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## **Analysis of factor affecting the ecotourism development in pasture and forest cooperatives in Golestan province, Iran**

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This research was carried out to investigate the role of natural resources cooperatives in ecotourism development. This was an analysis-descriptive study conducted through survey method. Statically population of study was 123 members of the directors of these cooperatives. A structured questionnaire was designed and distributed among the cooperative directors. Census technique was applied in this study. The validity of the questionnaires was proved by panel of counselors and experts of pastures and forests organization. In order to measuring the reliability of the questionnaires, a pilot test was carried out. Result of Alfa-Cronbakh 87% for ecotourism development was obtained. In order to data analyzing was used SPSSwin15 software. Results of stepwise regression test showed that organizing service providers and training local population in cooperatives gave positive effects on ecotourism development. Totally those factors explained 50% of effective factors on measure of ecotourism development variable by natural resources cooperatives.

**Keywords:** Natural Resources Cooperatives, Ecotourism Development, Cooperation, Golestan Province.

### **Introduction**

The socio-economic challenges, and other demanding development subjects, and the need to provide developing strategic purposes of socio-economic development is necessary (HAJI, 2008). This is especially important in the frail regions where the rural economies depend on agriculture. In reaction to diminishing agricultural opportunities, and addition pressure, extension, and development agents search new approaches, and opportunities for society, and economic development (Brennan and Luloff, 2005). The Potential of protected areas for ecotourism is one of the awaited sectors to contribute in achieving

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objectives of vision 2020 issues (HAJI, 2008) and cooperatives producing a varied of stuffs and services, can help in arriving successful aspect of rural life.

Cooperatives cause economic constancy, and provided a community based framework for local investment, and could provide an economic development strategy for our communities by establishing local channels of communication, and raising local decision-making (Brennan and Luloff, 2005).

Notwithstanding traditional agricultural, and livestock cooperatives, nowadays cooperatives centralization is on base of livestock, fishing, forestry, and other natural resource activities (Bendick and Egan, 1995). Nowadays, cooperatives can take a diversity of other activities reflective of the particular local characteristics of the area like tourism, the arts, small manufacturing, and aquaculture (Cawley, Gaffey and Gilmor, 1999; Johnson, Fox and Zipper, 1999; Phillips, 2004; Brennan and Luloff, 2005). Ecotourism is a specific kind of tourism in natural areas, which supports nature conservation and promotes socio-economic condition of the local communities and rural people (Sharpley, 2006). Ecotourism has been known as a kind of sustainable tourism that has various benefits for communities, and nature conservation. Ecotourism creates new opportunities for people employment on local resources in faraway regions with disheveled economic conditions, and high rates of underemployment.

Generally, ecotourism benefits or incomes for local people are greater than tourism, and wants less investment. Ecotourist tend to stay longer than the tourist, and to seek out local goods, and services for use (Rahemtulla and Wellstead, 2001). Nowadays, Countries where had economy on base of tourism industry, are more pay attention to environmental subjects related to sustainable development. Thereupon, there is an agreement on the need of improving sustainable tourism development in order to sustainable run of natural resources (Kenan, Okan and Yilmaz, 2011). Local communities' participation in development process is an important element in sustainable tourism and development, and local community involvement must be voluntarily (Sharpley and Telfer, 2008). Important benefits of participation in tourism included creating employment, lessening poverty, less destruction of the culture, and the environment resources than traditional tourism, increasing self esteem of local community, and earning money involving people in order to promote local economic development (Bendick and Egan, 1995; Murphy, and Williams, 1999; Gordon, 2004).

Whereas the governors do not work alone but in cooperation with public and private sectors for example Tourism Business Association, Tourism Authority of Thailand (TAT), Department of Fishery, national Parks and University so the main research question was “what are the effective factors on performance of pasture, and forest cooperatives in ecotourism development?”.

The main purpose of this research was the identification of the effective factors on ecotourism development in natural resources cooperatives in Golestan province. With this purpose in mind, the following objectives were compiled:

(1) The study of frequency distribution of answerers' idea about ecotourism development measure in cooperatives.

(2) The examination of measure of ecotourism development in natural resources cooperatives.

(3) The determination of independent variables impact in ecotourism development.

### ***The Goals of Natural Resources Cooperatives***

***There are some goals in natural resources cooperatives including:***

(1) prevention of rural immigration; (2) creating dynamic economies in poor regions; (3) improving rural participation; (4) increasing non-oil export; (5) improving quality of crops, productions and packing; (6) eliminating mediators and brokers between producers and consumers; (7) to be develop of rural and poor regions; (8) even distribution of income; (9) administration of social justice; (10) arriving to sustainable development ; (11) decentralization and delegation of authority; (12) job creating by local resources; (13) prevention of pasture , jungles and life environment destruction; (14) prevention of irregular grazing; (15) growing lateral jobs e.g. planting mushroom, forest and dairy crops production, apiculture , ranch (International Cooperative Union, 1998).

