Analytical Study: Women, Gender Equality And Climate Change

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Abstract

Climate change issue has become a global concern and several local and global forums are raising awareness regarding the severity of the issue. Climate change impacts both genders negatively socially, financially, health and behaviours as well. The researchers have pointed out that in comparison to men, women are more affected by the climatic changes and as a result gender inequality is increasing and transforming our social behaviours, thus we can say that there is a correlation between climate change and gender equality. Women in Pakistan and in many countries are not empowered due to socio-cultural practices and religious limitations. Since women are environment friendly in nature, therefore they are more exposed to nature and negative effects of climate change. It is highly needed ti raise awareness about the consequences of climate change among common people, especially women. We should adopt smart ways of utilizing natural resources to control and understand the issues caused as a result of drastic climatic changes. The main threats due to climate changes include: food security, water scarcity, food availability and food system stability.

Key Words: Gender Equality, Climate Change, Global Warming, Gender Sensitization, Millennium Development Goals.

نلخيص

موسمیاتی تبدیلی کا مسئلہ عالمی تشویش بن چکا ہے اور متعدد مقامی اور عالمی فورمز اس مسئلے کی سنگینی کے حوالے سے آگاہی پیدا کر رہے ہیں۔ موسمیاتی تبدیلی دونوں جنسوں کو سماجی، مالی، صحت اور طرز عمل کے ساتھ منفی طور پر متاثر کرتی ہے۔ محققین نے نشاندہی کی ہے کہ مردوں کے مقابلے میں خواتین موسمیاتی تبدیلیوں سے زیادہ متاثر ہوتی ہیں اور اس کے نتیجے میں صنفی عدم مساوات بڑھ رہی ہے اور ہمارے سماجی رویوں کو تبدیل کر رہی ہے، اس طرح ہم کہہ سکتے ہیں کہ موسمیاتی تبدیلی اور صنفی مساوات کے درمیان باہمی رابطہ ہے۔ پاکستان اور بہت سے ممالک میں خواتین سماجی و ثقافتی طریقوں اور مذہبی حدود کی وجہ سے بااختیار نہیں ہیں۔ چونکہ خواتین فطرت میں ماحول دوست ہوتی ہیں، اس لیے وہ فطرت اور موسمیاتی تبدیلی کے منفی اثرات سے زیادہ متاثر ہوتی ہیں۔ عام لوگوں، بالخصوص خواتین میں موسمیاتی تبدیلیوں کے اثرات کے بارے میں بیدا کرنے کی اشد ضرورت ہے۔ ہمیں سخت موسمی تبدیلیوں کے نتیجے میں پیدا ہونے والے مسائل کی روک تھام کے لئے اور اسے سمجھنے کے لیے قدرتی وسائل کو سہی طور پر استعمال کرنا میں پیدا ہونے والے مسائل کی روک تھام کے لئے اور اسے سمجھنے کے لیے قدرتی وسائل کو سہی طور پر استعمال کرنا ور خوراک کی حفاظت، پانی کی کمی، خوراک کی دستیابی اور خوراک کے نظام کا استحکام۔

كليدى الفاظ: صنفي مساوات، موسمياتي تبديلي، كلوبل وارمنك، صنفي حساسيت، ميلينيم ترقياتي ابداف.

Introduction

"A Year of Reckoning," He urged member states to change the mindset of decision making from near-term thinking to long-term

