

ROLE OF WOMEN IN TECH-DRIVEN GREEN GOVERNANCE AND IN ENSURING SUSTAINABLE FUTURE

Miss Aisha Bilal,¹

ABSTRACT

“Gender equality is a yardstick for measuring the progress of social civilization & an important goal for making to achieve sustainable development”-UN Foundation

Climate change is real, and so are its impacts, such as an unprecedented increase and decrease in temperature, floods droughts, dislocation, resettlement, and loss of livelihood, to name a few. Climate change is a very serious phenomenon, impacting not just the local communities, existing ecosystems across India but also highlighting the existing inequalities. The impact of climate change has affected women more adversely than men due to their vulnerability and lack of access to technology in certain areas, which further exacerbates the issue in case of women belonging to marginalized communities. With respect to research conducted on green governance a little attention has been paid to gender Understanding the existing discrimination and gender bias a few of them have been able to make it up to the leadership positions decision making. As per the statistics, by the end of 2015 only 12% of federal environment ministries around the world are headed by women, only 4% of the chairperson positions are occupied by women and 15% secretaries of the 92 environmental national committees around the world are women.

We need to understand that the increase in the number of female leaders is an important step towards a more just, inclusive , healthy and sustainable society .To make this a reality a broader as well as, gender specific and inclusive approach taking gender into strong consideration needs to be looked which would help in examining a complex nexus between gender and environment ,thereby providing a dynamic way of understanding the relationship between environmental change and gender equality keeping in alignment with the Sustainable Development Goals (SDG -5) . Further taking constructive steps in encouraging women to participate in Global Environmental Decision-making roles which would lead to gender equality and empowerment of women in environmental governance, by mainstreaming the gender and enabling India to become a developed country by 2047.

Key Words - Green Governance, Climate Change, Sustainable Development ,Women Leadership , Marginalized , Feminism , Environmental Justice , Technology, Developed India

¹ Research scholar, CMR University

1. Introduction

“Humanity is acting like Mother Earth’s delinquent child” - **Antonio Gutter**s

As per the statistics, by the end of 2020 only 12% of federal environment ministries around the world are headed by women, only 4% of the chairperson positions are occupied by women and 15% secretaries of the 92 environmental national committees around the world are women²As half of the world’s population comprises of women and girls ,they still are not given adequate representation in the decision making bodies at all levels (local , national , regional and international) . Even though being the victims and survivors of such disasters, only few of them, have been able to represent themselves in the Global Environmental Decision Making , thereby making their voices unheard and their efforts to preserve the environment unrecognized .³As climate change is causing destruction around the world India still remains vulnerable to climate change ,wherein women are most affected and more so for the women from the marginalized communities.⁴The adverse impacts of climate change makes more women vulnerable to such crisis as compared to men as they constitute the world poor and dependable population . In it’s recent judgement the apex court in *M.K Ranjitsinha Ors v. Union Of India , March 2024* , held that people in India have right to be free from the adverse effects of climate change , as such right is protected under Art 14 and Art 21 of the constitution , thereby marking the *silver lining* towards the climate jurisprudence in our country ,as by bringing the impact of climate change within the ambit of fundamental rights paves way for the legal accountability of climate action .⁵ For securing a better and sustainable future for all women have to be given access to decision making and leadership roles so as to ensure gender justice in it’s true sense and further contributing for the development of the nation , ⁶

1.1Conceptual Understanding of Environment and its components

“Environment is anything which surrounds us”.`**Albert Eisenstein**

There are four components of environment , which are , lithosphere , hydrosphere , atmosphere and biosphere , I.e rocks water , air and life respectively. It comprises both *biotic*

² The Gender Equality and Environment Intersection , An Overvie of development co=operation frameworks and financing , OECD November 2023

³ Paola Profeta , Gender Equality in Decision -Making Positions: The Efficiency Gains , 52 , 2017 , pp34-37 Intereconomics , 2017.

