

REVIEW ARTICLE

Explaining the community ecology model of women's empowerment in sustainable rural development

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Considering the emphasis on the approach of rural women's empowerment in development plans during one decade, this study was conducted to measure empowerment evaluating socio-economic factors affecting empowerment of rural women in Shahr Ray and zone of influence. Statistical population consisted of women living in Shahr Ray and sample size obtained to 220 members using Cochran formula then the required data were collected using stratified-cluster sampling and structured questionnaire. At pretest step, 80 questionnaires were distributed among rural women randomly then logistic regression was employed to evaluate factors affecting ability of rural women based on the Alkire method. Results indicated that the main factors affecting empowerment of rural women were their participation in socio-economic activities that the explained cumulative variance obtained to 55.80 by these factors. Moreover, the main barriers to empowerment of women included lack of job opportunities, low education level, family prejudice, lack of legal supports and communicational network so that these 4 variables could explain 55% of changes in dependent variable (lack of socio-economic capability of women). Ultimately, there was a positive and significant relationship between mentioned variables and barriers to women's empowerment at confidence level of 99%. Therefore, these barriers should be removed to promote capability of rural women of Shahr Ray in socio-economic activities and planning for their participation.

Keywords: Women's participation; socio-economic development; entrepreneurship; community ecology model

Introduction

Rural women play a vital role as human force not only in household activities but also in producing activities out of the household. Since women do activities inside and outside of the home, their role in community and economic activities should be accurately determined. On the other hand, since rural women are active in various parts of Iran, socio-economic activities of rural women are subjected to economic situation of household, community position of rural women, power of women, cultural awareness of men about women and geographical factors. In fact, sustainable actualization is subjected to real and active participation of women besides the men within development process. However, women's participation depends on their capability (Khalvati, 2009). Moreover, women's capability has been considered in development and gender literature when dealing with poverty and gender equality (Shakoori et al., 2007). In this regard, development conditions in rural spaces has made rural women as vulnerable communities in rural development plan despite their broader participation in daily socio-economic activities (Ali et al., 2007). Nowadays, experts believe that a specific attention is required for this community through revising planning approaches. Hence, participative and empowerment strategies for rural women have been considered based on the changes in development approaches. Therefore, women should be empowered in various scopes enabling them to play their role more in society. Women's empowerment is related to quality of life and fundamental issues of human rights (Jackson, 2010). Empowerment of women, in particular rural women will be developed if it is planned making them sociable and helping them to play their role and feel their sense of productivity. In this case, women will be aware of their vital role contrary to old beliefs about them. Under such circumstances, women can be more effective in individual and community development process relying on their abilities. Hence, the current community ecology situation of rural women can be determined through evaluating community ecology stability of women in order to actualize their real position. There are various methods for measuring the socio-economic situation; for instance, direct indexes including monthly income, education level, and job of individuals in society that are old indicators used to assess socio-economic status of people. In addition, the assets owned by people can be named as one of indirect indicators in study of development and health of individuals (Chuma and Molyneux, 2009). This study was conducted to examine the socio-economic factors affecting empowerment of rural women and identifying effective factors or barriers to this empowerment. To achieve the main objective of this study, the following questions were asked:

- What are the factors affecting community ecology empowerment of rural women?

- What are the barriers to community ecology empowerment of women in village activities?

