

# Analysis of Contribution to Environmental Safeguard Based on Gender: A Case Study of Kabul, Afghanistan

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**Abstract:** This paper evaluated the participation of male and females in environmental activities based on their level of literacy, transportation choice, diet, garbage-dumping methods and several other factors. The target area for this study was Kabul, Afghanistan, the primary data was gathered through interviews and a questionnaire including 30 questions in multiple-choice themes where a total of 2240 people took part. Authors also presented a correlation of living area with various variables for both gender categories and the including education and their environmental activities. Overall, it was found that, only 22.22 percent of females had proper environmental awareness, 47% of females lack the right to make decision regarding how to keep the environment safe within urban areas while in rural areas the percentage was significantly lower. Moreover, the age group 18 to 30-year-old were found more concerned about their living environment, and 79.41% and 69.44% of males both from females and males' points of view respectively, were devastative to their environment. Finally, it was observed that while females severely lack awareness and right to make decisions, yet, they were the highly affected and concerned for their surrounding environment, lastly, females were found more environmentally friendly and conservative than males.

**Key words:** gender, environment, awareness, contribution, sustainability

## 1. Introduction

Afghanistan is a land-locked country of plains and mountains. Below the high Khojak Pass on the country's southern border lies the Southwestern Plateau. This flat and harsh landscape is crossed by the Helmand River that feeds the marshes and lagoons of the Sistan basin. Rising from the plains are the Hindu Kush highlands, a central mountainous core, beyond which lie the Northern Plains [1].

This study is specifically carried out for Kabul "The Capital City of Afghanistan" and the study range includes both urban and rural areas. Geographically this study area is described as a mountainous city with several hills and vast lands, located in the eastern part

of the country. According to estimates in 2019, the population of Kabul was 4.114 million [2], which includes all the major ethnic groups of Afghanistan [3]. Rapid urbanization had made Kabul the world's 75th largest city [4].

This city has all four seasons, spring and fall are the rainy seasons, while summer is warm and dry, and the winter is cold and snowy. Overall, this city is considered a cold and dry climate city in Afghanistan. Social life in Kabul city is warm and the level of education is higher compared to other provinces. According to UNESCO (official website) [5], the highest level of literacy in Kabul city for females is 34.7% and the male literacy rate is 68%.

Regarding job, Kabul city is considered a land of opportunity to Afghans, while joblessness is felt strongly in this city as well. The labor market is mostly relying on male manpower, same as the governmental and international NGOs. Looking to a global fact;

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Although Females form one-third of the world's human work power, they earn only 10% of world income and 2/3 of them are illiterate [6]. This situation for females working in Afghanistan is almost the same, specifically when they work for private companies.

Focusing on paper, regarding the environment, both groups of gender have their responsibilities. In a culturally preserved country like Afghanistan, the participation of females and males in environmental activities and the level of caring for it are different. Both males and females have harmed their surrounding environment and have caused several environmental disasters. But throughout history females have been known to be in closer contact with the environment and it has been experienced several times that; the female community has always been affected more from their surrounding environment than males. Agriculture and greenery were jobs mostly related to males while this trend changed, and women took an equal and, in some cases, the greater part in plantation and greenery.

Furthermore, Today, Females make up almost half of the agricultural workforce, however, in many rural areas, they are still marginalized [7]. Females' contributions to agriculture in Afghanistan are often "meagerly rewarded" [8]. Females have a high rate of contribution to opium, livestock and dairy products, but rarely receive pay [9]. Yet Females' participation in agriculture is often considered "key, not only to ensuring increased agricultural production but also for improving food and nutrition security" [10]. Females are "a force for stability in their communities" [11]. They are also seen as agents of change in their households [12]. Non-governmental organizations (NGOs), such as the Global Partnership for Afghanistan, have helped Females become more involved in farming [13]. Such initiatives have helped revitalize orchards, constructed cold-storage facilities and provided educational resources.

This paper has assessed the role of both females and males in environmental safeguard and to observe which gender decisions has caused environmental

issues in this city. Finally, this paper mainly encounters the areas mentioned in sustainable development goals (SDGs) like Gender equality-goal 5, clean water and sanitation-goal 6, climate action-goal 13, life on land-goal 15. Moreover, this paper also encounters the area mentioned in Millennium Development Goals MDGs, such as: Promote gender equality and empower Females-goal 3 and ensure environmental sustainability-goal 7.