⁴ Akanksha Kullar , The disproportionate impact of climate change on women , Expert Speak , Observer Research Foundation , 2023

⁵ Writ Petition (Civil) No.838, 2019

⁶ Nikhil Pandey , Empowering Women in Leadership:6 Strategies to Heklp Women Lead , Emeritus , 23rd April , 2024 .

elements which includes animals , plants , forests , birds etc as well as *abiotic elements* which includes , water , sunlight , rocks , air etc .⁷Environment is a place where there is an interface between living and non-living things having influence on human life .It plays a crucial role in providing supply of resources , comprising both *renewable* as well as *non-renewable* resources , that helps in sustaining life through it's rich biodiversity and ultimately enhances the quality of life .⁸

1.2 Relationship between Women and Environment in India

India has lived in harmony with nature as respect for nature is an integral part of value system which was reflected in daily lives of people , folklore's , religious beliefs art as well as culture.⁹ Many a times we have heard about women and environment being related , wherein a connection is drawn between the two.¹⁰Women by nature are nurtures , quality which it also shares with the environment in common . Such shared quality makes women more caring and nurturing towards their environment .¹¹

1.3 Understanding The Nexus Between Women Empowerment and Green Governance

A woman is truly empowered when she is subjected to fair treatment and is independent enough to lead her life by promoting self-worth and is able to influence social change for themselves as well as for others.¹²The study of environment and nature has undergone transition , as on one hand it started with establishing the relationship between the environment and women which latter on was more about given women access to take part in the decision making process on the matters pertaining to environment and it's related matters . Women have for years played crucial role in managing the natural resources both within the family as well as at community levels and addressing the existing gender disparities , is a crucial step towards achieving sustainable climate action .¹³

2.THE FEMINIST APPROACH TO CLIMATE JUSTICE

As per the *UN report* by 2050 , 158 million more women and young girls would be pushed further towards poverty and 236 million women into hunger .¹⁴As stated previously in

⁷ Autumn Spanne , What are biotic and abiotic factors in an ecosystem ?,Treehugger , 8th March , 2022

⁸ Paul Carvalho , The Importance of Environmental Conservation and Resource Efficiency , 13 , Journal of Geography & Natural Disasters , 2023

⁹ Balamurugan.P Environment and Religious Practices In India , IJS&ER , 12 , 2021

¹⁰ Esther Boserup , "Woman's Role in Economic Development" , 2960

¹¹ Srijana Mitra Das , Women and Nature share a powerful moral connection , The Times Of India , 8th Feb , 2020

¹² Yashoda.S.Y. , Women's Empowerment In India And It's Importance - A Study , 1 ,pp-2395-4396 , 2021

¹³ Sara Duerto-Valero&Sharita Serrao , Efforts towards measuring the gender-environment nexus in Asia and the Pacific , UN Women , 26th Nov 2023 .

¹⁴ Feminist climate justice : A framework for action" , UN Climate Conference , COP28 .

various studies , women are adversely impacted more due to climate change than men , thereby making it necessary for us to look at this matter from a new approach , popularity referred to as “*feminist climate justice approach*”, wherein emphasis is laid on recognizing women’s rights pertaining to labour and knowledge (where the decision makers need to recognize the expertise women from diverse background have), redistribution of economic resources by the effective steps taken by the government , adequate representation of the voices of women.¹⁵This branch of feminism focuses on the *patriarchal oppression* and the existing social constrictions which are related to women as well as environment, highlighting a direct connection which exists between oppression of the nature on another hand and the subordination of women on the other .Some of the Eco-feminists argue environment and women are compared due to the existing connection between women and environment whereas some give credit to culture and historical factors for such comparison .¹⁶

2.1 Eco-feminism and Ecological feminism

It is under the *Eco-feminist* and “*women and environment*” approaches which highlights the prominent role of a women concerning environment protection .¹⁷ The credit for created awareness and consciousness into the public domain through her reports of the *Chipko Movement* goes to Vandana Shiva .¹⁸Eco-feminism and ecological feminism which might be assumed as one and the same thing , differ from each other . Ecological Feminism is different from Eco-feminism, where the former is more focused on the actual and specific interactions with the environment and tries to establish the connection between environment and the “*gender division of labour*” , which requires more caring and nurturing role for women , and therefore places women closer with the environment . It further tries to highlight existing discrimination in the policy matters , where even though women have a distinct knowledge about the land yet they are excluded from being part of the policy decisions on that particular land .¹⁹