Literature review

- Ozkia (2006) believes that empowerment of rural women is an important issue. Accordingly, empowerment of women helps them to make decisions powerfully.
- In opinion of Malhotra and Schuler (2002), empowerment is a process in which, women can organize themselves and improve their self-confidence using their rights to choose freely and control resources. In this process, women can achieve their goals benefiting from abilities to actualize their demands.
- Sharifi and colleagues (2010) emphasized on the effect of community ecology insurance, village development level, job diversity, value of assets, and activity duration on economic empowerment of female-headed households in rural areas.
- Shakoori and colleagues (2010) studied on empowerment of women who head households and indicated that there was a significant relationship between total empowerment index with some of basic variables such as age ($r=-0.3$), job ($r=0.8$), literacy ($r=0.4$), and household dimension ($r=0.4$), while there was not any significant relationship between professional skills and women's empowerment.
- Ketabi and colleagues (2003) mentioned the effect of some factors including high education level, accessibility to financial resources, improved health status, having the legal ownership right, lack of discrimination in job market and removal of traditional beliefs on women's empowerment.
- Mahmood and colleagues (2011) conducted a study entitled "measuring the capability of women in Bangladesh's villages" and proved that watching TV by women can predict and explain three indicators out of 5 indicators using for capability measurement. There was a significant relationship between education years, self-esteem, and freedom in activity among rural women.
- Komar (2002) assumes that women's capability is along with a severe, dynamic and democratic change in women's perception and expectation in society. Economic independence of women is firstly subjected to such change so that when a woman is independent economically will make the decisions by her and can freely choose her life and even sexual behavior; in this case, nobody can use her for pleasure.
- Shakoori and colleagues (2009) also found the same result. First, women's accessibility to resources including education and occupation is a facto facilitating capability of women. Second, assuming important role for women (bottom to up approach versus up to bottom approach). It means that the women should play a crucial role in their choices as specific actors. The third factor is subjected to results and outcomes of capability that meet basic needs and complicated achievements such as satisfaction, self-esteem, and community ecology participation.

Methodology

This is an applied research in terms of objective and a descriptive-analytical and correlational study in terms of method. Data gathering was done using field method and researcher-made questionnaire. To achieve validity of concepts, questionnaires were distributed among 30 members of statistical population within a pilot study. According to statistics of 2016, there were 10327 households living in studied place; of that, 8795 households live in rural places so they were selected as statistical society of this study and then entered to sampling. To obtained sample size, general Cochran formula was used; in this regard, the number of questionnaires reduced to 220 using correction formula due to time and economic limits as well as expansion of statistical society and then 8 villages (Ghale No, Ghani Abad, Seyyed Abad, Ali Abad, Dolat Abad Gheysarieh, Hossein Abad, Firooz Abad, and Nazar Abad) were selected as study sample through systematic method considering the conditions of region and similarities between villages. Factor analysis, Chi-square correlation and stepwise regression were used for data analysis.

Fundamental concepts

Participation: Participation is a process consisting of awareness, presence, decision-making, demand, and interest of person or community in affairs related to the person (Moeen, 2005).

Development: Development is a multi-dimensional activity pointing to economic, community ecology, political, and cultural dimensions (Asayesh, 1995, P. 8). Development is an attempt to improve life that has exists during the human society history; however, the current meaning of development is a comparative concept that has been discussed more rather than any other subject in recent half a century (Jomepoor, 2005, P. 51). Development is a continuous and dynamic process in terms of quantitative and qualitative growth in society structure (phenomenon) that aims at increasing abilities to meet physical and spiritual needs of human through balanced expansion of structures and improvement of performance of socio-economic institutes benefiting from all facilities and capabilities in environment (Zia Tavana, 2003, P. 87). Development can be defined as a human phenomenon that is formed by optimal attempts of human in a geographical space (Motee Langroodi, 2001, P. 280). Therefore, development is a concept beyond the growth that is based on qualitative and structural transformations that are different with past. In fact, quantity is not the only variable so that a new quality is the goal regarding the desired situation (Sarafi, 2004, P. 74).

Rural development

Village and rural society form a major part of developing communities. Development experience in these communities show that rural development plays a vital role in achieving development goals so that many of theorists consider rural development

as the driving force in developing countries, especially in initial steps of development considering it as an inevitable necessity (Jomepoor, 2007). Rural development is a factor contributing to regional and national development and is a part of national sustainable development based on the existing analyses (Behzadnasab, 2004). According to the definitions of rural development by various viewpoints, some key points can be mentioned as specifications of rural development:

- Universality of rural development process (economic, community ecology, and ecological) (Abrahamson, 1997),
- Popularity, participative and being endogenous (Umana, 2002),
- Freedom in choice and equal access to opportunities (Axinn, 1997),
- The final goal of rural development is obtaining satisfaction with life (EXCAP, 1996),
- Empowering people, creating new capacities, respecting domestic knowledge and information, and increasing awareness (Zahedi Mazandarani, 2005) (Dobe, 2004),
- Creating smooth changes in perspectives, values, consumption methods, etc. (Balazs and podmaniczky, 2001),
- Preserving environment (Overton, 1999).