## **2. Aims**

This paper mainly aims to:

- Evaluate the involvement of both genders in environment safeguarding activities.
- To evaluate the level of awareness and knowledge of natural resources and renewable resource usage.
- Analyzing the contribution of both gender in managing natural resources.
- Recognizing male activities considered threatening for the environment
- Recognizing female activities considered threatening for the environment
- -Evaluate the level of understanding of environmental issues such as global warming, water, and air pollution, overgrazing and soil degradation in terms of gender.

## **3. Methodology and Study Area**

On data collection basis this paper has used a questionnaire containing 30 questions for both males and females, these questions were in different styles and included short-answer and multiple-choice questions. Totally 2240 people took part in this survey from both urban and rural areas, where because of the limitation if the internet the data from rural areas were collected through visiting the houses in person. The following tables and figures are based on the responses received from the participants.

After the data collection process, the acquired data were analyzed to observe which gender group takes

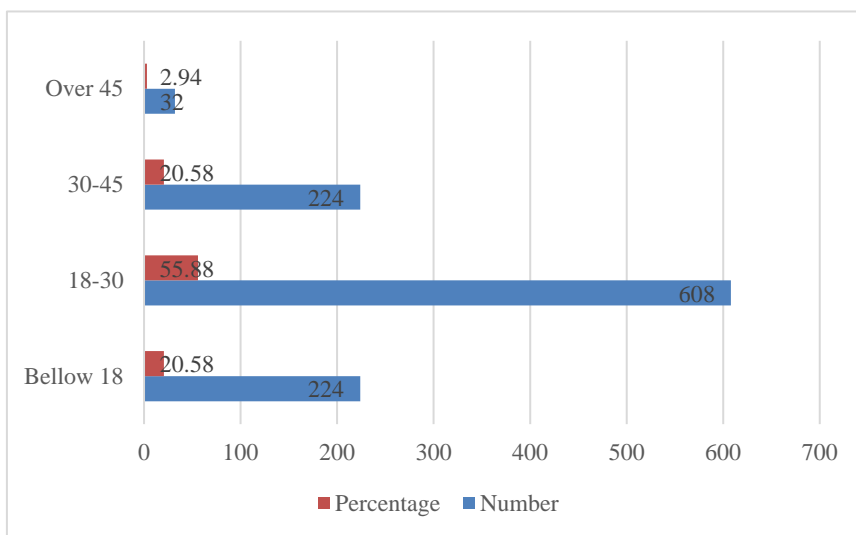
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more part in environment protection and to observe how different variants affect this process. It was revealed that the place where they live, age group, their awareness, education and their involvement with nature and their surrounding environment was the major variants.

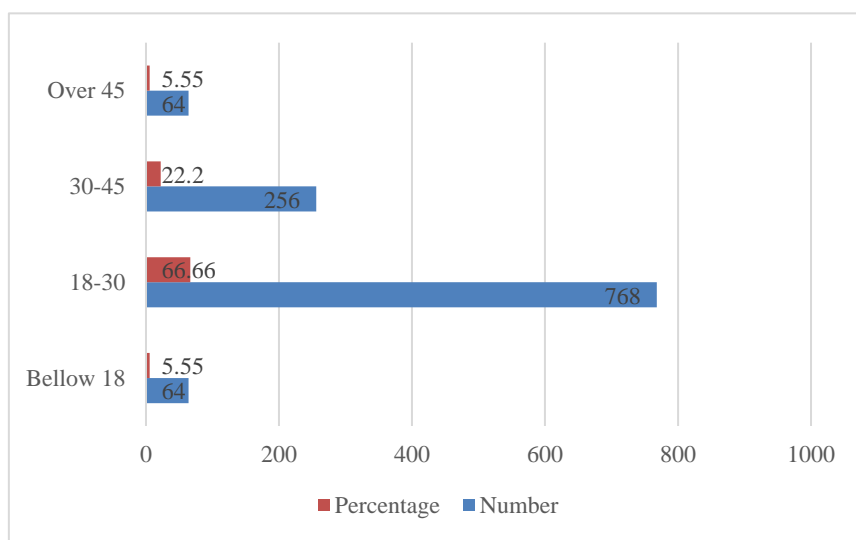
The research area selected is Kabul city 34°31'31"N 69°10'42"E. While Kabul is the capital city of Afghanistan, still, this city has split into parts, densely urbanized and culturally preserved villages. However, central areas of Kabul city are urbanized, but it still struggles with waste management, sanitation, water supply, and drainage system challenges.