2.2Islamic Feminism and Inter-sectional feminism

¹⁵ Feminist Climate Justice , A Framework for Action , UN Women , 2023

¹⁶ Ecofeminism : Understanding the Connection Between Gender and the Climate Crisis , Pachamama Alliance 30th May , 2023

¹⁷ Tristan Bove , Ecofeminism: Where Gender and Climate Change Intersect , Policy & Economics , 19th July , 2021

¹⁸ When women lead:Looking back at the Chipko Movement , 28th Sep , 2020 Dr. Vandana Shiva’s Decades-Long Environmental Activism is Rooted in Health of All Beings , 22nd Feb , 2022, Global Health Institute

¹⁹ Vanshika Surve , India needs more women leaders. Policy-making can’t be dominated by one gender , The Print ,2022

One of the bravest campaign ever having being conducted in Asia and Africa is Islamic Feminism , wherein Muslim men and women challenged the regressive practices imposed on women in the name of religion by using the “*Islamic reformist arguments*”, thereby advocating for equality of Muslims (male and female) in both the public as well as private spheres.²⁰ As per the *Gender Gap report* out of 30 countries at the bottom 24 countries having the widest gender- gap are Muslim majority countries .²¹ It is the duty of the religious leaders around the world to empower Muslim women so that they can play a crucial role in climate change as so far under the existing regressive practices Muslim women have been found suitable enough only for the domestic roles .²²As women in these countries do have knowledge towards the betterment of the environment , they should be given access to respond for the same by occupying the important roles in the various developmental organizations .²³ The introduction of 73rd and 74th Constitutional Amendment to the Constitution in the year of 1992 reserved seats for women from SC&ST communities at the local level ,enabling them to take part in the decision making process .²⁴ Therefore , it can be stated that if such discrimination is not prevented it would push women further towards margins , wherein they are further segregated , excluded and discriminated leading to their marginalization ,social and economic exclusion .²⁵

3.UNDERSTANDING HISTORICAL EVOLUTION OF ENVIRONMENTAL GOVERNANCE IN INDIA

Environmental Governance includes within it's ambit , set of rules , norms , policy ,customs and organizations etc entirely that are involved in management of the environment in all it's aspects, thereby reflecting interactions of humans with their environment.²⁶It was after the return of the first woman Prime Minister ,Indira Gandhi from the United Nations Conference

²⁰ Dauda Opeyemi , Navigating Islam , Feminism , And Identity ,Document Women ,[Document Women - Navigating Islam, Feminism, and Identity](#) 9th Feb , 2024

²¹ Global Gender Gap by Country , 2024, [Global Gender Gap by Country 2024 \(worldpopulationreview.com\)](#)

²² Dr. Mohammad Bin Abdulkarim Al- Issa , Women are the missing key to tackling climate change in the Muslim World , Euractiv , 22nd April 2022.

²³ Memon Hossain , Protecting nature , act of faith: Muslim women are leading the charge on climate activism , Tapestry , 7th July , 2022

²⁴ B.B. Malik and Jaya Shrivastava , Understanding The Participation Of Dalit Women Elected Representatives In Panchayats: A Study Of Ghazipur And Mau Districts Uttar Pradesh , Journal Of Rural Development ,pp.451 - 459 , 30

²⁵ Ritwajit Das and International Dalit Solidarity Network , Caste and Climate Change : How Systemic Oppression , Exclusion and Caste-Based Discrimination Against Dalit Women Of South Asia Will Further Push Them To The Margins In The Quagmire Of Climate Emergency , Caste and Climate Change , 23rd September , 2021