Village in community ecology perspective: Pierre Georges defined village as some lands on which, various community ecology groups work cooperatively and use the land and their alliance is based on the family and cultural relationships as well as tradition. Sorkin is another sociologist that names 8 variables including employment, environment, society size, population density, population congruity, movement, and mutual effects system as factors distinguishing the village from city (Farid, 1992, P. 101).

It can be stated that village is a homeland for future citizens of a large society, an original place for human associations for national development, source of human force as cultural reserves of any nation and agents for development of each country (Shahbazi, 1993, P. 35).

Empowerment

Empowerment has been translated in Persian language but the word "power" has been less considered in this translation, while power is a key concept in this term. Page and Czuba have mentioned, "the idea of power is the core of empowerment since empowerment will be possible if power changes; otherwise, empowerment will not occur. The concept of empowerment relies on the concept of power. Therefore, ignorance of power will ruin the meaning of empowerment" (Page & Czuba, 1999). In other words, empowerment means giving the power so that individuals can improve their self-confidence overcoming their inability so that the capable person is interested in working and doing tasks based on an internal motivation. Capable or empowered people not only do some activities but also think differently about themselves compared to the time before empowerment (Whetten & Cameron, 2002).

Sara Lange, one of theorists in women's affairs, believes that five steps including wellbeing, accessibility, awareness, participation, and control should be taken for women's empowerment.

- Gender equality means creating opportunities and situations in fair and equal conditions for both genders regardless of physical, mental, and spiritual power or their community and economic status (Ghafari, 2002). Women play a vital role in gender equality. In majority of communities, women are prior power in scope of life. The purpose of gender equality promotion is encouraging and enabling men to take production responsibilities and to play familial and community roles (Panahi, 2006, P. 176; Fleury and Lee, 2006).
- **Increasing accessibility:** Women should have access to production factors (land, work, and capital), income generating jobs, services, skill generating teachings that make employment and manufacturing possible, even their income and product.
- **Increasing awareness:** Women should know that their problems are not caused by their personality shortcomings, but they are originated from gender roles related to the culture so they can be changed. Awareness in this field means believing in equality. In perception step, women participate in all of programs related to them. Their participation should be matched with their number in society. Equality in control means the power balance between men and women (Mozer, 1993).

Community-based empowerment

This process consists of making aware of existing status, removal of structural barriers and constraints, benefiting from capacities and resources of local communities regarding effective management in decisions and attempts for improving life (Special committee on Community Empowerment in Welfare and Social Security, 2005).

Research location

Shahr Ray is a place with area of 2293 km² that reaches to Tehran province from north, to Qom Province from south, to Varamin and Pakdasht from east and to Islamshahr, Robatkarim and Zarandieh from west (Tehran Province Statistical Yearbook, 2001).

The area of triple restrict of Ray province is as follows: central part with area of 174 km², Kahrizak with area of 543 km², and Fashafooyeh with area of 1645 km² (Maleki, 2007).

Shahr Ray is the capital of Ray Province located in geographical coordination of 35.36 northern degrees, 56.26 eastern degrees. The height of this province is 10.62 above sea level. Shahr Ray is located in southeast of Tehran connected to Ahsan Shahr. The distance between Ray and city center of Tehran is more than 14 km (Geographic Culture of the Country's Villages).

