



DHARITRI

**WOMEN AT THE FOREFRONT OF
CLIMATE ACTION**

ELEVENTH ISSUE
2023-2024



DEPARTMENT OF GEOGRAPHY

ADITI MAHAVIDYALAYA

UNIVERSITY OF DELHI

EDITORIAL BOARD



CHEIF EDITOR



DR. SHEETAL SHARMA

ASSISTANT PROFESSOR

STUDENT EDITOR



MANSHA VERMA

SECOND YEAR



TRISHA SINHA

FIRST YEAR



KHUSHI KUMARI SINGH

FIRST YEAR

*“A good editor is someone who cares a little less
about the author's needs than the reader's”*

— Dene October

CONTENTS

- i MESSAGE FROM THE HEAD OF THE DEPARTMENT**
- ii FROM THE DESK OF THE PRINCIPAL**
- iii MESSAGE FROM THE TEACHER IN CHARGE**
- iv MESSAGE FROM THE EDITORIAL BOARD**
- v FACULTY**
- vi STUDENT CORNER**
- 1 ANNUAL REPORT 2022-23**
- 5 ANNUAL REPORT 2023-24**
- 11 ARTICLES**
- 12 LET'S TALK ABOUT WOMEN.....**
- 16 WOMEN'S RIGHTS INTO THE GLOBAL FIGHT AGAINST ENVIRONMENTAL CATASTROPHE**
- 19 LAST OF ALL...**
- 21 ADITI MAHAVIDYALAYA'S (WOMEN'S COLLEGE) ROLE IN CLIMATE CHANGE THROUGH SOLAR ENERGY GENERATION: IT'S PRESENT STATUS, INSTALLED CAPACITY AND FUTURE PROSPECTS**
- 34 "मै नारी"**
- 35 BRIEF REPORT ON PARTICIPATION OF WOMEN IN PERFORMING CLIMATE ACTION**
- 37 WOMEN IN CLIMATE CHANGE**
- 41 WOMEN: GUARDIANS OF EARTH'S HARMONY**
- 42 पैरों पर कुल्हाड़ी**
- 43 GLIMPSES OF DHARITRI 2023-24**
- 49 WOMEN AT THE FOREFRONT: PIONEERS OF ENVIRONMENTAL RESILIENCE AND CLIMATE JUSTICE**
- 51 ASSESSING WOMEN'S VULNERABILITY TO CLIMATE CHANGE: A CASE FROM RISHIKESH CITY (DOIWALA BLOCK), UTTARAKHAND**
- 55 WOMEN IN CLIMATE ACTION**
- 59 TREE MOTHER**
- 60 WOMEN OF RESOLUTION AND RIGHTS**

- 61 WOMEN AT THE FOREFRONT: EMPOWERING AGENTS OF CHANGE**
- 64 THE TOUGHEST CHALLENGE OF ALL**
- 65 SUSTAINABLE ROLE OF WOMEN IN CLIMATE ACTION**
- 66 CLIMATE CHANGE AND WOMEN**
- 67 WOMEN LEADERS IN CLIMATE ACTION**
- 69 WOMEN INCLUSION IN CLIMATE ACTION**
- 72 औरत माँ है जननी है**
- 73 WOMEN AND CLIMATE CHANGE: A VITAL INTERSECTION**
- 75 A QUICK REMARK ON THE SIGNIFICANCE/ROLE OF WOMEN IN CLIMATE ACTION**
- 77 महिलाओं की आवश्यकता**
- 78 MOTHER'S PAIN**
- 79 S-HEROS IN CLIMATE ACTION**
- 82 THE FEMININE FORCE**
- 83 DRAWING THE SYNERGIES BETWEEN GENDER, CLIMATE ACTION AND SUSTAINABILITY**
- 86 WOMEN DRIVING CLIMATE CHANGE**
- 88 BOOK REVIEW OF GENDER AND GREEN GOVERNANCE BY BEENA AGARWAL**
- 91 PRIDE OF DHARITRI**
- 92 PANEL DISCUSSION G20: BHARATIYA JNANA PADDHATI: GLOBAL MESSAGE (SPECIAL REFERENCE TO ITALY)**
- 94 LOCAL TRIP TO SOUTH DELHI, SANJAY VAN AND JNU**
- 96 "DHARITRI" GEO-FEST'24**
- 98 EARTH DAY CELEBRATION**
-

MESSAGE FROM THE HEAD OF THE DEPARTMENT



Dear Readers,

Greetings and best wishes to the faculty, staff and students of the Department of Geography, Aditi Mahavidyalaya on the publication of the eleventh edition of 'Dharitri' on the theme of 'Women in Climate Action' Climate justice and climate action are key issues in contemporary times and women's role in climate action is now an important research area in the discipline. Social and cultural roles as well as gendered division of labour, lead to women being impacted differently by climate events. On the other hand, women's traditional knowledge and familiarity with local environment cast them as key actors in climate action. I congratulate the editorial board and students for choosing this theme and wish you all the best.

