Factors affecting women participation in preserving environment in Ilam City

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ABSTRACT
Natural sources have lots of commercial and non-commercial values as a bed life and constant development of country. Balancing the ecosystem and support for agricultural sector. So, preserving environment and natural sources is not possible without participation of people specifically women. Hence, the purpose of this research is to investigate the factors affecting women participation in preserving environment in Ilam City.

KEY WORDS: natural sources, environment preserving, participation, rural women, Ilam City

INTRODUCTION
Surely today, destruction of environment is one of the most important challenges of development plans, in a way that stats show about 75 percent of lands all over the world are under the effects of different types of destruction and this process, which threads 15% of world population will increasingly continue if no effective action is implemented (Azkia, 1995). So in Iran, during past years environment destruction have continued with an increasing speed because of anomalous exploitation of lands, destruction of jungles, applying modern and inaccurate agricultural methods, chemical fertilizers, modified seeds and specially general ignorance of farmers about accurately using and reviving natural sources (Ettehadi, et al, 2010).

Hereupon, Zagros vegetative region is one of important and valuable regions in terms of area and species variety and has a remarkable role in national economy in terms of supply and preserve water and soil sources. This region, extending about 5 million hectares, covers 40% of total woodlands of Iran. Unfortunately in recent years, corroding and destruction of environment have been critical due to settlement of unstable production and exploitation systems and also high vulnerability rate of natural sources. Continuing this process will have lots of negative consequences (Karami, et al, 2010). Ilam Province is located in west part of country and in vegetative line of Zagros. This province owns 11 percent of total woodlands of Zagros zone and 4 percent of Iran’s woodlands and 4.97 percent of vegetative lands of Zagros and 8 percent of Iran's leas (woodlands, leas and watershed management organization of Iran, 2006). The investigations show that in recent years the woodlands in this area have been destructed because of population growth, imbalance of vital needs and production and service providing, inordinate grazing of animals, extending farmlands, supplying wood as fuel, recision of trees and so on. It is crystal clear that getting out of this dilemma requires categoric decisions in policy making, designing and implementing dimensions which seems impossible without using participation methods. Because, regarding the wide extension of these sources, preservation and maintenance is not feasible by one institution or organization or ever the government (Shariati, et al, 2005).
However, using rural people participation seems necessary. Women can play a determining role as 50 percent of active population in rural and tribal regions (Asgari Moghaddam, Bita).

It is worth mentioning in rural regions, women have the highest rate of communication and interaction with environment, because the major part of rural activities emanate in agriculture and animal husbandry which is toward using natural sources (Ghafari, Torki Harchagani, 2011). Therefore it seems that accurate planning and attracting active participation of rural women in preservation, reviving and developing natural sources we can take a fundamental step toward converting the culture of natural source to general knowledge (Asgari Moghaddam, Bita). So in this research we tried to investigate the effective factors on participation of rural women and take a fundamental step toward lessening the rate of environment destruction and using maximum participation of them in the field of natural sources. Accordingly, the purpose of the present research is to investigate the factors affecting women participation in preserving environment and natural sources in Ilam City.

**Overview of empirical studies:**

Coleman & Mwangi (2013) also believe that education level, income and husbandman are effective factors on participation of women in woodland management. The results showed that families of which caretaker is a woman, are more possible to participate in woodland management. Mehr Ali Tabar (2012) carried out a research titled "analyzing the position of villagers participation in preserving woodland natural sources". The author found out that according to high eagerness of rural people to preserve woodland sources, economic, cultural, and social and government policy related impediments which impede rural people participation should be obviated. Dolati and Hemmati (2012) investigated the factors affecting the participation of rural women in stable management of subterranean water sources in their study. They came into the result that age, number of children and literacy level has a positive and significant relation with participation of rural women in stable management of subterranean water sources. Kishore and Sarkar (2010) in a research titled "the effects of participation in economic and social management of Indian woodlands' found out that preserving woodlands requires active participation of society. They argued that active participation in preserving woodlands requires commitment, interest and motivation among residents of these regions. In this field, Maraga et al (2010) in a research titled "factors determining public participation in woodland projects of Niando River environ in Kenia" came into results that in order to successfully implement preservation projects, the economic – social benefits should be tangible for exploiters and participants. Ghanyan et al (2008) in a study titled "the role of rural women in using, preserving and reviving desert natural lands" found out that women play role in all preserving, reviving and destructing activities in the region. Damisa and Yohanna (2007) in a research titled "the role of rural women in management decision making in farm" came into the result that economic - social features of women are effective on the amount of their participation in village issues.

On the whole, we can come into the result that different factors affect the participation of woman in preserving natural sources. In the present research, we investigated personal features, economic, social, cultural, political, fundamental-welfare factors on participation of rural women in Ilam City in preserving natural sources.

