

**Protection of Environment and women's social position in Iran<sup>1</sup>**  
**(A Community Level Study)**

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**Abstract:** *The article addresses the mutual relationship between environmental improvements and improvement in social status of women. The main question of this article is: Are there any relationships between improvement in environment protection and promotion in the situation of women? The theoretical framework includes Hatfield's view about the existence of communities between the public and private spheres on one hand and the division of labor theory by gender on the other. Answering the question the documents of some environmental projects in Iran have been chosen. The goal of these projects was to protect environment through local communities and non-governmental organizations' participation. Content analysis is the method has been selected for implementing the research. A reverse questionnaire was prepared for data collection. The population includes 61 projects in various fields and locations throughout the country. The data indicates some kind of co-variance between the two variables namely environmental improvements and the social status of women in local communities.*

**Keywords:** *Gender roles, Environment, Social position of women.*

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## **Introduction**

In its interaction with environment humans have interfered with everything that nature had to offer. The man's own nature was also impacted as a consequence. With the acceleration of the trend first initiated at the onset of industrial revolution particularly during the last two decades, both changes have been manifested to such an extravagant extent forcing humans to take note of the interventions in nature, since his own survival was now at stake (Hamilton 2002; Mooney et al 2007). On the other hand the traditional western thinking human's ability to reason was a way to distance him from nature. One of the most important issues in classical sociology is to maintain the distinction with other sciences and sociologists avoided intervention in the natural aspects of problems. This tradition was challenged by several well-known sociologists in Chicago leading to the inclusion of human ecology as a sub-category of sociology by Park and Berguess (Quinn, 2005). Gradually the gap between social and environmental issues was closed. 1970's and early 1980's witnesses greater focus on environment in the scientific arena. However, the experts soon realized that attention to technical aspects of environment alone will not be sufficient in addressing the problem.

With increased attention of scientists to other dimensions involving behaviors toward the environment gender issues were also identified as a critical element. Gender and environment interaction has been addressed during the last decade. Understanding this interaction is not an easy task particularly in today's urban environments as most people have been considerably separated from the natural resources that provide the basis for their survival. The physical distance between resources providing food, energy, water and other critical elements necessary for our survival and today's urban societies will make comprehension of this relationship more complex. Susan

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<sup>1</sup> I had this chance to review Small Grants Program in Iran for several years (about 6 years ago). This article was prepared based on this opportunity). The program is known as GEF/SPG is a UN program directly working with local communities as well as NGOs. The program has a bottom up approach based on participation of stakeholders in development. Areas for collaboration are defined based on impact on global environment as an objective. The program follows global characteristics and aims and localizing these elements. Data used in this article are part of the study supported by DSS of UNDP in Iran in order to review the program and identification of strengths and weaknesses. The author is a member of the project implementation team. Environmental indicators used in the article have been determined by Dr. Ahmad Reza Yavari, Faculty of environment University of Tehran for use in the environmental section of the study. I asked his permission to use those indicators in this article. It should be noted that I also benefited from the collaboration of Ms. Yasamin Shahrababaki.

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Buckingham Hatfield believes that women's physiology and its way of life is more suitable to grasp the relationship between the society and the environment. In urban societies, women have the responsibility to purchase food and are very sensitive to providing clean and healthy food for their families. This behavior is more significant in women in lowest classes of the societies and particularly those in local communities. The social roles of women is related to gender that regards to what society expects from man and woman or what the society understands as feminine and masculine.. According to Hatfield, those attempting to comprehend the relationships between social and environmental issues should pay attention to the point that a society which has been stratified by elements like class, race and gender, will reflex the same stratifications in environmental issues (Hatfield, 2000).