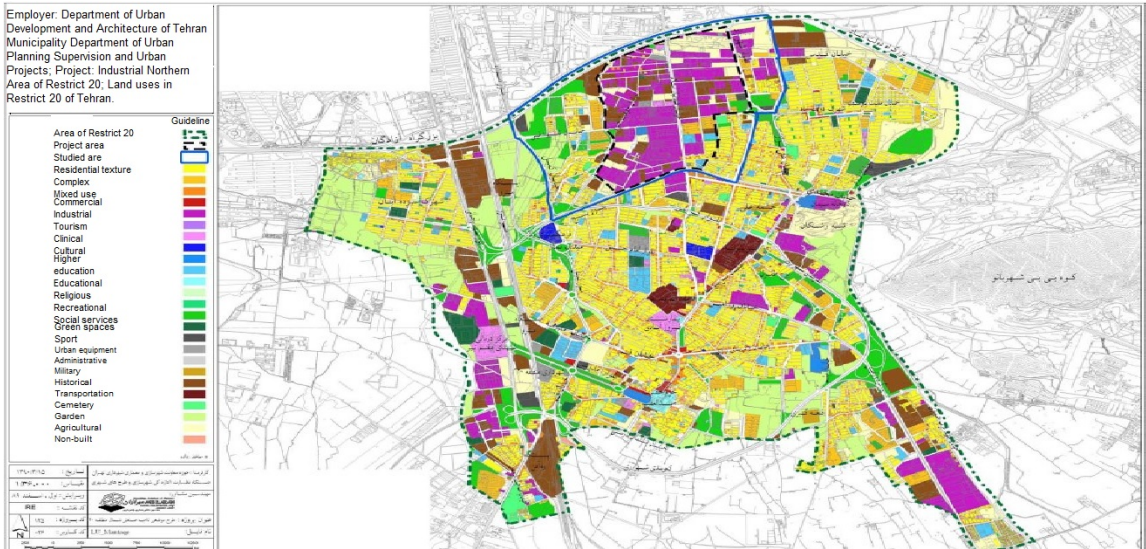


Figure 1. Location of Shahr Ray. Reference: District 20 Municipality.

Quantitative analysis of data

That applied 10 indicators were collected based on statistical period of 2016 in 5 separate parts in villages of Tehran restrict 20. Entropy model was used for spatial distribution of indicators and TOPSIS model was employed to investigate the women's empowerment in rural areas.

Describing topsis process

There are various method and models with different responses to measure and rank different economic, community ecology, cultural, and physical parts of urban neighbors and areas. In this case, multi-criteria methods are most important. Development of multi-criteria decision-making methods, in particular combination of fuzzy models and formation of fuzzy multi-criteria methods, ranking of inequalities level of centers and urban neighbors and areas has entered to a new step. One of ranking methods with powerful differentiation is "Technique for Order of Preference by Similarity to Ideal Solution" that is called TOPSIS. This method was introduced by Hwang and yoon in 2002 (Table 1).

Table 1. List of selected villages in sampling.

Row	Rural district	Village	Population	Village classification	Number of sample
1	Ghani Abad	Ghani Abad	1834	Very large	80
2	Hasan Abad	Ghale No Fashapooyeh	428	Large	40
3	Ghale No	Najm Abad	396	Large	40
4	Fashapooyeh	Ali Abad Moghofeh	115	Medium	20
5	Kahrizak	Ali Abad Gheysarieh	132	Medium	20
6	Azimiyeh	Olya	290	Medium	20

Reference: Statistics Center of Iran, 2016.

Measurement of capability is subjected to definition of empowerment dimensions and indicators, because any study and solution is not possible without knowing dimensions and indicators. For this purpose, some criteria that should be considered in selecting dimensions and indicators have been mentioned herein:

According to the study framework, dimensions and indicators should be selected based on the life of rural women

The applied dimensions should be comparable with international dimensions and standards

Empowerment indicators not only should be evaluated using instruments, but also should consider inherent aspects of empowerment

Empowerment is an essential process that its selected indicators should identify empowerment transformations during time. Moreover, it is essential to evaluate accuracy, validity and reliability of these indicators (Alkire & Ibrahim, 2007).

In this research, empowerment and its effective factors were measured using dimensions and indicators demonstrated in Table 2.

Table 2. Dimensions and indicators of empowerment of rural women and factors affecting it.