**PROF. ANINDITA DATTA
HEAD OF DEPARTMENT OF GEOGRAPHY
UNIVERSITY OF DELHI
CHAIR, IGU COMMISSION ON GENDER AND GEOGRAPHY**

FROM THE DESK OF THE PRINCIPAL



Dear Readers,

It brings me immense pleasure to write the prologue for the Annual Magazine of the Department of Geography- Dharitri. The theme of the magazine “Women at forefront of Climate Action” tells us that Women are increasingly at the forefront of climate action, driving change and innovation in tackling environmental challenges. From grassroots activists to prominent leaders in government and academia, women are playing key roles in advocating for sustainable policies, promoting renewable energy solutions, and raising awareness about the urgent need for climate action. Their diverse perspectives and experiences bring unique insights to the table, enriching discussions and shaping effective strategies for mitigating the impacts of climate change. Empowering women in environmental leadership not only strengthens efforts to combat climate change but also fosters greater inclusivity and equity in the global movement towards a more sustainable future. I extend my sincere congratulations to the Editorial Board for bringing this theme to the attention of the public.

Wishing them the best of luck!

**PROF. MAMTA SHARMA
PRINCIPAL
ADITI MAHAVIDYALAYA**

MESSAGE FROM THE TEACHER-IN-CHARGE



Dear Readers,

The climate crisis is not “gender neutral”, since it disproportionately affects women, which amplifies existing gender inequalities and poses unique threats to their livelihoods, health, and safety. Women bear a disproportionate responsibility for securing food, thereby during extreme events, they work harder to secure income and resources. Besides, women’s unequal participation in decision-making processes often prevent them from fully contributing to climate-related planning and implementation. When they get equal access to decision-making opportunities, they take more sustainable decisions for example, increased food security, greener mobility and reduced energy demand. Women-led actions need to be sufficiently funded to achieve a green transition. It is felt throughout entire world that investing on women creates ripple effects in all aspects. The Geography Department of Aditi Mahavidyalaya is here to recognize, publish and cheer on the brave women who constantly advocate and promote equitable, gender-conscious and just climate action measures. I wish all the best to entire Geography fraternity of Aditi Mahavidyalaya for taking initiative in this direction and publishing their annual magazine 2024- Dharitri on the theme ‘ Women and Climate Change’.

**PROF. PUNYATOYA PATRA
TEACHER-IN-CHARGE
DEPARTMENT OF GEOGRAPHY
ADITI MAHAVIDYALAYA**

EDITORIAL CORNER

We are either going to have a future where women lead the way to make peace with the Earth or we are not going to have a human future at all.

:- Vandana Shiva

Dear Readers,

We take great pleasure in welcoming you to the eleventh issue of the Annual Magazine “Dharitri”, Department of Geography. As the urgency of climate change becomes increasingly undeniable, the need for decisive action has never been more pressing. In the face of rising temperatures, extreme weather events, and unprecedented environmental degradation, women are the first responders to these phenomena and it calls for the global community to address this existential threat with climate actions.

In this issue, we delve into the multifaceted challenge of rightful climate action, exploring innovative solutions, inspiring stories, and actionable steps towards a sustainable future with women at the forefront. From the halls of government to the front lines of activism, women are taking bold steps to mitigate the impacts of climate change and build resilience in the face of adversity. Through in-depth analysis, compelling narratives, and thought-provoking commentary, we seek to spark conversation, raise awareness, and inspire collective action on behalf of our planet and future generations. From renewable energy initiatives to sustainable agriculture practices, from conservation efforts to policy advocacy, there is no shortage of avenues through which we can make a difference. Yet, as we navigate the complex terrain of climate actions, we must confront the uncomfortable realities of inequality, injustice, and political inertia that threaten to undermine progress. Climate change is not just an environmental issue; it is a social, economic, and moral imperative that requires us to confront systemic inequalities and injustices head-on which can be mitigated through climate actions. In the following pages, we invite you to explore the stories of individuals and communities leading the charge for climate action, as well as the innovative solutions and policy proposals that offer hope for a brighter future. Together, we can rise to the challenge of climate actions along with women empowerment, forging a path towards a more sustainable, equitable, and resilient world for all.