Basically research establishes facts based on empiricism to unfold the issues which are either invisible in nature or not being acknowledged by the society. Thus the researcher aimed to unfold the issues of women linked with the climate change and gender equality and its negative outcomes. Today the entire world is facing climate change borne issues and it has appeared as the major global problem. According to statistics the most deprived people around the globe, especially from developing nations will be highly affected by extreme weather and climate changes, therefore it is demanded by experts to adapt strategies to handle even the worst scenario (Balgis Osman, n.d). Women are more affected than men and they lack in access to resources and have no authority and also lack decision making power, thus efforts should be made to uplift their status so that they can protect themselves by using their empowerment as a tool (Balgis Osman, n.d). Due to biased socio-economic attitudes towards women (even though they participate equally with men in growth and attempts to sustain ecological balance) face issues like economic dependency, lack of access to legal and political rights and they are also highly vulnerable to harmful effects of climatic changes (UNDP, 2017). Like many other regions Pakistan is also a country with a wide variety of socio-economic conditions, cultural background, geographical and extreme to moderate climate zones (World Bank, 2011). According to census Pakistan is the fifth largest populated (World meter elaboration of the latest united nation data, 2021), country and face number of ecological challenges which includes pollution, deforestation,

thinking and develop a strategic vision to act decisively "in deep and systemic ways." (UN Secretary-General António Guterres highlighted his priorities for 2023.

biodiversity issues, contaminated drinking water (Khan et al., 2017). These issues creates worse scenario when combined with issues due to climate changes, because it impacts social, environmental and economic conditions (Khan et al., 2017). Global warming is also affecting Pakistan (Climate Emergency Institute, 2017), because due to global warming and natural catastrophes economic burden and costing is increasing by 5 % of GDP (World Bank, 2011). Climate change is caused by natural disasters and also by human-induced actions and it subjects people to face issues of health, economy, food security and supply, employment, live stock etc. Research is a medium to highlight the core issues embedded in the matter of concern and it helps to find out the right solution for addressing the problem faced by people and affecting both men and women equally due to the consequences of climate change globally (Dankelman, 2010).

Natural disasters caused by climate change effects humans and impacts men and women, but women face more problems due to their vulnerable social position and it affects their health and economic status due to the social behaviours and patriarchal setup, but by preventing these issues gender inequality can be transformed into a more gender balanced society aiming to acquire equal status for both (MacGregor, 2019). genders Constant temperature rise has caused drastic climatic changes and it causes melting of glaciers resulting in rise of water level in oceans and rivers which ultimately becomes the reason of floods and it is intensified due to rains (Booker, 2013). Deforestation, cutting of mangroves and destruction of surrounding areas are human-induced actions that have intensified the effects of natural disasters (floods, heavy rains, river water reversal and etc.) and above all it disturbs the eco balance (Owen, 2010).

The pace of climate change process has increased due to the due to development programs around the world, because with development no one is focusing on sustaining the nature. This has become the greatest challenge for the world for the world and this complex situation needs to be addressed on urgent basis or else we would not be able to control the damage of ecological balance. For this purpose we need to adopt mitigation strategies to maintain the eco balance. When the damage control due to climate change is debated anywhere in the world, the focus is seen on two main factors social and economic issues, but women's issues and gender inequalities caused by climatic changes is totally ignored, which is indeed very alarming, because without incorporating women and giving importance to their issues no positive results can be achieved. Combining economic activities to sustain global economy variety of forms of energy, land and transformation are used to generate greenhouse gases (GHG). These gases accumulate in the atmosphere and as a result the earth's temperature rise causing climate change. The catastrophe is that the nations who are responsible for GHGs do not fulfill their responsibility to control the damage caused due to the consequences of economic activities. These consequences affect the entire world though, but the cost is paid by the developing countries only and these developing countries are exposed to the climatic change effects with having low access to resources to mitigation and the adaptation (Stern, 2008).