**Table 1** General facts regarding the participants.

Total number of female participants	Total number of male participants	Total number of participants living in urban areas	Total number of participants living in rural areas	Marital status	
				Single	Married
1088	1152	1504	736	1248	992
48.57%	51.43%	67.14%	32.85%	55.71%	44.28%



**Fig. 1** Age of female participants.



**Fig. 2** Age of male participants.

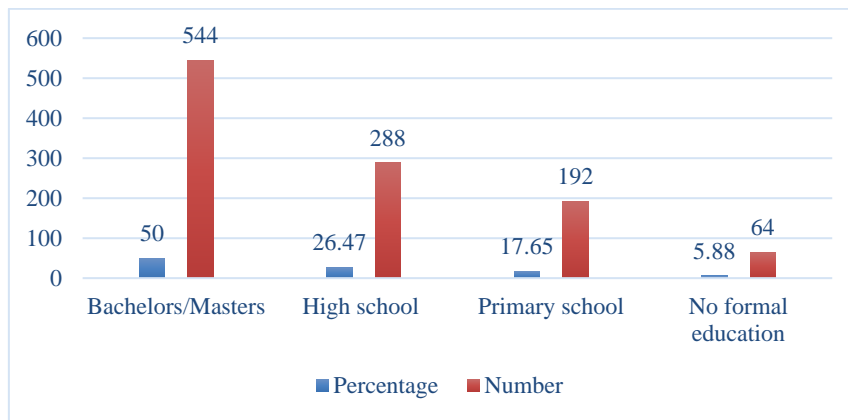


Fig. 3 Female literacy.

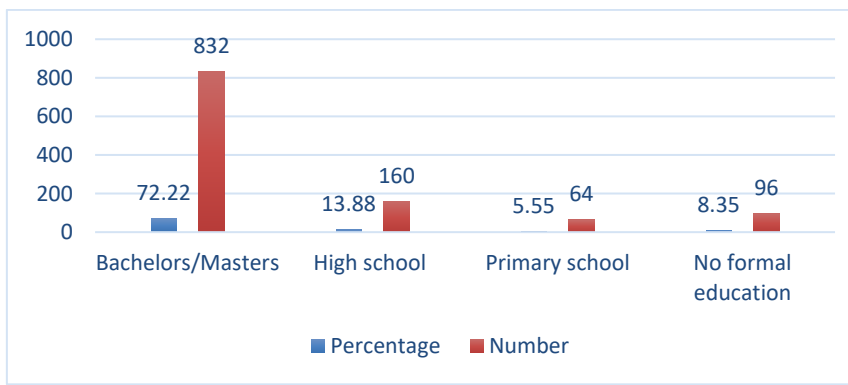


Fig. 4 Male literacy.

Table 2 Contribution to greenery and environment safeguard.

Activities	Females		Males	
	Number	%	Number	%
Plantation and greenery	672	61.76	960	83.3
Weeding	32	2.9	64	5.55
Cleaning/garbage removal	480	44.11	384	33.33
Agriculture, livestock or working with environment safeguard bodies/volunteer worker/environmentalist	416	38.23	288	25
Any initiative taken for environment safeguard	256	23.52	288	25

Table 3 Daily transportation and diet.

Activities	Females		Males	
	Number	%	Number	%
Vegetarians	256	23.53	128	11.11
Nonvegetarians	0	0	64	5.55
Eating both	960	83.33	832	76.47
Bicycle users	96	8.82	253	22
Public transport	672	61.76	576	50
Private vehicles/taxi	192	17.64	127	11
Usage of artificially and environment unfriendly products	576	52.94	736	63.88

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**Table 4 Garbage dumping methods and environmental concerns.**

Activities	Females		Males	
	Number	%	Number	%
Daily garbage dumping method				
Personally, to collection points	416	38.23	544	47.22
By municipality to collection points	320	29.41	320	27.77
Anywhere in open environment	32	2.94	160	13.88
Views on how critical the environmental issues are in their neighborhood				
Very threatening	832	72.22	544	50
Little threatening	224	19.44	224	20.58
No critical issue	160	14.7	0	0
Not concerned at all	160	14.7	96	8.33
Serious environmental issues they are concerned about				
Sanitation and hygiene	0	0	0	0
Air pollution	192	17.64	96	8.33
Water scarcity and over exploitation	0	0	0	0
Wastewater and solid wastes	96	8.82	64	5.55
Over population	6	0.58	96	8.33
All the mentioned issues	794	72.96	896	77.79

#### 4. Assessment of the Co-Relation Between the Variables

the gender involveness and eagerness in protecting their surrounding environment based on living in urban and sub-urban areas of Kabul city.