HAPPY READING!!

FACULTY



PROF. PUNYATOYA PATRA
PROFESSOR



DR. ANJU SINGH
ASSOCIATE PROFESSOR



DR. MAMTA ARORA
ASSISTANT PROFESSOR



DR. SHEETAL SHARMA
ASSISTANT PROFESSOR



MR. JAGMOHAN
ASSISTANT PROFESSOR



DR. SHADAB KHAN
ASSISTANT PROFESSOR

GUEST FACULTY



MS. RACHANA RANI SHARMA
ASSISTANT PROFESSOR



MR. PUSHALAL GANESH
ASSISTANT PROFESSOR



MS. EKTA SAHRAWAT
ASSISTANT PROFESSOR



DR. SWATI BIDHURI
ASSISTANT PROFESSOR



MR. PRAKASH SINGH
ASSISTANT PROFESSOR



DR. NAMRATA HANDIQUE
ASSISTANT PROFESSOR



**MR. GHANSHYAM SINGH
YADAV**
ASSISTANT PROFESSOR



DR. SHASHI KALA SAROJ
ASSISTANT PROFESSOR

STUDENT CORNER



Batch of 2021-2024



Third Year, B.A (Hons) GEOGRAPHY

Batch of 2022-2026



Second Year, B.A (Hons) GEOGRAPHY
First N.E.P Batch

Batch of 2023-2027



First Year, B.A (Hons) GEOGRAPHY
Second N.E.P Batch

ANNUAL REPORT

2022-2023



As per the University regulations, there will be different date of commencement of Academic session 2022-23 for Undergraduate students of I, II and III year. The academic session of V Semester was started from July 20, 2022 and the students were oriented about various Discipline Specific Courses (DSC) of the syllabus. A precursor event was planned on 11th July, 2022. A special lecture on the Occasion of World Population Day a Virtual Talk by the Associate Professor, Dr Ushvinder Kaur, Swami Shradhanand College, Delhi University, on The topic of the “Ageing population - A myth or reality” was very apt for the occasion. The world population dashboard showcases multiple issues concerning the contemporary situation - Ageing of the population is one among those. Our enthusiast students (approximately 85) very well received the talk and had a detailed discussion.

Department of Geography in collaboration with the Department of Mathematics, Aditi Mahavidyalaya organised a virtual webinar on “Nationalism and National Flag: Har Ghar Tiranga” to commemorate 75 years of India’s Independence under the aegis of Azadi Ka Amrit Mahotsav - ‘Har Ghar Tiranga’ campaign on August 14, 2022 .The invited speaker was Prof. Kaushal Kumar Sharma, Dean, School of Social Sciences, Jawaharlal Nehru University (JNU) who comprehensively explained the concept, significance and relevance of nationalism and our national flag. He discussed all the difficult aspects related to nationalism such as secularism, patriotism etc. and brought various facts to the light related to the national flag, skilfully that a layman can comprehend the convolutions. The webinar was attended by more than 60 participants and culminated with our National Anthem sung and the slogan “Jai Hind, Jai Bharat”.

On 17th September, 2022, Department of Geography, organised a “Poster making competition” on the occasion of “International Coastal Clean Up Day” themed “Let’s Save Our Oceans” and a “Reel making competition” on the occasion of “World Ozone Day” themed “Save Ozone Layer” where our students exhibited their skills using ravishing colours and showing their concern on the topic as well as the environmental crisis circling it.

A Workshop was conducted on - Career opportunities in Geoinformatics on 29th September, 2022 in our Department to spread awareness about career choices, Geospatial Programs and technologies in Geoinformatics among the students. This workshop was sponsored by Netra Institute of Geoinformatics Management and Technologies Foundation, New Delhi. A total of 80-90 (approx.) students attended the Orientation including students from other courses as well. Ms Kusum Singh, Senior Centre Accommodation introduced about the Institute and it's stages along with their institute's associate Placement Partners like Navayugan, CSDMS, CYIENT, Infotech etc. Briefing about the technologies which they instruct- Remote Sensing, GIS, GPR, Photogrammetry and Python. Mr Ravindranath Tiwari, H.O.D of Geoinformatics discussed about the Aerial Photography and its applications and signifying how this technology supports even Government Planning.