Review Literature

Several researches have highlighted the oppressive social behavior towards women and they are considered weaker than men and women. But on the other hand if we look closely and without being biased, women are the agents of change and even with so many social barriers they are still trying to prove their worth and their efforts should be acknowledged in development and sustainability. UN made some Global efforts like Post-2015 Development Agenda to highlight women's importance in the process of development, therefore after some criticisms on MDGs i.e. the absence of consultation during process their establishment the UNDP and its collaborators gave innovative point of view to promote global participation in the Post-2015 Development Agenda and took all stakeholders onboard across the globe. Similarly the seventeen sustainable goals (SDGs) gave a concrete agenda for development for next fifteen years and included poverty, inequality and violence against women as prime concern of the 21st Century. Similar efforts were made by the "Sendai Framework for Disaster Risk Reduction 2015-2030", "Gender Sensitive Disaster Risk Reduction (DRR)" and they act vitally in this regard and "the Paris Agreement under the United Nations Framework Convention on Climate Change laid out an overall goal for environmental change transformation in 2015" (UNFCC, n.d).

An understanding has been developed regarding climatic changes that world focuses on level of environmental changes and its variations and yet they are critical. World has also acknowledged as part of the Paris Agreement people who have least contribution in ecological destruction will suffer the most (UNFCC, 2015). "The Paris

Agreement 2015" also focuses on gender balance and women's empowerment and encourages member countries to adopt gender-responsive strategies in the areas of capability expansion and transformation. Furthermore the UNFCCC and INDCs have intended to reduce the national emission and adapt things according to the climate change trends (WHO, 2014). The gender discrimination and climate change affects are known but still women face gender-based and sexual abuse and they also suffer from mal-nutrition. Knowing all these issues nothing much has been done in this regard to safeguard women (Alston, 2014). According to several researches efforts to bring women in the mainstream have failed due to lack of understanding the severity of socially contributing factors, thus women remain vulnerable with least attention to their issues (Cho. 2022). Lack of acknowledgment of gender diversity and gender equality question arises why world has not given the due attention to women issues caused by the gender inequality and climate change? (UNESCO, 2021). Climate change is a global issue but it has local impacts as per regional climatic effects. World is already facing issues and hazards such as heavy rains, heat waves, storm and floods and with changing climate patterns extreme weather conditions and rise in sea level and temperature shifts. But when the people from vulnerable groups are exposed to extreme weather conditions their issues are intensified, especially people living near coastal lines (IPCC, 2012). Causes of men's and women's vulnerability to climate change vary socially and financially as gender intersects and creates this vulnerability based on cultural, financial and economic inequality. Since women are deprived more than men in areas like low access to education, employment, resources, legal cover, decision making power and social status impacts them drastically due to climatic changes. For instance less education limits their access to information and support system and these risks continue and limit their affectivity in future as well in development arena (IPCC, 2014).

Methodology

In this study quantitative research method has been utilized along with descriptive research method to have complete understanding about the research topic entitled "Analytical Study: Women, Gender Equality and Climate Change". The researcher aimed to explore the first hand knowledge (data) about the phenomenon through purposive and convenience sampling techniques of non-probability sampling method. The results are through simple frequency tables and statistics. The sample size for this study is 50 respondents (n=50).

Non-Probability Sampling

In non-probability sampling method selection of sample is based on subjective method. Since it does not need survey frame, thus it is easy to obtain data economically. It is dependent on the study's outcomes, and the sample was chosen based on the subject's requirement. Here in this study purposive and convenience sampling techniques for the collection of data (Nazim, 2013).

Convenience Sampling

It is a non-probability technique to select sampling units to include as sample in the research and this technique is the easiest way to collect data as the respondents are approached as per convenience of the researcher and their availability. This technique allows the researcher to access the sample at a given time and willingness. This technique is quite practical (Thomas & Sriram, 2002).

Purposive Sampling

This technique also falls in the category of non-probability sampling and it depends on the nature of the research subject. It is the most adaptable and time saving sampling technique (Henry, 2003).