**Instruments and method:**

The present study is quantitative in terms of general approach, operational in terms of purpose and descriptive – correlative in terms of data collection. Statistic population of this research includes rural women living in Ilam City (N=17250) among which 376 persons were selected using random stage sampling (central three stages, Chuar and Sivan) and Cochran formula. Data collection instrument in this research is author-made questionnaire including five sections: individual characteristics, economic factors (2 items, in form of five degree Likert scale), cultural- social factors (24 items, in form of five degree Likert scale), political factors (15 items, in form of five degree Likert scale), fundamental and welfare factors (7 items, in form of five degree Likert scale). Content and construct validity and also reliability of research instrument were confirmed using experts' opinions of woodlands, leas and watershed management organization and Cronbach test (0.82) respectively. The collected data was analyzed in descriptive statistics (frequency, mean, standard deviation, and coefficient of variation) and interpretive statistics (correlation coefficient and multiple regression analysis) using SPSSwin20 software.

**RESULTS AND DISCUSSION**

**Personal characteristics:**

According to the results, the average age of rural women under the study was 42.3 with standard deviation by 10.09 year and they were in spectrum of 17-77 years old. In addition, most of rural women (67.8 percent) were single and only 32.2 percent were married. Also most of people under the study (73.3 percent) didn’t have higher education degrees and about 60.1 percent were jobless and among them, merely 15.2 percent were households. Major numbers of rural women in Ilam (70.1 percent) had less than 10 million Rials monthly income. Also most of them (62.8 percent) claimed that classes and training- promotive sessions in participating
in natural source preservation were not held in their living place. This is while most of rural women (37 percent) were interested to take part in classes.

- The relation between variables under the study and participation degree of rural women in preserving natural sources in Ilam City

We used Pearson’s correlation coefficient in order to investigate the relation between independent variables and participation of rural women in preserving natural sources in Ilam City (table 1).

Table 1: Relation between variables under the study and participating in preserving natural sources.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient type</th>
<th>Participating in preserving natural sources</th>
<th>Correlation coefficient</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Pearson</td>
<td>0.290**</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Monthly income</td>
<td>Pearson</td>
<td>0.109**</td>
<td>0.034</td>
<td></td>
</tr>
<tr>
<td>Number of family members</td>
<td>Pearson</td>
<td>-0.120*</td>
<td>0.019</td>
<td></td>
</tr>
<tr>
<td>Cultural factors</td>
<td>Pearson</td>
<td>0.450**</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Communicational factors</td>
<td>Pearson</td>
<td>0.461**</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Training-promotive factors</td>
<td>Pearson</td>
<td>0.590**</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Political factors</td>
<td>Pearson</td>
<td>0.453**</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Fundamental and welfare factors</td>
<td>Pearson</td>
<td>0.121*</td>
<td>0.019</td>
<td></td>
</tr>
</tbody>
</table>

** Significance in level of 1%
* Significance in level of 5%

The results presented in table 1 show that there is a positive and significant relation in level of 1% between age, cultural factors, communicational factors, training- promotive factors, political factors and participation of rural women in preserving natural sources in Ilam City. Also variables monthly income and fundamental and welfare factors had positive and significant relation in level of 5% with dependent variable. This is while the number of family members has negative relation in level of 5% with participation degree of rural women in preserving natural sources of Ilam City.

- Factors affecting participation of rural women in preserving natural sources in Ilam City

We used multiple regression and step by step method in order to identify effective factors on participation degree of rural women in preserving natural sources in Ilam City. The results showed that training-promotive factors, political factors, age, fundamental and welfare factors, the number of family members, employment status and cultural factors were inserted step by step and respectively into the equation. In the first step, variable \(x_1\) (training – promotive factors) inserted into the regression equation and could determine 39% of changes in variance of dependent variable. The results show that training- promotive factors had the major determination power on participation degree of rural women in preserving natural sources. So if we pay more attention to training- promotive factors, the participation degree of rural women in preserving natural sources will be higher and better. In the second step, variable \(x_2\) (political factors) was inserted into the regression equation. This variable accompanied by the previous variable, determine 44% of dependent variable changes. All variables were inserted to regression equation respectively and on the whole they determined 53% of dependent variable variance that is participation degree of rural women in preserving natural sources in Ilam City.

Table 2: Summary of inserting independent variables on participation of rural women.