The new academic session for the First Semester students commenced on 2nd November, 2022. Thereby, an Orientation Programme was organised exclusively for them, wherein they were briefed by Dr Anju Singh, Teacher- in –Charge along with the faculty members of department about the structure of the New Education Policy, curriculum, code and conduct, varied college committees etc.

“Dharitri” – The Geographical Society organised an Annual Inter-college Geo-Fest on 10th February, 2023 on the theme “Millets – A Gateway to Health and Food Security” which was inspired by thUN International year of Millets -2023. Dr. Ranjeet Ranjan Kumar, Senior Scientist, IARI who was the invited resource person, delivered a talk on “Pearl Millets”. He discussed in length about its types, significance, reasons for its neglect and challenges. He also shared valuable insights of India's role in protecting millet and its benefits. In order to create awareness among the students, a Nukkad Natak was performed by our students with a focus on the significance of millets in food security and its health benefits. Further in line, various inter-college competitions were organised namely, Culinary Delight, Millet Art, Pictionary and Treasure Hunt, wherein, more than 100 students participated from different colleges of Delhi University. Furtherance to that, a cultural performance was presented by Geography (Hons.) students showcasing various dances of those states of India which have highest production of Millets.

A local survey was conducted by the Department of Geography, dated 15th February, 2023 at Yamuna Biodiversity Park located on the western bank of River Yamuna, with an aim to investigate soil and mapping of this region. The survey covered a full inventory of soils in relation to the geomorphological setting, their morphological and physio-chemical properties, taxonomic classification, problems and potentialities associated with the soils, their management needs and recommendations for scientific land use planning. The survey was conducted by B.EL.ED. Second year students, to assess the potential soils for different crops along with Cropping patterns.

As a part of curriculum, 22 students have attended the trip and prepared the report. A field trip was organized to Chamba, Himachal Pradesh and its surroundings of VI semester students from 24th February to 2nd March, 2023 contingent upon Disasters. The motive of the trip was to “Investigate the Landslide Occurrence in the district Chamba”. Several locations selected as the sites of field visits were – Panchpula waterfall, St. Francis Church, Khajjiar, Chamba, Dharamshala etc. Though it’s a part of the curriculum, yet its significance in providing an altogether different exposure to the students cannot be undermined. Our 34 students enthusiastically participated in various scheduled tasks during the trip. We visited Government College of Chamba, where we exchanged two different cultures. Prof M. Salaria of Sociology department had arranged a seminar where we had a discussion with them on landslide occurrence in the region. They took us to the most vulnerable landslide zones where there is a frequent occurrence of landslides due to several reasons. They also briefed us about the past history, about the deadliest life taking landslides which kills so many people and reasons behind this holocaust. We observe many physical features around roadside areas like Ravi River, Rocky mountains and others covered with loose soil on which construction was going on for several projects which increases the chance of landslides. The field trip to investigate Landslides in the Chamba region was successful and witnessed media coverage in television and newspaper.

A field trip was organized by the Department of Geography to Shimla, Himachal Pradesh and its surroundings of IV semester students (total 32) from 16th March to 20th March, 2023 contingent upon tourists. The motive of the trip was to study “Tourist’s motivation and their needs and wants” which lead to specific findings and recommendations to know the facilities, study area, and the locals. Kufri, Chail, Mall Road etc, were visited for the collection of related data. With the same theme, another group of our students (total 22) also covered

various places in Delhi like - Rajghat, Majnu ka Tila, CP, Sarojini, Akshardham, Chandni Chowk, Red Fort and Jama Masjid, Chattarpur, Qutab Minar, Lotus Temple, ISKON, India Gate, National museum, Nizamuddin and Rashtrapati Bhawan. Their observations and findings were well documented for our records.

A local field survey was accomplished by the third year students of Geography Department in several industrial areas in Delhi from 27th to 28th of March, 2023 to contingent upon Disasters. The motive of the survey was to critically evaluate “The people’s perception on the Occurrence of Fire Hazard in Delhi” which leads to specific findings and recommendations in order to reduce the contingency of the holocaust. Among all the disasters, we chose “Fire Hazard” for a primary survey, as Delhi has several pockets, markets, industrial areas which are densely populated, congested with narrow streets and poor infrastructure making them vulnerable to fire outbreaks. Anaj Mandi, Rani Jhansi Road, Jhandewalan, Sadar Bazar, Bawana industrial area, Connaught Place, Wazirpur industrial area, Chandni Chowk, Bhagirath Palace etc. were covered under this assignment.