On the other hand the condition of women and gender related ideas are widely articulated in all societies and each community has formulated its own unique response based on history and culture. The belief that gender has been socialized and the gender differences which are highlighted reshape the destiny of women. In other words it should be accepted that men and women will not always display distinct characteristics from each other. According to Robatom "...they can create a common experience and women's condition has evolved from this common experience." (Robatom, 1385). Compared to the past the determining forces in today's world have been significantly distorted. Classes and the challenges among them is no longer the main topic related to the manifestation of movements for changing the world. Instead, we are witnessing the expression of new definitions changing the nature of the society. Two of the most prominent forces in this regard include the efforts made towards women's conditions and the environment. Focus on these social forces will undoubtedly affect both conditions and they may not be easily set apart. It is not surprising to note that many articles by environmentalists also discuss gender as a supportive force in environmental issues. Based on the same model, it is also expected that the movements supporting the environment can also impact the condition of women. Today, all over the globe, countries are implementing changes with the hope of improving and facilitating people's livelihood. Women are the focus group in most of these programs. These efforts are classified as development programs at the international and national levels. In the last decade the two following main elements have been highlighted:

1. Protection of environment and natural resources
2. Gender and achieving better conditions for both genders

Given the fact that the sociology has embraced nature and environment, one of the main issues is the common faith of women and environment. Somehow the two suffer from a common pain with a common cure. The issue has been widely discussed and criticized with no specific clear answer to the relation between the two elements. Representation of nature as a mother clearly indicates that the idea is still alive and well even though there have been many discussions in this regard. The main question which this article seeks to answer is therefore: "Is there any relationships between improving women's access to public domain and the improvement of environmental conditions?"

### **Theoretical Approach**

When discussing the relationship between gender and environment, the first theory that comes to mind is eco-feminism. This expression was first articulated by a French woman Françoise d'Eubonne to identify a movement led by women to save the earth. Eco-feminism was both an analysis of the society/ nature relations as well as a prescription for changing this relationship. According to Hatfield eco-feminism is used to express and approach to analyze the society nature relations in two specific areas of cultural eco-feminism and social-eco-feminism. Cultural eco-feminism is identified a strong positive linkage between women and nature. This linkage is highlighted in birth and regeneration of women. Accordingly when compared to men, women are better supporters of environment. According to the social eco-feminists, since women and nature are both subject to a male dominated society, compared to men women are in better position to express views on nature based on the roles since they share this subjugation with nature. Hatfield reminds us that both the above trends are observed in the cultural, historical and social settings in the western world (2000: 35). In this approach, the closeness of women to nature is the direct consequence of social roles associated with women. Therefore, the closeness can be seen as a social norm. Sutton has further added liberal, social and third world eco-feminism concepts to the theory of eco-feminism. Accordingly, social eco-feminists believe that due to their social roles, women are less capable of distancing themselves from nature. Due to the subjugation and prejudices based on their roles as care takers assigned by the society, women are better able to comprehend these concepts. Therefore, they are of the belief that the first step in eliminating discrimination against nature is to abolish other forms of discriminations. Val Plumwood confirms that the focus on the closeness and common fate between women and nature can result in transfer of the burden of environmental clean up to women based on the feelings of guilt and motherly duties (A global super housewife). Other views such as Janet Biehl state that "Women are asked once more to prevent the

fall, this time the fall of the planet”. Griffin states that based on social beliefs and social practices women are closer to nature. With regards to Plumwood’s views, Griffin points to treatment women and nature as instruments will be implemented in parallel. This is in turn observed not only in specific women experiences such as rearing of children and house chores but also in wages (Cudworth, 2003:57). According to Cudworth, Plumwood is particularly concerned about the reversal strategy of social change. Instead of cooperation in a leading culture, a group of eco-feminists known as affinity eco-feminists, advocate a new culture based on subversion, resistance and replacement of the dominant culture and its replacement with positive values instead of previous feelings such as hate, and exclusion. Plumwood adds that the initial dichotomy and dualism between human/ nature and men/women are so deeply intertwined that a solution is required for transcending both.