Three independent variables were studied to observe

**Table 5a Correlation of living area with various variables of female gender.**

Location	Variables	Ratio*	Location	Variables	Ratio
Urban areas	Education	0.64	Rural areas	Education	0.42
	Environmentalism	1.56		Environmentalism	1.04
	Cleaning	1.36		Cleaning	0.90
	Public Transportation	0.97		Public Transportation	0.65
	Private vehicles/Taxi	3.4		Private vehicles/Taxi	2.26

\* location/variable

**Table 5b Correlation of living area with various variables of male gender.**

Location	Variables	Ratio*	Location	Variables	Ratio
Urban areas	Education	0.65	Rural areas	Education	0.43
	Environmentalism	2.39		Environmentalism	1.60
	Cleaning	1.79		Cleaning	1.20
	Transportation	1.19		Transportation	0.80
	Private vehicles/Taxi	5.44		Private vehicles/Taxi	3.63

\* location/variable

**Table 6 Females' and males' education and environmental activities co-relation.**

Female	Variables	Ratio*	Male	Variables	Ratio
	Public Transportation	0.65		Public Transportation	0.56
	Private Vehicles/Taxi	0.18		Private Vehicles/Taxi	0.12
	Cleaning the surrounding	0.46		Cleaning the surrounding	0.37
	Pollution concerns	0.18		Pollution concerns	0.09
	Usage of environmentally un-friendly products	0.56		Usage of environmentally un-friendly products	0.71

\*Ratio= variable/education

## 5. Results and Discussions

To enhance the interest of both gender categories in environment protection following recommendations are offered;

- 1) Both males and females should try to dispose of the garbage responsibly, rather than disposing it in an open environment.
- 2) Similarly, for males living in the villages, they should be informed about the garbage dumping methods and places where it is safe. Environmental protection campaigns should start in villages through municipality assistance to enhance the level of awareness.
- 3) For females, the right of taking decision in regard to keeping the environment clean should be given, because according to the survey, these are the females who are mainly affected by environmental issues. Female's advice, thoughts, and efforts should no longer be discouraged, and they should be given priority while taking decisions regarding the environment.
- 4) The level of male and female education strongly affects their level of care for their surrounding environment, thus, overall, their participation in receiving formal education will be a huge contribution to the environment as well.
- 5) Environmental studies should be included in the curriculum of all educational institutions and it should be a compulsory class, this will enhance the awareness and spread the message

to keep the environment safe.

- 6) Females should be motivated to use more clean sources of energy and not to cut down trees for cooking or heating purposes. And they should be taught how to efficiently use animal waste and turn it to biogas.
- 7) Local government should act strictly and make policies regarding environment safeguard and encouragement of females to take part.

## 6. Conclusion

This research paper aimed to assess the level of involvement of males and females and the effects of their daily lifestyle on the environment in both urban and rural areas of Kabul city.

In this research, most of the participants were between 18-30-year-old, which means this age group is more concerned about their natural living environment and acts more responsibly and accordingly. The paper presented all those main activities where both males and females were involved in promoting or demoting environmental protection.

Based on the data, it was revealed that 47.22% of females did not have the right to make environmental decisions for their living society, province or on a national scale, they could only contribute to the cleaning of the house. Because of a man dominant society, only 22.22% of the females had proper awareness of the environmental issues.

However, most of the daily activities done by females were considered environmentally friendly, such as their transportation choices, where the majority of them used public transport, the daily cleaning habits

of their surrounding environment, and their eagerness to take part in environmental protection campaigns. While on the other hand 79.41% and 69.44% of males both from females and males' points of view respectively, were posing more harm to their environment based on their daily activities, working nature and eating habits.

Finally, this study found females in Kabul city more concerned about their environment which was based on the response of 2240 participants. The only major barrier females face in Kabul city is the man's dominancy and lack of rights to make decisions regarding keeping the environment safe and clean.

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