### ***Kinds of Natural Resources Cooperatives and Their Activities:***

According to the research of Rezaee (2007), in Iran there are different kinds of natural resources cooperatives :

**Pasture Cooperatives:** There are 380 pasture with 15821 members in Iran and their role is preventing irregular grazing and revival of desolate pasture.

**Forest Cooperatives:** There are 54 forest cooperatives with 6945 members in Iran and their role is decreasing forest destruction and help to solve woodmen economical and social problems .

**Jungle Resources Management Cooperatives:** There are 78 jungle resources management cooperatives with 5784 members in Iran and their role is planting, conservation of pastures and Jungles, Prevention of irregular grazing, integrated cultivation and conserving genetic sources.

Cooperatives of Using Lateral Crops of Forests and Pastures: There are 112 cooperatives of using lateral crops of forests and pastures with 6383 members in Iran and their role is drug plants production, conservation of natural resources, using lateral crops of forests and pastures and job creating.

Desert Cooperatives (Sand Stableness): In Iran, there 34 million hectare desert that sand movement by cyclones imperils life and economical centers. There are 4 desert cooperatives with 18 members in Iran and their role is prevention of natural resources destruction, best use of watery and earthy sources, reclamation of destruction ecosystems and job creating.

Tooba Project Cooperatives: According to this project, national and governmental landscape especially in Zagros areas devoted to jungle and garden developing. There 154 Toba cooperatives with 3501 members in Iran and their role are conservation and revival of natural resources and job creating.

***Research Question: The main research question was:***

What the effective factors on performance are of pasture and forest cooperatives in ecotourism development?

**Literature Review**

Researches have been carried out in relation to the strategies of natural resources cooperatives in ecotourism development.

The research in California shows that ecotourism development has started in watershed cooperatives in 1961 (Hopkins and Bowden, 1961-62). The finding of Pishro (2004) indicate that attracting popular participation, organizing local people, gathering investments , and utilization of expert human resources in natural resources cooperatives are suitable strategy in ecotourism development (Pishro, 2004). In United States there are relationship between natural resources cooperatives , and natural resources organization in order to ecotourism development. Local people participation, organizing them and developing their knowledge cause tourism development (Zeppel, 2006; Butler and Hinch, 2007). In natural resources cooperatives of Ethiopia, natural resources management, even distribution of income and natural resources protection is necessary to ecotourism development (Veerakumaran and Pitchai, 2007). According to the research of Dehgan (2001) investment in tourism causes job creating (Dehgan, 2001). The research of Mill , and Morrison (2002) and Perreault and McCarthy (2002) show that marketing, organizing local people, providing exemplary service, providing lodging, food, service , and transportation, advertising, public relations, social media and partnerships are key elements of ecotourism development (Mill and Morrison, 2002; Perreault

and McCarthy, 2002). Blackman, Foster, Hyvonen, Kuilboer and Moscardo (2004) found factors to the success of tourism development in peripheral regions included the presence of a leader, partnerships, the identification and advertisement of nature attractions, government support, marketing, research and educating, local involvement, infrastructure and financial support (Blackman, Foster; Hyvonen; Kuilboer and Moscardo, 2004). The finding of Wang, Pfister and Morais (2006) proved that educating local people about the potential benefits of tourism is impact factor in improving their participation for tourism and achieving sustainable development (Wang, Pfister and Morais, 2006). According to search of Dieke (2005) presenting visitor demand, financial support, human resource development, and marketing are important factors in ecotourism development (Dieke, 2005). Research of Johnson, Fox, Zipper and Carl (1999) show that training cooperative members included sport fishing, hunting, training natural resources protection, training wild life diversity, training garbage recovery , and training tour guide cause ecotourism development. According to the research of Murphy and Williams (1999) managing includes planning, organizing, leading and controlling are Factors contributing to successful tourism development (Murphy and Williams, 1999).