²⁶ Jessica M.Savage &Ors , The challenges of establishing marine protected areas in South East Asia ,Regional Studies in Marine Science , 2023

on Human , Environment and Development that was held in Stockholm , 1972 , environmental governance began in India . She established the National Environmental Planning and Coordination Committee in her commitment towards the Stockholm Declaration .²⁷Further laws were enacted so as to constitute the Central Pollution Control Board (CPCB) , 1972 followed by the State Pollution Control Boards.²⁸ An umbrella legislation was enacted by the Parliament namely , The Environment Protection Act , 1986 .It was in the year 1992 when UN Conference on Environment and Development 1992 , popularly referred to as Rio Declaration was signed , simultaneously Environment Policy and Strategy Statement was released in India .²⁹Further for 32 sectors Environment Impact Assessment was made compulsory by the central government .In it's recent past the government of India has taken initiatives so as to combat the challenge of climate change , such as the National Action Plan on Climate Change , the National Adaptation Fund on Climate Change , the Climate Change Action Programme as well as the State Action Plan on Climate Change , wherein the government aims to achieve its goal of 450GW renewable source of energy generation by 2030³⁰.In order to have a transition from Bharat Stage IV to Bharat Stage VI emission norms by April 2020 , wherein the government aims to achieve smart cities , electric vehicles as well as the energy efficiency initiatives .³¹

4.MPACT OF CLIMATE CHANGE ON WOMEN

“Climate change is creating a downward spiral for women and girls”- Sarah Hendriks , UN Women Deputy Executive Director

As per the statistics 80% of individuals who are displaced due to the climate change are women, where they are exposed to higher risks of violence including the sexual violence. According to the International Union for the Conservation of Nature (IUCN) , climate change increases instances of *gender-based violence* as such enables to maintain control over the limited resources during such times .³²68% of 130 peer -reviewed studies have found that

²⁷ Yudhajit Shankar Das , How Indira Gandhi shaped India's climate stand 51 years ago , India Today , 2023

²⁸ Air Act , 1972 & The Water Act , 1974

²⁹ Dr. Shridevi S. Suvarnakhandi , Environmental Governance in India :Issues and Challenges , International Journal of Political Science, 7 , pp:13-32 , 2021

³⁰ National Action Plan On Climate Change , Ministry of Environment , Forest and Climate Change , GOI [National Action Plan on Climate Change | The Official Website of Ministry of Environment, Forest and Climate Change, Government of India \(moef.gov.in\)](https://www.moef.gov.in/national-action-plan-on-climate-change)

³¹ Aditi Khodke , Implementataion of Accelerated Policy-Driven Sustainability Transitions : Case of Bharat Stage 4 to 6 Leapfrogs in India , 2021

³² Ayat Soliman &Ors , Climate change and gender-based violence -interlinked crises in East Africa , Development and a Chnaging Climate , 2022

women are more impacted with climate change as compared to men.³³ UNFCCC Report , June 2022 on climate change has highlighted that women are more vulnerable to the impacts of climate change than men , due to the interplay that exists between gender and existing social norms . The report further highlights the important role that women and the existing marginalized groups can play so as to adapt to the climate change .³⁴The *climate change induced displacement* is on rise and majority of those who are forced to leave their homes are women , and are deprived of education and employment opportunities and are forced into child marriages wherein they are subject to domestic violence, thereby threatening women's lives in various “*gender specific ways*”wherein women from marginalized communities being most vulnerable to such human rights violations .³⁵Despite the positive contribution women make towards positive climate , they are marginalized from the mainstream decision making pertaining to decision making., wherein the historical factors of undermining women by undervaluing their potential and abilities As climate change has a differentiated impact of women/girls and men/boys due to the different conditions of men and women , there is a need to look at the same from a “*gender responsive approach*”.³⁶Therefore , understanding of issues pertaining to environment from a *gender-environment nexus* would enable in achieving a more fairer and sustainable society , as environmental factors have ‘*gender-differentiated effects*’ as men and women have different roles in the society .³⁷