Empowerment of rural women	Dimensions	Definition	Indicator
	Self-esteem	Belief in self, ensuring to ability to think, understanding, teaching, selecting and making decision for self and sense of being precious	1- Sense of success in life 2- Sense of satisfaction with self 3- sense of respected by

		others
		4- ability to help others with their problems, sense of self-efficacy (adopted from Coopersmith, 1981)
Capacity to cope with stresses	Ability of women to cope with periodic risks, crises and tensions in family	1- existing disasters 2- financial limits and debts 3- shortage of essentials for life 4- incurable diseases and unexpected death 5- spouse abuse
Participation in family decisions	Ability of women to participate in making decisions for household, financial affairs, children welfare, health issues, agricultural and community ecology issues in line with other family members	1- buying livestock and production inputs 2- spending the family saving 3- health and treatments for children and parents 4- having more children 5- lending and borrowing 6- fostering and teaching children 7- making decision about properties and consumption
Access to community ecology and economic resources	Right of access, free access, having power to use resources or gain benefit from socio-economic resources	1- proving relevant facilities and equipment for family 2- managing and consuming income of self and family 3- using rural cooperatives 4- use of bank services 5- community groups and associations
Dynamism and spatial mobility	Ability of women to move from a place to another	1- going to the hospitals and companies 2- meeting friends and relatives 3- visiting markets and purchasing
Understanding equality and gender awareness	Inequalities and discriminations against women in community ecology, economic, and legal scopes	1- education 2- economic opportunities 3- right of ownership and heritage 4- marriage and divorce 5- being aware of rights 6- managing home affairs
Ownership of properties	Ability to control properties	1- ownership of producing assets 2- 1- ownership of non-production assets
Community ecology -cultural	Occupational and community ecology relationships, gender discrimination status, education, use of mass media	
Economic	Job status, having income, and gaining money	

At preliminary step, 220 questionnaires were filled out then the final questionnaire after required corrections. Moreover, content validity of questionnaire was approved based on the judgment of experts in community and human sciences such as

sociology, anthropology, community work, and psychology (Tables 3-10).

Table 3. Decision-making matrix in explaining empowerment of community ecology status of women living in Shahr Ray villages.

ID		Household dimension	Literacy percent	Participation rate	Employment rate	Population movements
Olya		3.1	9.9	8.3	38.3	3.24
Ghani Abad		3.4	8.6	8.4	39.4	3.65
Ghale	No	3.67	8.2	8.7	38.5	3.32
Fashapooyeh						
Najm Abad		3.38	7.2	7.3	39	3.14
Ali Abad Moghofeh		3.56	9.3	7.6	40.3	3.12
Ali Abad Gheysarieh		3.84	7.2	8.1	48.6	3.86

Reference: The author (2017).

Table 4. Shannon entropy weighing in explaining empowerment of community ecology status of rural women.

Quantitative matrix	+	+	+	-	+
	Household dimension	Literacy percent	Participation rate	Employment rate	Population movements
Olya	3.1	3.24	8.3	9.9	38.3
Ghani Abad	3.4	3.65	8.4	8.6	39.4
Ghale	No	3.67	8.7	8.2	38.5
Fashapooyeh					
Najm Abad	3.7	3.14	20000	5	5
Ali Abad Moghofeh	3.56	3.12	7.6	9.3	40.3
Ali Abad Gheysarieh	3.84	3.86	8.1	7.2	48.6
SUM Pij	21.27	20.33	20041.1	48.2	210.1

Reference: The author (2017).

Table 5. Linear non-scale to weigh indicators of community ecology status.

Linear non-scale	+	+	+	-	+
	1X	2X	3X	4X	5X
Olya	0.1457	0.1594	0.0004	0.2054	0.1823
Ghani Abad	0.1598	0.1795	0.0004	0.1784	0.1875
Ghale No Fashapooyeh	0.1725	0.1633	0.0004	0.1701	0.1832
Najm Abad	0.174	0.1545	0.9979	0.1037	0.0238
Ali Abad Moghofeh	0.1674	0.1535	0.0004	0.1929	0.1918
Ali Abad Gheysarieh	0.1805	0.1899	0.0004	0.1494	0.2313

Reference: The author (2017).