ANNUAL REPORT

2023-2024



The Department organised various events during the academic session 2023-24 ranging from orientation programs to workshops. The first event of the Department of Geography was organised on 11th July.

- **WORLD POPULATION DAY:** *The Department of Geography, Aditi Mahavidyalaya organised a webinar on World Population Day on 11th July 2023. All were invited for an online interactive session on the occasion of World Population Day at 8:00 PM and link was shared with the participants. All the faculty members along with 60 students were interacted in the session. Most of the participants were shared their personal experiences and gave few ideas about the population control. Despite of the fact it was a little late in the evening but all participants enjoyed a lot.*
- **ORIENTATION PROGRAMME:** *The new academic session for the First Semester students commenced on 16th August 2023 and an Orientation Programme was organised exclusively for them. The students were briefed by Prof. Punyatoya Patra, Teacher-In-Charge along with the faculty members of the department about the structure of the New Education Policy, curriculum, internal assessment, code and conduct, varied college committees and various other aspects which are essential for their academic growth.*
- **TEACHER'S DAY CELEBRATION:** *The Department of Geography, celebrated Teachers' Day on 5th September 2023 in the room number 18 of the Geography department. Greeting cards were given to each faculty member as a token of gratitude to acknowledge and recognize their dint of hard work. More than 40 students joined the celebration. The program started with the address note by Principal madam Prof. Mamta Sharma followed by a cake cutting ceremony. The students of the department enjoyed the delicious cake with blessing of entire faculty.*

- **DEBATE COMPETITION:** *The Department of Geography with collaboration of the Debating Society of Aditi Mahavidyalaya organized an incredibly successful debate competition on the Topic “Water Ethics: Can Water Solve Conflict” under G20 Presidency Summit on 14 th September 2023.*
- **PANEL DISCUSSION:** *The Department of Geography organized a Panel Discussion on 5th October 2023 under the G-20 presidency on a noteworthy theme G20: BHARATIYA JNANA PADDHATI: GLOBAL MESSAGE (SPECIAL REFERENCE TO ITALY). The background address delivered by the convener, Dr. Anju Singh on the conception of the whole idea behind the panel discussion. The current global issues at G-20 summit on various environmental issues like climate change, health and human wellbeing, peace, etc. which seems intricate to deal with modern scientific and technological development can be one step in the direction of unfolding the remedial measures to curb by understanding the Bhartiya Jnana Paddhati is eternal inspiration to decide on the theme of the panel discussion. She elaborated that the main theme Vasudhaiva Kutumbakam - Bhartiya Jnana Paddhati is completely nature driven and explained it with the lucid example of why should we call India- Bharat and who are Bhartiya’s. The panel discussion initiated with the insightful welcome address by the Prof. Mamta Sharma, Principal, Aditi Mahavidyalaya on the rich heritage and traditional knowledge of Indian scholars of the country. The occasion was graced by the esteemed Prof. Rana P. B. Singh, renowned and eminent connoisseur of cultural landscapes and heritage studies, chair person of the panel discussion. The outstanding deliberations on the Indo-Italiano preview of culture and cultivating future were shared. The other speakers were Prof. Seema. M. Parihar, Kirorimal College, University of Delhi, Prof. Parveen. K. Pathak, CSRD, Jawahar Lal Nehru University and Dr. Saurabh, Deputy Proctor, University of Delhi. The event has also witnessed the radiant presence of Prof. Pooja Khanna, Nodal Officer of the G-20 presidency, Aditi Mahavidyalaya, University of Delhi. The event was culminated by the concluding remarks and vote of thanks by Prof. Punyatoya Patra (TIC).*

- **ONLINE WORKSHOP ON “GEOSPATIAL TECHNOLOGIES**

The three days online workshop was organized by the Department of Geography on 16th to 18th November 2024 at Google Meet platform in Collaboration with Swastik Edustart. The program started at 2:00PM with the welcome address by Miss Suhani. The guest speaker was Dr. Bratati Dey, ICSSR Post Doctoral Research Fellow (Founder member of Swastik Edustart). There were about 60 students of 2nd and 3rd Year B.A. Geography have participated in the workshop. Opening remarks and introduction on the theme were given by Dr. Bratati. She highlighted numerous applications of Geographic Information System (GIS) and its relevance in present context. Some of them were Geo-information, Maps, Predictions along with (A.I) and Estimations. The workshop ended at 4:00PM on 18th November. Henceforth, the workshop served as a great learning opportunity for the participants and it successfully concluded.