4.1 Impact of Climate Change on Women From Marginalized Communities

Climate change doesn't affect everyone equally , women from marginalized communities suffer more due to inter-section of gender , ethnicity and low income including other social and economic factors. Individuals belonging to marginalized communities are subject to discrimination wherein they are historically excluded from the mainstream social , economic , political, educational and cultural life ,due to the existing unequal power relationships across economic , political , social as well as cultural dimensions .³⁸Women from marginalized communities are subjected to double discrimination , firstly by being a

³³ *Ibid*

³⁴ New Report : Why Climate Change Impacts Women differently than Men , United Nations Climate Change , 2022

³⁵ Ivan Natividad , Climate -induced displacement is a global phenomenon , but not evenly experienced , Berkeley News , 2023

³⁶ Adopting Gender Responsive Approach On Climate Change Policies , United Nations Institute for Training and Research

³⁷ *Ibid*

³⁸Intersectionality and Multiple Discrimination , Gender Matters , Council Of Europe Portal , [Intersectionality and Multiple Discrimination - Gender Matters \(coe.int\)](https://www.coe.int/t/dg4/intersections/intersectionality_and_multiple_discrimination/GM.pdf)

women and secondly by being part of the marginalized community .³⁹ Findings of the *Intergovernmental Panel on Climate Change* (IPCC) have found out that people belonging to the marginalized communities are most vulnerable to impacts of climate change, due to various reasons such as , poverty , existing gender roles and unjust cultural norms .⁴⁰As women rely on the healthy ecosystems so as to feed their families , making them more vulnerable to environmental degradation and disasters , more predominant due to the climate change .Women belonging to the rural as well as indigenous communities have responsibilities such to gather water and firewood , so as to ensure the well-being of their family members .The travelling of women to the unprotected areas where there is lack of private toilets puts their safety into peril, thereby making them vulnerable to violence and further depriving them of their education and employment opportunities.⁴¹With respect to health of women , as per UN report , 2022 the increase in temperatures has lead to increasing instances of childbirth , spread of diseases like malaria , dengue etc responsible for adverse maternal and neonatal outcomes , furthering impacting their mental health .⁴² It is now well established that climate change causes greater impacts on vulnerable people , both in developed as well as developing countries .⁴³It is to be noted that the intersection of conflict , climate change and the Covid- 19 pandemic had a severe impact of women , many of whom already were subjected to the inequalities and discrimination deeply rooted in the society .It was during the COVID-19 pandemic , when efforts were taken so as to outreach to marginalized communities .Instances of domestic violence , forced marriages , child labour, trafficking and exploitation were recorded during that period . Young girls had to drop out from their schools and were forced to get married , or in worst scenarios were sold . Many women were forcefully displaced which was further aggravated by existing gender inequalities .⁴⁴After COVID-19 pandemic came to an end , the countries started taking a different approach , from response to recovery phase . Meanwhile, it is important to mention here that , by ensuring that women are given access to green jobs , and climate resilient livelihoods , which would help in bouncing back .During COVID-19 gender inequalities

³⁹ Shafey Kidwai , Marginalization of women and the social exclusion discourse , Frontline , 2020

⁴⁰ Balgis Osman-Elasha , Women In The Shadow of Climate Change , UN Chronicle , United Nations , [In the shadow of climate change | United Nations iLibrary \(un-ilibrary.org\)](#)

⁴¹ Dr.Christina Kwauk and Dr.Liesbet Steer , Four Ways that Climate Change Impacts Girls Education in Africa ,Global Center On Adaptation , 2023

⁴² Wmi Suzuki & Ors , UN report : Global child deaths have reached historic low , World Bank Blogs , 2024

⁴³ New UN report : Inequalities cause and exacerbate climate impacts on poor and vulnerable people , Department of Economic and Social Affairs , UN .