Table 6. Entropy and weighing community ecology indicators.

	m	6	K=	0.5581		
Entropy of each index	Ej	-1.3079	0.9982	0.0101	-1.328	-1.1518
Deviation rate	dj	2.3079	0.0018	0.9899	2.328	2.1518
Normalized weight	Wj	0.2967	0.0002	0.1273	0.2992	0.2766

Reference: The author (2017).

Table 7. Making quantitative and non-scale of decision matrix of community ecology indicators.

ID	Household dimension	Literacy percent	Participation rate	Employment rate	Population movements
Olya	0.36	0.39	0.42	0.48	0.38
Ghani Abad	0.4	0.44	0.42	0.42	0.39

Ghale	No	0.43	0.4	0.44	0.4	0.38
Fashapooyeh						
Najm Abad		0.39	0.38	0.37	0.35	0.39
Ali Abad Moghofeh		0.42	0.37	0.38	0.45	0.4
Ali Abad Gheysarieh		0.45	0.46	0.41	0.35	0.49

Reference: The author (2017).

Table 8. Weighing the normalized matrix of community indicators of women's empowerment.

	Household dimension	Dependency rate	Unemployment rate	Illiteracy percent	Employment rate
Wi	0.29	0.002	0.12	0.29	0.27

Reference: The author (2017).

Table 9. The ratio of indicators to normalized matrix of community index of rural women's empowerment.

ID		Household dimension	Literacy percent	Participation rate	Employment rate	Population movements
Olya		0.1	0	0.05	0.14	0.1
Ghani Abad		0.12	0	0.05	0.12	0.11
Ghale	No	0.12	0	0.05	0.11	0.1
Fashapooyeh						
Najm Abad		0.11	0	0.04	0.1	0.11
Ali Abad Moghofeh		0.12	0	0.05	0.13	0.11
Ali Abad Gheysarieh		0.13	0	0.05	0.1	0.13

Reference: The author (2017).

Table 10. The positive and negative ideal solutions for community ecology index of women's empowerment.

	Household dimension	Literacy percent	Participation rate	Employment rate	Population movements
Max	0.13	0	0.05	0.14	0.13
Min	0	0	0	0	0

Reference: The author (2017).

To obtain the distance of each option from positive and negative ideals, villages were coded then the rate of positive and negative ideals was determined (Tables 11 and 12). 1=Ghani Abad, 2=Najm Abad, 3=Ghale No Fashapooyeh, 4=Olya, 5=Ali Abad Gheysarieh, 6=Ali Abad Moghofeh.

Table 11. The distance of each option from positive and negative ideals of community ecology index.

ID	di+	di-
1	0.03	0.05
2	0.03	0.03
3	0.04	0.02
4	0.05	0.02
5	0.03	0.03
6	0.05	0.03

Reference: The author (2017).

Table 12. Ranking the studied villages in restrict 20 based on community ecology index.

ID	CL
Olya	0.62
Ghani Abad	0.52
Ghale No Fashapooyeh	0.47
Najm Abad	0.38
Ali Abad Moghofeh	0.3
Ali Abad Gheysarieh	0.25
Olya	0.62

Reference: The author (2017).

Research question: Is rural women's empowerment leading to increased community ecology interaction, sense of self-confidence, and self-reliance among them, and what are problems in community ecology empowerment process?

To answer this question, stepwise multivariate regression was employed due to the significant correlation between community ecology interactions, self-reliance and self-confidence. Correlation between variable varied from 0.735 between community ecology interaction and self-reliance to 0.928 between self-reliance and self-confidence. According to stepwise multivariate regression, only self-reliance could enter to the equation. There was a significant relationship between job performance and self-reliance based on the sum of squares obtained from regression ($F(1,98)=100.4$, $P<0.001$).

The equation will be:

$$1.1+0.58(\text{self-reliance})=\text{Job performance}$$

The summary of regression analysis indicated that job performance could explain 51% of changes in self-reliance. In this case, one-way ANOVA was used (Table 13).

Table 13. One-way ANOVA.

Variable	F	Sig.
Self-confidence	0.547	0.702
Self-reliance	0.316	0.867
community ecology interactions	2.953	0.024

According to Table 14, women's capabilities had significant effect on community ecology interactions.