<table>
<thead>
<tr>
<th>Step</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.628</td>
<td>0.394</td>
<td>0.393</td>
<td>9.84033</td>
<td>243.502</td>
<td>0.000</td>
</tr>
<tr>
<td>2</td>
<td>0.669</td>
<td>0.447</td>
<td>0.444</td>
<td>9.41236</td>
<td>150.966</td>
<td>0.000</td>
</tr>
<tr>
<td>3</td>
<td>0.695</td>
<td>0.484</td>
<td>0.479</td>
<td>9.11076</td>
<td>116.120</td>
<td>0.000</td>
</tr>
<tr>
<td>4</td>
<td>0.710</td>
<td>0.504</td>
<td>0.499</td>
<td>8.93950</td>
<td>94.306</td>
<td>0.000</td>
</tr>
<tr>
<td>5</td>
<td>0.718</td>
<td>0.516</td>
<td>0.509</td>
<td>8.84644</td>
<td>78.809</td>
<td>0.000</td>
</tr>
<tr>
<td>6</td>
<td>0.730</td>
<td>0.532</td>
<td>0.525</td>
<td>8.70496</td>
<td>70.014</td>
<td>0.000</td>
</tr>
<tr>
<td>7</td>
<td>0.734</td>
<td>0.539</td>
<td>0.530</td>
<td>8.65817</td>
<td>61.377</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 3: Variable coefficients inserted into multiple regression equation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Standard error of B</th>
<th>Beta</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant value</td>
<td>7.864</td>
<td>2.807</td>
<td></td>
<td>2.802</td>
<td>0.005</td>
</tr>
<tr>
<td>Training-promotive factors</td>
<td>0.634</td>
<td>0.063</td>
<td>0.430</td>
<td>10.119</td>
<td>0.000</td>
</tr>
<tr>
<td>Political factors</td>
<td>0.331</td>
<td>0.049</td>
<td>0.334</td>
<td>6.763</td>
<td>0.000</td>
</tr>
<tr>
<td>Age</td>
<td>1.357</td>
<td>0.444</td>
<td>0.117</td>
<td>3.057</td>
<td>0.002</td>
</tr>
<tr>
<td>Fundamental and welfare factors</td>
<td>-0.311</td>
<td>0.085</td>
<td>-0.149</td>
<td>-3.661</td>
<td>0.000</td>
</tr>
<tr>
<td>Number of family members</td>
<td>2.396</td>
<td>0.642</td>
<td>0.145</td>
<td>3.729</td>
<td>0.000</td>
</tr>
<tr>
<td>Employment status</td>
<td>3.513</td>
<td>0.976</td>
<td>0.36</td>
<td>3.599</td>
<td>0.000</td>
</tr>
<tr>
<td>Cultural factors</td>
<td>0.323</td>
<td>0.145</td>
<td>0.100</td>
<td>2.236</td>
<td>0.026</td>
</tr>
</tbody>
</table>
Conclusion and suggestions:

The results showed that age of rural women had positive and significant relation with their participation in preserving natural sources. This finding is consistent with those of Annabestani et al. (2012), Dowlati, & Hemati (2012), Ghanbari et al. (2012), Ahmadavand and Sharifzadeh (2011), Rahmani et al. (2010) and Norouzi and Bakhtiari (2009), Shames-el-din et al. (2000) But it is inconsistent with the results of Amirnejad and Rafei (2009). Analysis of correlation coefficient between rural family members and the amount of their participation in preserving natural sources showed that there is a reverse and significant relation between these two variables. That is if the number of family members are fewer, participation in preserving natural sources will be higher. This finding is consistent with those of Rahmani and Majidi (2009) and Varamini (2003) but it is inconsistent with the results of Mirtorabi et al. (2012). Also analyzing correlation coefficient between two variables monthly income of rural women and their participation in preserving natural sources showed that there is a positive and significant relation between these two variables. These findings were consistent with those of Annabestani et al (2012), Ghafari and Torkiarchegani (2011), Rahmani et al (2010), Amirnejad and Rafei (2009), Khani and Ahmadi (2009), Shames-El-Din et al. (2000) and Kaur & Punia (1988). But it is inconsistent with the results of Mirtorabi et al. (2012). Analysis of correlation coefficient between two variables cultural factors related to rural women and their participation in rural development process (case study: Darzab town, Mashhad City). City and regional studies and researches, 9(3) showed that training –promotive factor in participation in preserving natural sources, it is suggested that effective plans be designed by authorities of promotive trainings in order to increase the accessibility of rural women to these sessions. Creating special facilities, giving bank and credit loans in form of long term loans with low bank percentage, for rural women activities in preserving and reviving programs which increases their motivation. Creating and reinforcing rural women constitutions (specifically in form of cooperation and women department). Because these institutions extend their social and economic participation.

REFERENCES


Arayesh, M. and S.J. Farajallah Hosseini, 2010. Regression analysis of factors affecting people's participation in preserving, reviving, developing and using renewing natural sources from the point of view of...

Asgari Moghaddam, Z. (Bita). The role of women in desertification and stable development of natural sources.


