is equal to $R=0.73$, its identification coefficient is equal to $R^2=0.52$ and standard coefficient (Beta) is equal to 0.29. Therefore it can be said that four variables including the area of the lands which belong to it, the amount of persuasive contacts rates, educational level and social status justify around 0.52 of the changes in dependents variable. In order to estimate equation, according to the obtained information and meaningfulness of final regression model in the present research, effective variable in the rustic people partnership in the cooperatives of forest's by-product can be estimated as follow:

$$Y = 13.80 + 0.42x_1 + 0.188x_2 + 0.142x_3 + 0.115x_4$$

4. Conclusion and recommendations

Results of the research show that there is a meaningful relationship between the extension contacts and partnership in the exploitation cooperatives of forest's by-products. Extension an essential role in the participation of individuals in various activities, and paying attention to the role of extension is one of the main factors behind the success of collaborative activities. Findings of the research are in line with previous researches done by Akhavan et al, (2012)., Ehsani et al (2012)., Mousaei (2009) and Seyfi Khodashahri, (2010).

Results from Spearman's correlation coefficient indicate that there is meaningful relationship between age and partnership in the exploitation cooperatives of forest's by-products. Participation of young people in various activities is a success factor in programs that work with people. Young people have a higher level of acceptance and are more likely to be at risk. Results of the research are in line with previous researches done by Habibi, Alipour, Kia Deliri (2014)., Hassannejad et al (2011)., Baghaei et al (2009)., Shariati (2006)., Motavali (2004)., Khalighi and Hasan Ghasemi (2005)., Ehsani et al (2012). Results of the research show that there is a meaningful relationship between education level and their partnership rate. In a changing world, more successful people are coming along with change. And based on these changes, they improve their level of education and scientific ability. Training is the key to the success of collaborative activities. Results of the study are similar to previous researches done by Habibi, Alipour, Kia Deliri, 2014,

Shariati (2006), Motavali (2004), Seifi Khoda Shahri (2008), Hejazi and Arabi (2008), Ehsani et al (2012), Samaram (1996), and Mousaei (2009).

Results of the research show that there is a meaningful relationship between the amount of using information resources and partnership in the exploitation cooperatives of forest's by-products. People who have more access to information resources (Internet, satellite, television, and publications) have more up-to-date information. This information increases their participation in various activities. Results of the research are in line with pervious researches done by Akhavan et al (2012), Ehsani et al (2012) and Mousaei (2009).

Results obtained from Spearman's correlation coefficient indicate that there is meaningful relationship between job experience and partnership rate. Finding of the research are similar to the pervious researches done by Shariati (2006), Motavali (2004), Khalighi and Hasan Ghasemi (2005), Hejazi and Arabi (2008), Ehsani et al (2012), Samaram (1996).

Results of the research show that there is meaningful relationship between annual income and partnership in the exploitation cooperatives of forest's by-products. Results of the research are in line with pervious researches done by Sam Aram 1996, Akhavan et al (2012), Ehsani et al (2012).

Results from Spearman's correlation coefficient indicate there is a meaningful relationship between the amount of using information resources and partnership in the exploitation cooperatives of forest's by-products. People who have more access to information resources (Internet, satellite, television, and publications) have more up-to-date information. This information increases their participation in various activities. Results of the research are in line with pervious researches done by Akhavan et al, (2012), Ehsani et al (2012).

Results of the research show that there is a meaningful relationship between the economic factors and partnership in the exploitation cooperatives of forest's by-products. Results of the research are similar to the pervious researches done by Ehsani et al (2012), and Seyfi Khodashahri (2010).

Results from Spearman's correlation coefficient indicate that there is a meaningful relationship between the area of the land which people have and their partnership in the exploitation cooperatives of forest's by-products. Land is one of the most important indicators of strength and visibility of villagers. As other research suggests, this factor plays an important role in the participation of the villagers. Results of the research are in line with

the pervious researches done by Sam Aram 1996, Ehsani et al (2012), Akhavan et al (2012).

Results from Spearman's correlation coefficient indicate that there is a meaningful relationship between social factors and their partnership in the exploitation cooperatives of forest's by-products. Results of the research are in line with the pervious researches done by Ehsani et al (2012).

According to the results obtained from research following suggestion are presented:

Results indicate that there is meaningful relationship between age, educational level, the amount of persuasive contacts and partnership rate, therefore it is suggested that during planning to encourage people to participate, methods which use participation of youths as well as potentials of older people are more practical and avoid them from marginalizing.

Responsible staffs should organize persuasive educational courses and present educational films and distribute magazines and persuasive pamphlet in order to enhance rustic's awareness and knowledge and encourage them to participate in cooperatives of forest's by-products.

Results that there is a meaningful relationship between the areas of the land which rustic people have and their partnership rate. Since, most of the rustic people have less than 5 hectare, and there is a few main landlord in the villages. Therefore decision-makers should pay special attention to development and attraction of people to participate. It should be noted that operating these plans at macro level is not welcomed by rustic. So, it is suggested that all the plans should be designed and operated according to the needs of these who have small lands.

Results of the research also indicate that there is a meaningful relationship between social factors and their partnership in the exploitation cooperatives of forest's by-products. Thus it is suggested that cooperatives office should provide a condition that rustic people can participate in the cooperatives of forest's by-products by participating in educational courses and meetings about social factors.

In the prioritization of participation stages which was done based on variance coefficient regarding to participate in planning, they preferred to participate in the cooperatives meetings. Therefore, responsible staffs can consult with all people in different areas through meetings and organize their plans according rustic people needs. In the participation stage, first priority in related to rustic peoples tendency to do financial support in order to construct alternant industries or conserve forest trees, and tendency to offer part of their land is the last priority. Thus it is suggested that government and

officials should pay lands price to rustic people. Since there is a meaningful relationship between income and capital, and rustic people participation, it is suggested that government should provide low price facilities and loan for poor people in the villages and pave the way for them to participate in cooperatives.

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