Table 13. Mean of empowerment variables at educational levels.

Variable	Self-confidence	Self-reliance	community ecology interactions
Illiterate	2.2286	2.3929	1.7857
Elementary	2.5429	2.5	2.5
Secondary	2.6857	2.7857	2.6786
Diploma and lower	2.35	2.5781	2.3125
Above diploma	2.3538	2.4615	2.1442

About hypothesis 1, it can be stated that the positive correlation between three factors of community ecology interactions, sense of self-confidence and self-reliance based on the Pearson correlation coefficient and multivariate regression made rural women of statistical society who were the member of cooperative company be in an interactional triangular with the mentioned factors so that a two-way relationship observed in direct and mutual relationships between these factors and individual-group promotion of cooperatives' members (Figure 2). In this regard, hypothesis 1 was confirmed.

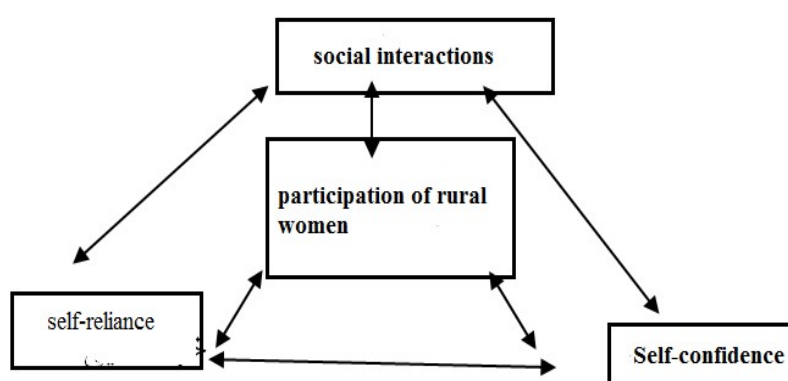


Figure 2. Interactional correlation of rural women's empowerment.

Conclusion

According to the ranking of studied villages and based on the community ecology index, villages of Ghani Abad and Najm Abad had respectively more suitable community ecology status for rural women's empowerment compared to villages of Olya, Ali Abad Gheysarieh, Ali Abad Moghofeh, and Ghale No Fashapooyeh, respectively.

Empowerment studies indicate that women's empowerment is possible in one of life dimensions while it is not possible for other dimensions. Hence, some researchers have attempted to measure women's empowerment using variables and dimensions. Nasir and colleagues believe that indexation of empowerment should be extracted from a studied society (Nasir et al., 2007, P. 20). The analysis of relationship between personal, community ecology, economic, supportive and

empowerment characteristics of women indicated that women with high capabilities have more entered to empowerment process.

Since rural women are usually illiterate, results showed that women mention some reasons for that including early marriage, patriarchal attitudes ruling the family and living in village. Therefore, it is recommended to provide the field for education through Literacy courses for adult women, pay attention to higher education of rural girls and women and change the villagers' attitude and negative appraisal in this context using a suitable promoting system. Increased education and awareness level of rural women in Shahr Ray not only increases their capability but also empowers the next generations. Therefore, the focus is on promoting education level of rural women living in Shahr Ray to take an important step toward promoting their status in rural activities.

Recommendations

Some research recommendations can be mentioned herein:

- Further studies can be done to provide teachings that are matched with demands and needs of rural women and to change culture and attitude of villagers.
- Since rural women's capabilities in villages with more households are different with small and medium-size villages, the welfare level and rural area may be other effective factors. Hence, it is recommended to design an index in order to measure welfare status of villages in case of examining the effect of villages' situation and relative welfare on women's capability.
- Seemingly, type of culture, tradition and attitude of people living in a village are effective factors. Therefore, it is suggested to design suitable empowerment indexes in further studies to investigate the relationship between these variables.
- It is recommended to create required facilities such as governmental and non-governmental organizations to expand participation of rural women at all of managerial level, in particular in rural activities.
- Financial support for rural women within micro and macro credits regarding sustainable rural development.
- Providing educational facilities for rural women based on economic, educational, political and cultural dimensions in order to achieve sustainable rural development.
- Teaching to remove gender discrimination in home and community ecology activities.