Hypotheses

Hypothesis is an assumption established by the researcher based on the prior knowledge on the subject which is tested later by using hypothesis testing method to validate its acceptance or rejection. It is a relationship between several variables and it could be a direct statement or can have cause and effect relationship. This is a testable assumptions made by the researcher about his expectations to occur in the research (Wigmore, n.d). the hypothesis of this research are given below:

- 1. Climate change has put negative effects on gender equality.
- 2. Empowering women means more effective climate solutions

Theoretical Background

The climate change is highly influential on ecological balance and people in Pakistan and across the globe. Rapid climate changes have brought enormous changes in the environment i.e. melting of glaciers, unexpected rain and snow fall, sudden temperature changes are affecting the entire ecological system and have appeared as serious threat in form of drought and water scarcity and rising temperatures (Prescia, 2021). Many challenges are faced by nations for the settlement of IDPs as a result of natural calamity and at this stage the government intervention is needed to shield both the displaced people and the climate by taking appropriate environmental actions (Nirantar, 1997). Similarly another challenge is of food security i.e. modeling food security like consumption of food, its utilization and controlling mal-nutrition rate. governments should focus on conventional system of demand and supply, and it's utility. As high consumption of food can decline food supply chain, therefore few assumptions have been drawn in this paper based on the findings as theoretical framework:

- 1. Well organized supply, consumption of food to control mal-nutrition rate
- 2. Edible and non-edible items are produced by the economy
- 3. Household food consumption is influenced by the food supply and demand chain
- 4. Climate change determines the food security and its demand and supply
- 5. Climate change directly affects both the genders
- 6. Women suffer more than men for being vulnerable in all social domains
- 7. Gender equality can promote a gender and ecological balanced environment

Results and Conclusions

This study claims that climate change is a biggest threat to humans today, the floods, and rise in earth's temperature, cyclones and heavy rains i.e. the extreme weather is effecting or lives and our environment as well. The threat to water scarcity, food supply and security health and safety is very high and alarming and with each passing day these threats are intensifying. Women are becoming the victim of feminization of poverty with compromised health and less economic opportunities.

Gender inequality is the main cause of all gender discrepancies and discrimination. Basically climate change is affecting both genders but women being more vulnerable are more prone to climate change borne issues. Natural disasters have negative impact on human health, temperament and attitudes and it declines the quality of life and services also.

Table # 1 Frequency distribution according to their ages

Ages	Frequency	Percentage
21 – 30 years	9	18%
31 – 40 years	16	32%
41 – 50 years	14	28%
Above 50 years	11	22%
Total	50	100%

The data above shows that 32% sample size belong to the age group from 31 - 40 years; similarly 28% belong to age group 41 - 50 group. Whereas 22% respondents belong to

above 50 years age group and 18% respondents belong to 21 - 30 years of age. This data shows the variation of respondent's age that was included in the research.

Table # 2 Frequency distribution according to their Professions

Professions	Frequency	Percentage
Student	10	20%
Lawyer	5	10%
Government job	15	30%
Business men	11	22%
Retired persons	5	10%
Teacher	2	4%
Engineer	1	2%
Doctor	1	2%
Total	50	100%

According to the above table 30% people are engaged in government jobs, 22% of the respondents are business men, 20% are students, 10% are lawyers and retired persons,

4% are linked with the noble profession of teaching, whereas 2% of them are associated with the professions of engineering medicine respectively.

Table #3 Frequency distribution according to their gender

Gender	Frequency	Percentage
Female	25	50%
Male	25	50%

Total	50	100%
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Data represents the gender representation included in the data collection as sample of the research population, that is 50% are women

and 50% are men, as the researcher aimed to collect the perspective of both the genders.

Table # 4 Frequency distribution according to qualification

Qualification	Frequency	Percentage
Matric	5	10%
Intermediate	10	20%
Graduate	20	40%
Masters	15	30%
Total	50	100%

Data represents the academic scale of the respondents and 40% of the respondents have done their Graduation, 30% of them completed their Masters, and 20% passed their

Intermediate, whereas 10% of them are Matriculate. These figures clearly indicate the academic qualification of the respondents.