⁴⁴ *Ibid*

increased and countries are still recovering towards more sustainable and gender-equal path .⁴⁵

4.1..Impact of Climate Change On Women in Developed Countries

No matter how much progressive a country might be , almost every country has their share of history of ill-treating women, .Women have less access to natural resources such as land , decision making structures , technology etc thereby minimizing their capacity to adapt to climate change .⁴⁶ At present the western countries are in the progress in ensuring the empowerment of women .As developed countries have sufficiently economic income as well as infrastructures , it is time for them to deliver on to their commitments on climate change by fulfilling the promises made by them in their financial pledge of providing 100million dollars as aid to the developing countries .⁴⁷

4.1.Impact Of Climate Change On Women in Developing and Under Developed Countries

As stated previously women are disproportionately affected by the climate change due to the limited access to the resources , causing the to travel farther distances so as to obtain essential supplies , thereby exposing them to greater risks to their safety .⁴⁸ The poor from the developing countries are affected dis-proportionality due to which they are in the greatest need of their adaptation strategies.Since women in India are dependable heavily on the natural resources,they are burdened with increased workloads such as during the period of droughts and floods , which is worsened due to the existing regressive social norms , childcare responsibilities further preventing them from having a better life by migrating to other places , thereby aggravating their vulnerability.⁴⁹

5. INTERNATIONAL EFFORTS TO GENDER INCLUSIVENESS

Both at national as well as international level , efforts are taken so as to ensure that women's voices are heard and further ensuring their participation in the decision making on matters pertaining to environment.The World Summit on Sustainable Development , 2002 which was held in Johannesburg , emphasizes on the need for *gender analysis* , *gender specific data* and

⁴⁵ *Ibid*

⁴⁶ AguilarL2 , Is there a connection between gender and climate change ?,UN Chronicle , 2008

⁴⁷ Matthieu Goar , Climate : Financial aid for developing countries , a crucial issue ahead of COP28 , Le Monde 2023

⁴⁸ Joe Mc Carthy , Understanding Why Climate Change Impacts Women More Than Men , Defend The Planet , Global Citizen Explains , 2020

⁴⁹ New Analysis of National Climate Plans : Insufficient Progress Made , COP28 Must Set Stage for Immediate Action , 2023

gender mainstreaming in furtherance with its sustainable development efforts , thereby committing itself towards women's empowerment and gender equality .⁵⁰

5.1 Understanding Efforts At International Level

There are efforts taken at international level so as to ensure the participation of women, so as to give recognition to their voices and take into consideration their perspectives on sustainable development taking the form of conventions , charters as well as resolutions .⁵¹

5.1.a. The Beijing Declaration and Platform Of Action

It was in 1995, at the Fourth World Conference on Women , wherein it was agreed by the representatives from about 189 countries on a plan for gender equality , often referred to as *The Beijing Declaration and Platform Action* , which still inspires and guides the decision makers on matters pertaining to women's rights . Being progressive in its nature it has 12 critical areas concerning empowerment of women and for achieving gender equality.⁵² From the structural point of view , the said declaration outlines the need of involvement of women in decision making at all levels which can be inter-mediated by the international bodies and the various women's rights organizations ensuring that their concerns are raised as well as addressed in the policies and programs.⁵³

5.1.b. The Post-2020 global biodiversity framework

The concerned parties to CBD on December 2018 agreed for the “*gender responsive framework*” , to develop “*The Post-2020 global biodiversity framework*” .⁵⁴ To make this a reality collaborative efforts of UNEP, WCMC and UN Women are taken so as to ensure implementation of this framework , which includes ensuring -

A) Equal opportunities for women to take part in leadership, decision -making and effective engagement at all levels.

B) Equal access , ownership and control over the biological resources

C) Equal access to benefits from biodiversity conservation and sustainable use and benefits from the genetic resources utilization .⁵⁵

5.1.c. UN Framework Convention On Climate Change (UNFCCC)

Gender Action Plan under UNFCCC which was agreed by the governments calls for equal as well as meaningful participation of women in the international climate process , and further

⁵⁰ *ibid*

⁵¹ Treaties and conventions promoting women's rights: An overview , Facts and Figures , FOCUS2030 , 2023

⁵² Women and The Environment: 25 Years On , Sep , 2020

⁵³ Beijing Declaration and Platform for Action , United Nations Economic and Social Commission for Western Asia