Sutton addresses the comparisons between feminists and eco-feminist teachings. The way feminism is introduced; there is an inherent dichotomy in feministic views and the views presented by eco-feminism. Feminism is presented as a political ideology relying on the premise that society is dominated by men and patriarchal and there is a need for a movement by women to challenge the status quo to achieve gender equality is necessary. Accordingly all organizations and feminist groups collectively believe that ideas which advocate the closeness of women to biology and nature while men are inclined toward culture and logic should be further investigated. According to this theory the relation between women and biology allows men to label them as emotional individuals not suitable for rational thinking. However, during the latter part of the 1970’s and 1980’s a new form of feminism has been manifested reflecting environmentalist ideas and issues. Eco-feminism reiterated the relationship between women and biology and nature. However, this time some econ-feminists accepted the relationship as a step forward to establish that a special connection exists between women and nature which can be an extraordinary indicator and unique for women in an era where environmental risks are increasing. Sutton immediately reminds us that women are not a majority in the groups advocating environmental protection around the globe (Sutton, 2007). From a different perspective, Karen Warren advocates a common stand between men and women in dealing with nature. However, based on historical, cultural and social circumstances various groups have achieved many results in addressing the process. According to her, these differences should be addressed by eco-feminists. While there are challenges concerning the political strategy with an approach to closeness and likeness of women with nature they represent a strong argument on how social exclusion, division of labor by gender, as well as relationships between society and environment. They present ways that intertwined and closely linked ideologies advocate conquering “nature” and conquering specific social groups which operate marginally (Cudworth, 2003:58). Maria Miles is among social feminists analyzing the exploitation of women and nature by the dominant social structures. These social structures include capitalism, male dominance, colonialism, inclination to wars, and governments. Miles states that division of labor by gender is at the center of the link between exploitation of women by men (Cudworth, *ibid*: 59).

Hatfield also believes that there are other concerns leading to the criticism of the theory of eco-feminism. These concerns indicate that accepting the eco-feministic analysis can lead to isolation of men from this movement. Carolyn Merchant promotes the behavior encouraging collaboration between genders on environmental issues. Plumwood also advocates avoiding a separation expressing that one side of the argument describes the other. In this way of thinking women behaviors include natural and caring traits as a consequence of dominance. In rejecting the status of cultural eco-feminists Rose states that male/female dualism is truly a male/male description of feminine dualism. Therefore, it could be said that these feminine attributes are previously defined by men. While these authors have described themselves as ecologic feminists (except Rose) and are considered as Patriarchal critique, they also review some of the social and cultural claims attributed with eco-feminism such as essentialism, and the fact that the relationship between women and nature has not been defined with total satisfaction (Hatfield, *ibid*:39-40). Cecile Jackson has critiqued the relationship between development and environment according to eco-feminism in order to identify contradictions and difference among women. She has particularly identified the tensions between Northern and Southern women and believes that women in the North view those in the South as victims. She also notes that in the South, relationship among women and with the environment is significantly influenced by class, age and their position in the family. Each of these elements may lead to less than desirable behavior towards nature (*ibid*: 40).

In comparing ocean and the city as two distinct environments, Sutton is seeking to describe the relation between the society and nature. He believes that differences between these two environments will make distinguish between “natural environment” and “society”. Sutton emphasizes that this separation is not beneficial and distractive for sociologist and scientists in social sciences. The society and the natural environment are intertwined together by default and we may need a better alternative to understand this ongoing relationship to give equal weight to the natural environment and human reactions (Sutton, 2007:16). There is an impression that according to the eco-feminist theory the intertwining between the society and the environment is an interpretation of the relationship

between women and nature. Like other scholars, Sutton states that eco-feminists are of the belief that new modern societies have devastated both women and nature simultaneously. Therefore, based on the need for change in conditions of both, they believe that environmental supporters and eco-feminists have a common goal described as reversing negative cultural values towards women and nature in the society (modern society). Suttons states that there is little room for men in the eco-feminist ideas, while many of the modern feministic theories are equally supported by both genders. However, Sutton argues that eco-feminists believe that both genders have similar experiences with nature, but they place women's experiences at a higher level. Cultural eco-feminists have taken a different approach concerning gender differences toward nature in order to resolve this disagreement. From their perspective, associations of women with emotions and nature and those between men and reason are socially established. This signifies that searching for masculinity and femininity and a linkage between the two should be investigated. According to Sutton, eco-feminism inclinations in this regard provide a wider base for support which includes men, since this approach will shift the offender for damage from men towards a masculine society.