Table # 5 Frequency distribution according to the social class system

Social class system	Frequency	Percentage
Elite class	8	16%
Mediocre class	25	50%
Lower class	17	34%
Total	50	100%

Data reveals that 50% respondents are from mediocre class, 34% represents their class as

the lowest strata of the social class system and 16% belongs to the elite class category.

Table # 6 Frequency distribution according effects of climate change on gender equalities

Effects of climate change on gender equalities	Frequency	Percentage
Yes	47	94%
No	3	6%
Total	50	100%

As per data 94% of the people agreed that climate change create threats for life and it affects health along with livestock, safety and security of people, especially women and girls of all ages are affected due to lack of decision

making power, while the remaining 6% think that climate change has no impact on gender equalities, because it is already prevailing in the society.

Table # 7 Frequency distribution according to what is meant by climate change effect?

What is meant by climate change effect?	Frequency	Percentage
Rising rate of sea level	2	4%
Pollution	3	6%
Food security	8	16%
Devastating floods	20	40%
Sudden temperature drop and rise	7	14%
Global warming	10	20%
Total	50	100%

The data above implies that 40% of the respondents view climate change in the form of devastating floods thus damaging crops and risks human life and property. 20% claims that it results in global warming (rise in temperature as greenhouse gas emissions), whereas 16% respondents food security issues and drought become a global threat due to

impact of uncontrollable climatic changes. 14% of them think that it means sudden rise of temperature, 6% think that climate change is causing pollution, whereas 4% consider climate change is causing rise in sea level. These are the consequences of climate changes which are serious threats for our lives.

Table # 8 Frequency distribution according to importance of gender equality

Importance of gender equality	Frequency	Percentage
Provides equal economic	13	26%
opportunities		
Right to education	7	14%
Excelling in personal capacity based	5	10%
on skills	3	1070
Fulfilling home expenses mutually	25	50%
Total	50	100%

As per empirical evidences 50% of the research respondents said that gender equality provides support and help in domestic domain

and in fulfilling home expenses mutually with their partner, whereas 26% respondents relates it with equal economic opportunities only. Whereas 14% people thinks that women get right to education due to gender equality and as a result access to employment due to education, and 10 % have opinioned as by gender equality women gets the chance to showcase their expertise, skills and can excel in the area of their interest.

Table # 9 Frequency distribution according to how gender is affected due to climate changes?

How gender is affected due to climate changes?	Frequency	Percentage
Lack of women's financial independence	12	24%
declining social rights of women	16	32%
Increased gender inequality	4	8%
Reduced political rights of women	18	36%
Total	50	100%

The data claims that 36% people consider that women are already submissive in nature and oppressed by the society and they suffer additionally as a result of climate changes, and 32% respondents said that their social rights are denied by these sudden changes, because it takes time to bring life to normal. Whereas 24% consider it to be the cause of women's

increased financial dependency on men which effects heir social status directly, whereas 8% were found with an opinion that such climatic changes increases gender inequality and makes women suffer more, because they are already burdened with reproductive responsibilities.

Table # 10 Frequency distribution according to how gender inequality and climate change impacts both genders?

How gender inequality and climate change impacts both genders?	Frequency	Percentage	
Hampers human needs	33	66%	
Impacts both genders	12	24%	
Women suffer more for being nature friendly	5	10%	
Total	50	100%	

Data above explores that 66% said that gender inequality hampers human needs not only in terms of food security and mal-nutrition, health and economic sustainability. Whereas, 24% thinks that men and women both are

equally affected and their life is devastated due to natural calamities. Only 10% thinks that since women are nature friendly therefore, they suffer more than men.

Table # 11 Frequency distribution according to the relationship between gender and climate change

Relationship between the gender and climate change	Frequency	Percentage
Direct relation	18	36%
Effects on socio-economic conditions	32	64%
Total	50	100%

Data discloses that 64% people thinks that there is a direct relation between climate changes and gender because it directly impacts socio-economic aspects and women are directly exposed to changing weather conditions. But on the other hand 36% have a standpoint that it does not have a direct relation but still it impacts the socio-economic conditions and is a serious threat to human life.