⁵⁴ Decision 14/34 , Decision 14/18

⁵⁵ Towards a gender-responsive post-2020 Global Biodiversity Framework , United Nations Decade on Biodiversity , 2021

ensures the prominent role for women to take part in decision making as well as in climate action .It was in 2012 when UNFCCC adopted a goal so as to achieve gender balance in national policy on climate .⁵⁶

6.NEED OF WOMEN IN DECISION MAKING AND LEADERSHIP ROLES

“When more women are decision makers environment wins”- University of Colorado Boulder

As per the study conducted in 2019 , which revealed that increase of women’s representation in the Parliaments at National Levels , leads to the adoption of more stringent climate change policies . Further their participation at the local level with respect to management of natural resources leads to better results in governance and conservation.⁵⁷ To achieve the aims and objectives as laid down under the above mentioned conventions and charters we need women at all levels to take part in green governance . Having more women in the decision making and leadership roles will lead to positive impact on decision making pertaining to climate change .As women are usually first to respond to natural disasters , risk reduction , thereby building a stronger and more resilient communities better equipped to face challenges of climate change . Having more female board members in an institution leads to utilization of renewable energy that that of male board members , thereby improving the CSR ratings and reputation of the country.As per the study the combination of male and female directors on board creates shareholder value. ⁵⁸More women gaining access to decision making and are represented countries have started to develop gender action plans with an objective to improve gender equality and a move towards more sustainable society .⁵⁹ Understanding the fact that the evolving nature of climate demands a more inclusive approach wherein gender is taken into strong consideration. Therefore,by adopting ***“gender sensitive approaches”***women being part of decision making can bring in climate friendly and gender sensitive perspective to existing policies as women possess the ideas as well as the powerful leadership qualities to solve such problems . ⁶⁰

7.DIGITAL TRANSFORMATION AND WOMEN EMPOWERMENT

“Digital empowerment can help in boosting women empowerment”-Smile Foundation

⁵⁶ Five Reasons Why Climate Action Needs Women , United Nations Climate Change , 8th March 2023

⁵⁷ *Ibid*

⁵⁸ Pradip Kumar Das , Impact of women directors on corporate financial performance -Indian context , World Journal of Social Science Research , pp320 , 2019

⁵⁹ Gender Action Plan , 2022-2025 , Unicef

⁶⁰ Mariah Levin , Why female leadership is crucial to tackling climate change and other crises , Race To Resilience.

As 90% of the new jobs around the world require digital skills and women face gender-based restrictions on their use of such technologies due to inaccessibility and if having access face sexual harassment on virtual platforms .When digital technologies are utilized to drive fundamental change, it is referred to as digital transformation, which leads to increased efficiency ,as going digital, presents government with an unique opportunity to face challenges (of disjointed , slow and tedious services). Further it's implementation can be ensured by self-service e-portals for the citizens , electronic document management , citizen and community engagement platforms , predictive analysis etc .⁶¹In the recent times various government organizations all over the world have made an attempt to embrace digital technologies for their political agendas and for the government transformation strategic programs.⁶² One such instance that can be quoted is , when the various women across India presented before various courts across India including the apex court , which also gained appreciation of our honourable Chief Justice of India , DY Chandrachud , who further went on to lay emphasis on the need for digital inclusion, as *“technology by itself is not the remedy for all ills”*.⁶³ Further with the advancement of AI which is leading to 4th industrial revolution ,wherein we are moving towards intelligent information society , both from the organizational as well as from political perspectives .⁶⁴Government needs to invest in such technologies as the development of these technologies digitally creates opportunities for the governments across the world to modernize governance which in turn would lead to improvement in social governance , thereby providing more people oriented services publicly which eventually would lead to human progress and increased administrative efficiency whereby causing a shift towards open , platform based , data driven and in-cloud governments which would lead to transformation of good governance into smart governance.⁶⁵ Such can be done by developing sound technological policies along with conducting scientific research so as to save the environment which would enhance women's economic as well as political standing in environmental matters that can be achieved by bridging the digital gap , thereby ensuring safe and inclusive internet . Further with the help of digital tools the participation of