Another approach which evaluates the relationship between gender and environment focuses on domestic division of labor. This view emphasizes public and private domains which segregate between men and women activities. By playing roles as mothers, caretakers, and domestic workers will be linked to the private sphere (see Alirezanejad & Saraie, 1386) where goods and services are provided free of charge and without an exchange. On the other hand the public areanawhich is dominated by political and economic transactions has more relations with men. Hatfield believes that between the public and private spheres, there is an intermediate space which includes neighborhoods and communities. This intermediary sphere could be considered as a physical extension of the family and household. A sphere where women are more active (ibid: 67). Accordingly, further understanding of the linkages between women and the environment requires consideration of the importance of local communities as a bond between private and public domain. A critical element in community development is the need for correction in the current culture. On the other hand only programs which have introduced sustainable changes are those based on existing culture, as all major social movements are rooted in tradition. The groups experiencing rapid changes will lose many of their inherited traditions by default (Belcher, 1974:1). Accordingly, reliance on this approach, actions for change in the condition of environment or women should take into consideration the status quo and utilize it as its guide.

Based on the theoretical framework, it can be concluded that there is a significant relationship between the role of women and environmental improvements. Also Increased involvement of women as members of local communities in environmental protection will improve their access to formal opportunities in the public domain of their community.

### **Research Method**

In the context of theoretical framework it was previously stated that traditional sociology views nature and society as two separate elements and nature is generally outside the scope of any sociological approach. One of the major challenges faced by the research team was the differences in the type and nature of indicators in cultural and environmental research literature which made simultaneous comparisons very difficult. Given the prevalence of quantitative methods in most environmental research, the qualitative methods were used in this project at the expense of some data. The documents examined included existing reports from completed projects or those under implementation with at least one mid-term review report.

It also included films, pictures and other available reports. Given the nature of the social variables, measurement of social variables was done by the level of nominal and interval. The measurement for environmental variables reached to ordinal and ratio level. In this research only a small portion of environmental data indicating an improvement in environment situation were used. Reverse questionnaire was the instrument used for data collection which included all the variables studied including social, economic, environmental, methodology etc. For better understanding of local community and NGOs involved with project implementation several project sites were visited and project personnel as well as government and non-government partners interviewed. The population in this research included completed projects and those under implementation by the program up to March 2007.

Up to third quarter of 2007, the program has implemented 80 environmental projects in the different areas. The projects include those implemented and under implementation in various fields. About 61 projects from the total meet the minimum selection criteria for inclusion in the statistical population.

## Research Findings

Based on the project’s theoretical framework, the interaction was noted between women’s situation in environmental projects implemented with member of local communities and the environmental objectives achieved by the projects. To identify the impact of this interaction, changes in organizations in various areas were of interest. Even though the changes are slow, the program impact on gender and associated changes were noticeable. Data seems to indicate that in 80% of the projects, target groups claimed ownership of the projects. In 95% of the cases project personnel were able to establish good relations with local communities. In more than 60% of the projects the groups supported the existing local community to achieve project objectives. There is clearly an actual relationship between the projects and the local communities where projects are taking place. Program documents and project site visits indicate that program policies are aimed at support and collaboration with existing social institutions in lieu of creating new institutions within the society. This criterion allowed for better acceptance of the program by the local community and the interaction between the projects and the society.