Table # 12 Frequency distribution according to exploring the meaning and link between empowering women and more effective environmental solutions

exploring the meaning and link between empowering women and more effective environmental solutions	Frequency	Percentage
Yes	42	84%
No	8	16%
Total	50	100%

According to the above data 84% people emphasizes on empowering women to attain effective environmental solutions to have a sustained approach for future generations as well, but 16% of the respondents does not find

the solution of this issue through empowering women. That is these people do not consider women empowerment as a must social condition.

Table # 13 Frequency distribution according to what are the prime issues linked with gender and climate change?

What are the prime issues linked with gender and climate change?	Frequency	Percentage
Low energy access	16	32%
Most importantly the food security	15	30%
Efforts to have Sustainable agriculture	9	18%

Land and resources access	10	20%
Total	50	100%

Data claims that 32% people view low access to energy as a key issue in liking gender and climate change, whereas 30% thinks the most important barrier is the food security issue.

Similarly 20% consider land and resources access is a key hurdle and only 18% of the respondents focus on making efforts for sustained agriculture.

Table # 14 Frequency distribution according to how climate change intensifies gender inequality?

How climate change intensifies gender inequality?	Frequency	Percentage
Increases male control over women	29	58%
Increased women's work load	21	42%
Total	50	100%

The above data shows that 58% people said that climatic changes and gender equality increases the supremacy of males over

females and 42% said that women's work load in increasing and thus women are more vulnerable now.

Table # 15 Frequency distribution according to how Government can improve through policies gender equality to empower women?

How Government can improve through policies gender equality to empower women?	Frequency	Percentage
Government can make form awareness raising groups to educate people at grass-root level	32	64%
Government should collaborate with gender specialists to handle issues due to climate change	18	36%
Total	50	100%

As per facts given above according to the 64% of the respondents concrete steps should be taken at the public sector level and by forming group of experts from local people to manage the equitable and gender oriented environment, whereas the remaining 36% have the opinion that government should

collaborate with gender specialists in order to resolve the climate change borne issues.

Discussion

The quantitative data shown above in the frequency tables identify that gender equality is directly linked with the climate change and is a greatest threat and challenge for the whole

world and it deprives women from their basic rights even more. Since women being involved in climate borne activities, therefore their health is also compromised, because they take care of their family as well and tries to meet their requirement rather than focusing on their needs. Due to low literacy rate in Pakistan women, especially from lower class are less aware about the climate change and its effects, thus they are badly affected and it is also harmful for their family (as women take care of their family). To minimize the women's exposure to natural calamities and its effect on their health it is very important to properly formulate strategies. Awareness and educational sessions should be conducted at local and grass root level for both genders, in order to educate women and men and also make men realize about the problems of women. If this type of understanding is developed then only we can have a gender balanced society where both men and women will face and handle things together. Decision-making power and empowerment can make women more functional and it will bring a good social change. As women are environment friendly, therefore they can play a vital and positive role to come up with better solutions to tackle problems during natural calamities. These measures must be an taken at private and public sector and they must initiate and focus on women's empowerment by providing them access to right of education and employment with support system at domestic level as well, because it will not only benefit women but will also benefit their families, societies and at national level. Women can also play vital role in food supply and security if their potential is utilized to sustain environment and this can only be obtained through gender equality to have a sustainable future.

Recommendations

- Government should take massive steps to control the negative impact of climate change to improve gender relations.
- Forests and mangroves should be protected so that we can have natural barrier against floods, storms and other natural disasters.
- Climate change should be a part of curriculum at all academic levels.
- NGOs should also play their role in collaboration with the government in raising awareness and nature sustenance.
- We should switch to alternative ways of energy to sustain energy resources and should invest in renewable resources also.
- Women should be empowered in all sectors, so that they can play their active role in controlling negative impact of climate change.

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