- **WORKSHOP ON FUNDAMENTALS OF REMOTE SENSING**

The Department of Geography organized a workshop on “Career opportunities in Geo-Informatics” on 2nd December 2023 in the GIS lab of the Department of Geography for spreading awareness about career choices, Geospatial Programs and technologies in Geo-informatics among the students. This workshop was sponsored by Netra Institute of Geo-informatics on “Fundamentals of Remote Sensing”, New Delhi. Total 50 students attended the Orientation including students from other courses as well. Mr. Ravindra Tiwari (Head of Dept- Geo-Informatics) and Ms. Devashri Talukar (Faculty, NIGMT) were resource persons. The workshop was organised for B.A. (Hons) second and third-year students the main goal of the workshop was to orient the students with respect to career in GIS & and Remote Sensing and to allow experiencing hands on practical on “ERDAS” a remote sensing software.

- **PTM/Parents Teachers Meeting (Online mode):** *The Department of geography conducted an online PTM in the last week of March, 2024 for B.A. Hons and B.A. Programme semester II, IV and VI students. The meeting was headed by Prof. Punyatoya Patra, TIC, department of Geography along with senior faculty Dr. Anju Singh. All other faculty member joined according to their specializations. The purpose of the online PTM was to interact with parents regarding their wards performance in terms of their scholastic and co-scholastic areas with special focus on their attendance in classes.*

- *Various parents attended the online meeting along with their wards. It was observed that parents were very excited and enthusiastic about it.*
- **ONE-DAY LOCAL TRIP:** *One of the most exciting activities that everyone enjoys is the trips. The Department of Geography organized a one-day trip to Sanjay Van and visit to JNU Campus for B.A. (Hons) Geography and B.A. Programme students whereas total 56 students along with six faculties visited the place. Sanjay Van is a large urban forest area near Vasant Kunj and Mehrauli in Delhi, India. It is spread over an area of 443 hectares. It is one of the densest forest areas in the green lungs of the city. After visiting Sanjay Van on the same day around at 4:00PM, students got an opportunity to interact with Professor Kaushal Kumar Sharma, Dean, School of Social Sciences, JNU at CSRD lecture hall in SSS-III building. Prof. Sharma deliberated upon the importance of field trip and the nature of geographical enquiry one should look at as budding geographers. He stressed on the concepts of changing notion of space, time and reality and asked the students to survey among themselves about how they remember any particular phenomena or even and its linkage with the concept of mental map. He ended the interaction by wishing them all the best for their future and advised them to religiously follow college curriculum as it would help them build a better foundation for their future studies.*
- **LONG EXCURSION FIELD TRIP:** *The Department has organized one-week long field trip, i.e. from 3rd April to 10th April, 2024 to Vishakhapatnam and surrounding areas to study the impact of cyclones on the coastal region of Andhra Pradesh. In this trip thirty-seven students of B.A. Hons. Sem VI students along with four faculty members have visited the Cyclone Warning Centre, University of Andhra Pradesh, fishermen villages to collect both secondary and primary data related to their study. In the Cyclone Warning Centre, the students were exposed to all the equipments and methods used to warn the local people during the advent of cyclones. Prof. P. Suneetha, Head, Department of Meteorology and Oceanography, Andhra University has given the exposure to our students regarding the types of researches they are doing on cyclones in their department. Prof. K. Srinivas Rao, Principal, College of Science and Technology, Andhra University also interacted with and guided our students. Our students with the help of the students of Andhra University have interviewed little more than 400 villagers of Jallaripet and*