Based on theoretical framework in separation of public and private areas for participation of both genders and the presence of women as a link between the two areas, it is expected that within the local community, women’s social relationships are limited and defined within a predefined areas. Accordingly, collection of reliable and accurate data in this regard was not an easy task. Based on all the above and to quantify the results based on observations, the following variables were identified and established concerning activities of women as members of local community.

1. New roles<sup>1</sup> for women members of local community who collaborated in project implementation
2. Access to new sources of power for women in project target groups, including access to different trades or access to new sources of income.
3. Presence of local women in various stages of project implementation<sup>2</sup>.
4. Various training sessions and the certificates obtained by women.

Based on gender division of labor, the greatest presence of women was expected during project implementation in line with their traditional roles. The data from review of reports indicates the following: 55% of women from local communities participated in various stages of project implementation including project definition, its execution, and monitoring and evaluation of the results. The greatest contribution of women in various stages was during project implementation where 45% of women from local communities were directly involved. The second area of high participation of women included monitoring and evaluation with 30% of local women and 50% of women from NGOs. Project design was the third area of women participation in various stages of the project with 25% participation among local communities.

**Table (1): Percentage of occurrence of various elements of gender characteristics in projects**

Type Presence or Absence	Stronger roles for women in NGO <sup>3</sup>	New roles for women in local community	Access to new resources of power for women in target groups				Presence of local community women in project implementation cycle			
			Employment and income generation	Formal position/social status	Training/ Certificates	Other	plan	Implem	Monitoring &Evaluation	Other
Yes	36	31	26	20	56	13	25	44	28	11
No	38	66	69	74	41	82	74	54	69	87
N/A	26	3	5	7	3	3	5	2	3	2
Total	100	100	100	100	100	100	100	100	100	100

Presence of NGO women in project implementation			
plan	Implem	Eval Assess	Other
41	56	49	3
33	18	25	70
26	26	26	26
100	100	100	100

<sup>1</sup> It includes roles where women members of local communities generally do not interfere do not get involved in implementation based on traditional values (watering of wild plants in mountains, nucleo-injection of oysters etc.)

<sup>2</sup> Includes several stages which is further discussed in the relevant sections.

<sup>3</sup> Indicates stronger roles which provide for greater access to resources of power and are generally available in public sphere, they include membership in rural councils, arbitrations councils, project implementation council and other roles which access to higher levels of power than those traditionally available. A role can be both considered as new and strong.

Data also indicate that during the course of project implementation, women have been able to reach opportunities and improved positions in the public circles. These opportunities included obtaining income generating activities in the village or nearby areas, membership in the village council among others. About 30% of the new working opportunities were captured by women and 20% was access to variables which improved women's official position in formal institutions resulted from the project implementation in the respective areas. Women who were able to exhibit their capabilities joined the project implementation team. Then by proposing a new project they accepted positions in institutions such as cooperatives or participated in election and became members of the village council or other groups. They were generally able to upgrade themselves and obtain stronger and new roles in the village or township public domain.

During the course of project implementation, women were offered new opportunities for informal training. In 60% of the projects implemented specialized training certificates were issued to those successfully completing the programs. In 37% of the projects implementation led to the creation of new roles for women in local communities. It should be noted that the first activities were linked with women's traditional roles. For instance, in a project related to sea corals in the Persian Gulf lead to a new project for pearl production. The project ultimately realized that women are much more able to nucleon inject on the oyster than men and this activity which related to their traditional roles was proposed to them. Some of the local women were trained in the area and are successfully proceeding with doing the task and training other in the local community<sup>1</sup>. In 29% of the projects new power resources were allocated to women. This included access to new training/education programs, membership in groups previously associated with men due to the prevailing local culture and tradition as well as new positions and opportunities such as membership in village arbitration council among others.

In more recent projects in particular there is an increasing presence of women. Table 1 indicates that women have gained strength with increased number of projects implemented and they have taken more pivotal roles. In these cases the improvements in women roles took place with full respect for gender roles in the area and the society gradually accepted these new assignments.