⁶¹ Digital Transformation in Government: Challenges , Examples (2024) , Whatfix Blog 28th feb, 2023

⁶² Fatima Bouaziz , E-Government and Digital Transformation : A Conceptual Framework for Risk Factors Identification , Disruptive Technology and Digital Transformation for Business and Government , 2021

⁶³ Awstika Das, “Technology by Itself is not Remedy for All Ills :CJI DY Chandrachud Emphasises on Need for Digital Inclusion”, 2023

⁶⁴ Koo, Eunjin , Digital transformation of Government : from E-Government to intelligent E-Government , MIT Libraries, 2019

⁶⁵ Accelerating the Digital Transformation of Government , Huawei

women in leadership roles in digital space is boosted , thereby giving them the access to become the active agents of change .⁶⁶

9.CONCLUSION, SUGGESTIONS AND WAY FORWARD

Therefore, from the above it can be concluded that it is the responsibility of the government to have more equitable as well as effective global response for climate crisis, that would enable the harmonious coexistence of justice and sustainability. Further in addition to women being praised for the virtues and qualities that they shares in common with the environment , focus should be on giving women access to lead , wherein they can contribute for the formation of policies and laws on matters pertaining to environment at, local , national and international levels. As gender inequality hampers women's capacity as well as potential for being actors of climate action plan emphasis should be on the sustainable development solutions that would dramatically improve the lives of women and girls. Investing on girls as well as on women has greater benefits for the communities and the nations, as women have the ability of building climate resilience .Women's rights can be addressed effectively by promoting greater gender equality wherein women are not just seen merely as helpless victims of climate change but active leaders that would lead to transformation.

9.1Suggestions

Following suggestions can be provided so as to achieve what has been stated in the conclusion -

1. There is a need for practical action so as to tackle ill effects of climate change and the existing gender inequality specially in the area of decision making , by taking up ***“policy and tech driven approach”*** , wherein gender-sensitive climate change policies, gender specific climate change agenda, gender responsive action and programmes are formulated which with the help of technology would encourage participation of women in green governance .
2. Collaboration between various stakeholders under the leadership of women needs to be encouraged at all levels (local , national . regional and international) and sectors(such collaborations can take form of bilateral agreements between the government and the private firms , while ensuring the *“cost-effective framework”*which would help in accelerating climate action .
3. To build a sustainable future women have be harnessed with the knowledge , skills and leadership qualities . Women have to be trained for disaster management roles and their status in responding climate change has to be improved so as to help them better respond to

⁶⁶ Valentina Bellesi , Gender mainstreaming in environmental policies , OECD iLibrary 2022

climate change effectively while ensuring gender equality and inclusiveness , thereby confirming to SD G's .

4. There is a need for *gender awareness of gender equality* ,so as to ensure full and equal participation of women that would help in improving the roles & status of women responding to climate change and making better contribution to the future of green governance .Further efforts have to be taken so as to place women at the forefront for the sustainable development and for confronting the efforts of climate change as women and girls are disproportionately affected .

5. An *equitable approach and a bottom up approach* needs to be adopted for the governance , rather than contributing with the *top down approach* ,wherein the leaders from marginalized communities can voice their concerns and prevent further marginalization of their community, that would help in binding the fabric of the community politically wherein all are included in the development process .

9.2 Way Forward

So far no major political party in “*the contemporary electoral politics*” in India has taken up very serious action against the impacts on climate change which makes it necessary for them to bridge this existing gap .Such can be done by opting for long term perspective on climate change and sustainable development over the existing short term economic gains plans .India can set an example for other countries to follow by becoming amongst the few countries to advocate for “*women led development*”, where women are equipped with green skills ,and tech skills which would enable them to mitigate the crisis of climate change .India needs to take it's first step to have a population based response instead of solution based response , ensuring greater inclusion of women leaders in the climate discourses with gender focused solutions that would lead to a sustainable and developed future as envisioned by India by 2040 .