References

- Asayesh, H. (2006). Introduction to the rural economy of Iran (5th edn). Kermanshah Islamic Azad University Press, Iran.
- Azki, M., & Ghaffari, G. (2004). Rural development with emphasis on rural society in Iran. Tehran, Ney publication.
- Behzad, N. J. (2004). Integrated local development strategic approach to rural development. Rural Congress Articles, Challenges and Perspectives, Institute for Management and Planning.
- Jpme, P. M. (2007). Introduction to planning of rural development; Approaches and Methods. SAMT Publications, Switzerland.
- Khalati, M. (2009). Investigating the capacity of housewives and its effective factors in Shiraz City 2007. Journal of Social Research.
- Office of Statistics and Information of the Ministry of Cooperatives (2010), Familiarization with women's cooperatives.
- The Office of Education and Development of Women's Rural Cooperatives, the Central Organization of Rural Cooperatives of Iran (2003). Will meet with our duties towards our cooperative.
- Zahedi, A. M. (2002). The basics of social welfare, Tehran. Allameh Tabatabaei University, Iran.
- Shahbazi, A. (1993). Rural development and promotion. Tehran University Press, Iran.
- Shakouri, A., Rafatjah, M., Jafari, M. (2007). The Components of women's empowerment and explaining factors affecting them. Women's Research.
- Sarafi, M., (1998). The basics of regional development planning. Planning and Budget Organization Publications, Iran.
- Zia, T. M. H. (1990). A view of the village and its development mechanisms. Journal of Geography Growth and Education, 6.
- Ali, B. A., Zarafshani, K. (2007). Gender analysis of agricultural activities in Kermanshah Villages: recommendations for rural development.
- Ghaffari, S. R. (2007). The role of rural women in the sustainable development process: A Case Study on Chaharmahal & Bakhtiari Province, Ph.D. in Geography and Rural Planning, University of Isfahan, Iran.
- Farid, Y. (1992). Application of geography in the methodology of city and village. Tabriz University Press, Iran.
- Lange, S. (1392). Criteria for women's empowerment, Tehran. Intellectuals, Iran.
- Iranian Statistics Center. (2012). Results of Population and Housing Census of Tehran Province. Tehran, Iran Statistics Center, Iran.
- Motee, L. S. H. (2009). Rural planning with emphasis on Iran (4th edn), Mashhad University Jihad, Iran.
- Jackson, M. A. (2010). Empowering Women of Nepal: An Experience of Empowerment in the Land of the Himalaya. M. A Thesis, Prescott College in Adventure Education, Arizona, USA.
- Chuma, J., & Molyneux, C. (2009). Estimating inequalities in ownership of insecticide treated nets: does the choice of socio-economic status measure matter? Health Policy and Planning, 24(2), 83-93.
- Malhotra, A., Schuler, S., & Boender, C. (2002). Measuring women's empowerment as a variable in international development. Gender and Development Group: World Bank.

- Abrahamson, K. V. (1997). Paradigm ability in sorlin, ed the road towards sustainability. A historical perspective Asustainable Baltic region, The Baltic University programme, Uppsala University, Sweden.
- Axinn G. H., & Axinn, N. W. (1997). Collaboration in rural development; a parctioinr hand book London.
- Balaze, K., & Podmaiczky, I. (1999). Rural enterprise planning: an applied approach to address new challenges, Szent István University, Hungary.
- Dobie, P. (2005). Models for national strategies: building capacity for sustainable development. Development Policy, 1.
- Escap, J. (1996). Showing the Way: Methodologies for Successful Rural Poverty Alleviation Projects.
- Ward, R. G. (2001). Strategies for Sustainable Development: Experiences from the Pacific. Oceania, 72(1), 86.
- Umana (2002). Generating capacity for sustainable lesson and challenges, Choice. Environmentally Sustainable Sustainable Group, UNDP, USA.
- Fleury, J., & Lee, S. M. (2006). The social ecological model and physical activity in African American women. American journal of Community Psychology, 37(1-2), 129.

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