### **Changes in Environmental Conditions and Women's Situation**

On the ground of theoretical framework, it was expected that women and environment would have a common fate. It was apparent that the society's sensitization and behavior towards nature would also impact women's conditions. This observation would be highlighted in women members of local communities. Table 2 represents similarities between changes in women's conditions and the improvements in environmental conditions at the local community level. As previously stated, women involved in projects are categorized into those active in NGOs and those as members of local communities. Based on the set of indicators selected in environmental projects to better understand women's conditions, a more comprehensive variable named "Gender characteristics"<sup>2</sup> was identified. Projects were scored from 0 to 12 based on gender characteristics. Projects were also scored based on "Observed improvements in environmental conditions"<sup>3</sup> from 0 to 3 for the best conditions. For the measurement of the relationship of lack thereof between the two variables Chi Square test was used. Based on the fact that value in many columns and rows are less than 5 an alternative categorization for gender characteristics was redefined as follows:

- Group 1 includes projects scored from 0 to 2.
- Group 2 includes projects scored from 3 to 5.
- Group 3 includes projects scored from 6 to 8.
- Group 4 includes projects scored from 9 to 12.

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<sup>1</sup> Similar cases were observed in many other projects, however, in order to observe the project's quantitative framework further elaboration of the subject was avoided. Given the diversity in various projects with regards to environmental issues and the socio-economic conditions the projects provide great potential for more quantitative case studies.

<sup>2</sup> Main characteristics of this variable are identified in Table 4. Scores are ranked from 0 to 12 based on the presence or absence of the characteristics.

<sup>3</sup> This indicator was established in the environment section and achieving the sectorial objective, the indicator was defined by Dr. Yavari and used with permission. Based on the definition the variable consist of following three main components: a) Area protected or under control (formal or informal); b) Rehabilitated area (Tree cultivation); c) Other (indirect or undesirable results and impact such as sensitization, attention and interest of reporters and managers). Projects with a score of 3 meet all three criteria, while a score of 0 indicates not meeting the above. Value of 0 indicates improvements are out of reach, 1 indicates little improvement possible, 2 indicates average improvements while 3 shows acceptable levels.

**Table (2): Project dispersion according to gender characteristics and environmental improvements**

<b>Environmental improvement</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Total</b>
<b>Gender Characteristics</b>					
<b>1</b>	13	0	5	1	19
<b>2</b>	9	5	6	0	20
<b>3</b>	3	3	3	1	10
<b>4</b>	2	5	3	2	12
<b>Total</b>	27	13	17	4	61

Evaluation of this relationship in relation with the observed environmental improvements in areas of project implementation indicates a significant relationship between the two variables. Chi square test on the data presented in table produces a value of 15.408 with 9 df at the 5% significance level. Pearson correlation also indicates a value of 0.293 significant at the 2% level<sup>1</sup>. The results indicate co-variation relationship which indicates the simultaneous presence or absence of the two variables. Based on the symmetrical condition of this variable the relationship could be classified as two-way. In order to identify the most significant components between these two variables, improvements in environmental conditions observed in 61 projects were reevaluated based on various indicators. Results of this observation indicate a significant reciprocal influence between some of the gender characteristics. Based on current views concerning the participation of local communities in various collective activities, the presence at various level of development project implementation is recommended. Accordingly four levels of participation are identified for women in various project implementation stages as follows:

1. Women’s participation in project definition
2. Women’s participation during project implementation
3. Women’s participation during project monitoring and evaluation
4. Women’s participation in other areas created based on the unique characteristics of the project. As an example projects which create the opportunity for the development of new projects.

The combination of the above four variables created a new variable entitled “presence of women from local communities in various stages of project implementation”. A chi square test for this variable in relation to “Observed improvements in environmental conditions” was 28/969 with 9 df at the 0.001 level indicating a significant relationship.