### **Material and methods**

This study was carried out in order to investigate of cooperatives importance in job creating and appointment of effective factors on performance of pasture and forest cooperatives in job creating for decreasing unemployment in Golestan Province. This was an analysis –descriptive study conducted through survey method. Statically population of study was 123 members of the directors of these cooperatives in Golestan Province. There are 3 forest cooperatives and 28 pasture cooperatives in this province. A structured questionnaire was designed and distributed among the cooperative directors. Census technique was applied in this study. The validity of the questionnaires was proved by panel of counselors and experts of pastures and forests organization. In order to measuring the reliability of the questionnaires, a pilot test was carried out. Results of Alfa-Cronbakh 87% for ecotourism development were obtained. In order to data analyzing SPSSwin15 software was used. For this purpose multi variable regression test was used. Dependent variable is ecotourism development that evaluated in lekert spectrum that evaluated by earned money from ecotourism, job stabilization in ecotourism industry, communication between cooperatives and people, renting natural resources landscapes to tourism sector and using natural resources lands in order to attract ecotourist indicators.

## ***Research Variables***

### ***Based on previous studies independent variables are:***

- 1- Marketing ecotourism by holding local handcrafts exhibition, brochure publication of ecotourism resources, international exhibition of local music, and photographs.
- 2- Providing services like food, home, transportation utensil, and ecotourist guide.
- 3- Organizing local people e.g. producers of handcrafts industries, dairy crops, and plant drug in cooperatives
- 4- Local people participation to provide food and home.
- 5- Training members of cooperatives e.g. sport fishing, hunting, training natural resources protection, training wild life diversity, training garbage recovery, and training tour guide.
- 6- Ecotourism resources publicity by brochure publication of ecotourism resources, local industries exhibitions, holding national and international ecotourism seminars.

## **Results**

This study was carried out in order to investigate of effective factors on cooperatives performance in ecotourism development. So to completion of questioners has been gone to pasture and forest cooperatives, personal. Studying cooperatives were listed in Table 1.

The priority settings of ecotourism development statement were determined using coefficient variation statistics. In this way, each statement that had a lower coefficient variation was related to a more important situation. According to the results shown in Table 2, in the managers' idea, communication between cooperatives and people (37.09), job stabilization in tourism industry (40.71), the amount rate of Earning money from ecotourism (47.14), renting natural resources landscapes to tourism sector (48.57), and using natural resources lands in order to attract ecotourist (48/90) is in very low level, and faced serious problems (Table 2).

Results of mean (M= 0/34) about ecotourism development measure in cooperatives investigate that ecotourism development measure in cooperatives is in very low level (Table 3).

**Table 2.** Ranking of managers' idea about ecotourism development measure in cooperatives

Ecotourism development indicators	Number	Mean	SD*	C V**	Rank
communication between cooperatives and people	23	1/86	0/69	37/09	1
Job stabilization in ecotourism industry	67	1/40	0/57	40/71	2
Earning money from ecotourism	22	1/41	0/66	47/14	3
renting natural resources landscapes to tourism sector	20	1/40	0/68	48/57	4
using natural resources lands in order to attract ecotourist	29	1/37	0/67	48/90	5

Scale: 0= Nothing, 1=very low; 2=low; 3=moderate; 4=high; 5=very high; \* standard deviation; \*\* coefficient of variation.

**Table 3.** Frequency distribution of managers’ idea about ecotourism development measure in cooperatives

Ecotourism development measure	Frequenc y	Percent	Valid percent	Cumulative percent
Nothing	89	72	81/6	81/6
Very little	11	8/6	9/8	91/4
little	5	4/3	4/9	96/3
middle	4	3/2	3/7	100
No respondents	14	11/8	-	-
Total	123	100	100	-

Scale: 0= nothing, 1=very low; 2=low; 3=moderate; 4=high; 5=very high; Mean: 0/34 median: 0 mode: 0 standard deviation: 0/73

In order to determine the improvement of ecotourism development in cooperatives, all of the variables shown in Table 5 were entered into a stepwise regression analysis. The analysis results are shown in Tables 4 and 5.

**Table 4.** Stepwise multiple regression in improving ecotourism development of cooperatives

Steps	R	R <sup>2</sup>	R <sub>adj</sub> <sup>2</sup>	F
1	0.69	0.47	0.468	56.37*
2	0.72	0.52	0.506	33.21*

**Table 5.** Standardized and unstandardized coefficients of improving ecotourism development

Variables	Unstandardized	Std.	Standardized	t	Sig.
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	<i>coefficients Beta</i>	<i>error</i>	<i>coefficients Beta</i>		
Constant	-0.679	0.563	-	-	-
organizing service providers (X <sub>11</sub> )	0.529	0.088	0.589	6.01	0/000
Training members of cooperatives (X <sub>15</sub> )	0.172	0.072	0.235	2.39	0/020

According to Table 4, organizing of service providers, and training members of cooperatives were entered as stepwise regressions.

In the first step, organizing of service providers was entered in the regression equation and it was determined that 46% of the variance of the dependent variable (ecotourism development).

In the second step, organizing of service providers, and training members of cooperatives

#### ***Variable represented 50% of the changes***

In total, when entering all of these variables, the result was  $R^2 = 0.506$ . This coefficient shows that 50.6% of the ecotourism development' variance was related to these two variables.

The regression significance was also calculated by the Ftest; it was significant at the 95% level.

Results of stepwise regression test showed that organizing of service providers, and training members of cooperatives have positive effects on ecotourism development. Totally those factors show 50% of effective factors on measure of ecotourism development variable by natural resources cooperatives.

The variables that were entered in the regression equation were the main part of the regression analysis, and are shown in Table 4.

According to the results shown in Table 5, the regression equations according to B and Beta quantities were, respectively:

$$Y = 2.59 + 0.52x_{11} + 0.17x_{15} - 0.679$$

$$Y = 0.58x_{11} + 0.23x_{15}$$

Y= ecotourism development

X<sub>11</sub>= Organizing service providers

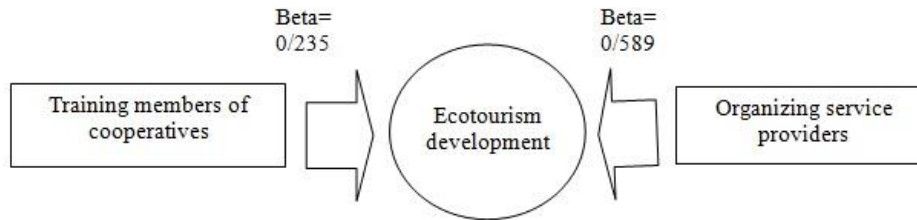
X<sub>15</sub>= Training members of cooperatives

Figure 1 shows collections of determining and effective factors in improving the ecotourism development of Golestan province cooperatives.

Results show that the amount rate of earning money from ecotourism, job stabilization in tourism industry, renting natural resources landscapes to



tourism sector , and using natural resources lands in order to ecotourist attract is in very low level , and faced serious problems.



**Fig. 1.** The determining factors of ecotourism development in natural resources cooperatives in Golestan Province on base of Beta coefficient.

Whereas analyzing ecotourism potential, Public-Private partnerships and identify the natural resources landscapes promote ecotourism opportunities. As such, communication between cooperatives and people is in very low level, too. Whereas ecotourism is a "people business," oriented and public participation is one of the Key Elements of ecotourism development. So, creating an ecotourism business on public-centered philosophic and raising policies for this ethic will help in promoting ecotourism.

Totally those factors show 50% of effective factors on measure of ecotourism development by natural resources cooperatives.

## Discussion

There are 3 forest cooperatives and 28 pasture cooperatives in Golestan province. There are 428 members in forest cooperatives and 1315 members in pasture cooperatives in this province. Population of study was 123 members of the directors of these cooperatives in Golestan Province. Area of forest cooperatives area 26252 hectare and area of pasture cooperatives is 171228 hectare.

The growing of economic, and social problems, and key benefits of ecotourism included creating employment; reducing poverty, and self esteem for local communities indicate importance of ecotourism development in country. Cooperatives are a social and economic organization that provides facilities, and conditions for ecotourism development. Base on regression analysis, and in according to managers' view point it can be concluded that there are many factors that can influence ecotourism development in natural resources cooperatives. For arrive to this purpose, finding factors influencing on ecotourism development in natural resources cooperatives is necessary. This

research, found some of those including: Organizing service providers, and training members of cooperatives.

According to the results, cooperative managers should organize services producers e.g. h, and industries, dairy crops, and plant drug in cooperatives. On the other h, and cooperatives should engage, and involve local people in works to try, and optimize their benefits, and so it cause ecotourism development in rural regions. There are no adequate training courses in cooperatives. So the cooperative managers should pay more attention to hold training courses for members of cooperatives e.g. sport fishing, hunting, training natural resources protection, training wild life diversity, training garbage recovery, and training tour guide.

This research recommends important factors in ecotourism development. These factors should be considered in improving any ecotourism development programs in natural resources cooperatives. The results of stepwise regression test show that organizing service providers have positive effects on ecotourism development. These Results are supported with researches of Butler and Hinch (2007); Zeppel (2006); Mill and Morrison (2002); Perreault and McCarthy (2002); Murphy and Williams (1999) and Pishro (2004). The findings of this research showed that Training members of cooperatives have positive effects on ecotourism development. This finding is accordance with researches of Butler and Hinch (2007); Zeppel (2006); Blackman, Foster, Hyvonen, Kuilboer and Gianna Moscardo (2004); Wang, Pfister and Morais (2006); Dieke (2005); and Johnson, Fox, Zipper and Carl (1999).

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