**Table (3): Project dispersion according to presence of women from local communities and environmental improvements**

<b>Environmental improvement</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Total</b>
<b>Presence of women in local communities <sup>2</sup></b>					
<b>1</b>	15	2	7	-	24
<b>2</b>	7	1	6	1	15
<b>3</b>	4	7	2	-	13
<b>4</b>	1	3	2	3	9
<b>Total</b>	27	13	17	4	61

The data produced a Spearman correlation of 0.300 with 0.019 degrees of freedom indicating a positive relationship between the two variables. In other words, the presence of women from local communities in various stages of project resulted in mutual improvements in environmental conditions. In this context the presence of women did not result in any environmental improvements in each project stage. The relative presence of women is only effective during the overall process and not in each single stage. Observations indicate that implementation of environmental projects provides an opportunity for women’s access to the public domain. This has been achieved based on access to social and formal positions. Chi square test indicates a significant relationship between “Improvements in environmental conditions” and women’s access to formal social opportunities such as membership in village councils or general management of cooperatives and other institutions.

<sup>1</sup> The standard error is approximately 0.127.

<sup>2</sup> None of the projects met all four levels of participation, therefore the variance of project scores from the perspective of women participation in various project stages ranged from 0 to 3.

**Table (4): Project dispersion according to access to formal social opportunities and environmental improvements**

Environmental improvement	0	1	2	3	Total
Access to formal Opportunities					
Yes	26	8	14	1	49
No	1	5	3	3	12
<b>Total</b>	27	13	17	4	61

Chi square test among the two variables was 15.054 with 3 degrees of freedom at the 0.002 level of significance. Spearman correlation indicated a value of 0.343 at the 0.007 significance level. The two values indicate co-variance between the two variables. Therefore there is a co-variance between improvements in the project's environmental conditions and increased opportunities for women to access formal social positions. To further investigate women's access to opportunities in public domain within the scope of the projects attention was also focused on level of women access to income as well as wage paying jobs. In this context the relationship between these conditions and environmental improvements in the region were examined.

**Table (5): Project dispersion according to access to formal social opportunities and environmental improvements**

Environmental improvement	0	1	2	3	Total
Access to occupation and income					
Yes	25	7	11	2	45
No	2	6	6	2	16
<b>Total</b>	27	13	17	4	61

Chi square test among the two variables was 9.500 with df 3 at the 0.023 level of significance. Spearman correlation indicated a value of 0.336 at the 0.008 significance level. The two values indicate co-variance between the two variables within the social context of the projects implemented. Based on the evaluated variables, it is concluded that during the project implementation process women obtained improved access to new social roles distinct from traditional roles. All cases indicated a positive relationship between improvement in environmental conditions and women's participation.

## Conclusion

This article has focused on the relationship between participation of women as local community members and improvements in environmental conditions in projects. Eco-feminism and various other approaches identified in the theoretical framework present a commonality between environmental and women's conditions despite all differences in perspectives. This article uses the Hatfield's approach of the public and private spheres and the presence of local communities as middle ground between the two in analyzing the relationship between the two variables with special focus on gendered domestic division of labor. The hypothesis were developed accordingly indicating that with stronger roles of women in projects environmental conditions will improve.

At the same time environmental projects implementation will witness changes in women's roles and their introduction into new areas. The research method was content analysis to review program documents and project reports and the data was obtained using a reverse questionnaire. The research findings indicate a positive correlation between local communities' women presence in projects and observed improvements in environmental conditions. The tendency of women towards the public domain is noticeable. This is more evident in projects which were initiated based on traditional role of women in local communities providing the basis for women's participation. The relation described above was not observed between presence of NGOs women and improvements in environmental conditions. It is therefore emphasized that the relation introduced in this article was only observed at the local community level. The evaluation of women activities in volunteer organizations and the possible interactions with environmental conditions requires a separate evaluation based on suitable theoretical framework.



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