- *Bimanipattanam villages using the structured questionnaire. As a part of curriculum, the students have written individual reports on the basis of their field study. Besides, during the field study, they have also visited Rushikonda beach, Borra caves, coffee plantation areas and tribal museum in Araku valley.*
- **“DHARITRI” GEO-FEST 2024:** *“Dharitri” – The Geographical Society organised an Annual Inter- college Geo-Fest on 18th April, 2024 on the theme “Women at the forefront of climate action” which has inspired by the UN International themes. To speak on the theme, a dynamic feminist academician Prof. Anindita Datta, Head, Department of Geography, Delhi School of Economics, University of Delhi was invited as resource person. She delivered a talk on the topic “Women at the forefront of climate action: Feminist Solidarity, mutual aid and Gendered Possibilities to build back better in crisis and recovery”. She begins by stating that Disasters are typically perceived as tragedies resulting in the loss of lives and property. However, adding a different perspective to it, she argues that disaster are an ‘window of opportunity’ to build back better that is they present a chance to address pre-existing conditions, such as sex equity. Through the process of recovery and rebuilding after a calamity strike, we can actually create a more utopian and more egalitarian society. In order to create awareness among the students, a group dance followed by a Nukkad Natak was performed by our students with a focus on the significance of role of women in the society and climate change. Further in line, various inter-college competitions were organised namely, Tulika the Poster making competition, through my lenses (Reel making and Photography competition, Magellan of Globe the Map Pointing and Quiz and Khul ja-sim-sim the Treasure Hunt, wherein, total around 150 students from different colleges of Delhi University were participated. Furtherance to that, the prize distribution ceremony and the group photographs were conducted at last.*
- **B.EL.ED. Second year Field Trip:** *The survey covered a full inventory of soils in relation to the geomorphological setting, their morphological and physio-chemical properties, taxonomic classification, problems and potentialities associated with the soils, their management needs and recommendations for scientific land use planning. The Department of geography conducted a field survey for B.El.Ed. Second-year*

- *students along with 3 faculties to Kamla Nehru Ridge, University of Delhi. They have gained very insightful and interesting knowledge about the Kamla Nehru Ridge which is home to a diverse range of flora and fauna, showcasing the rich biodiversity of the area. Students encountered various species of plants and animals, highlighting the importance of preserving such natural habitats in urban environments. They also experienced a butterfly conservatory. Students got to know about the different species of butterflies and their host plants; some of those plants are very common that can be seen in our houses as well. There was a historical monument like the Flagstaff Tower and the Chaurburja Masjid is also located which is the main stream of the 1857 revolt. As a part of curriculum 27 students have attended the trip to Delhi University Ridge area and prepared the report.*
- **EARTH DAY CELEBRATION:** *The department of Geography in collaboration with Eco Club and Department of History organised Earth Day on 22nd April, 2024. The spirit of the event was laid in the theme of “plastic v/s planet” which not only aimed to spread a vibrant light on the malicious use of plastic but a reminder that we are the only ones who can make it possible. To fulfil the noble cause, our guest speaker, Mr. Aditya Patel, Assistant Director, DRDO, Ministry of Defence, Government of India, provided a wonderful insight on the matter through his informative speech. In conclusion, Mr. Patel added, “Indiscipline leads to another indiscipline but discipline can also lead to discipline as well”. With reference to the book “Atomic Habits”, he encouraged the audience to inculcate small but productive habits in their lives. Youth with their ultimate potential can steer the wheel of change not only in terms of plastic misuse but also with other ecological problems faced by. We are not at a war with plastic but we are indeed on a war with misuse of it and the consequences faced by the innocent. Everyone enjoyed the event.*



ARTICLES

LET'S TALK ABOUT WOMEN.....

*Dr. Sheetal Sharma, Assistant Professor,
Department of Geography,
Aditi Mahavidyalaya*

There is a quote given by many scholars, "Women are completely at the forefront of climate solutions in everyday life." But there is one question which always comes to my mind that "How do women play a key role in addressing climate change"..... let's talk about this here. Being a planner, I feel that those who are most affected by climate change today are women, girls and marginalised communities, and they must be involved in the designing and implementation of climate-responsive actions to ensure the equal sharing of benefits. Whenever we are talking about women, it means we have to take a long breath just to accept those multi-talented beings. It doesn't mean that we are avoiding the role of men in the society but as a woman handles multiple tasks at one time it is a "God gift" to her. Women are very close to nature due to their household responsibilities. As they get up early in the morning and go to bed at last. By including more women in climate action, we can create a more sustainable and equitable future for all. It's a fact that if we provide the same access to resources as men to women, they can increase their output in any activity. Women's vulnerability to climate change stems from several factors, like social, economic, cultural and others. Moreover, we have experienced that women represent a high percentage of poor communities that are highly dependent on local natural resources for their livelihood, particularly in rural areas where they shoulder the major household responsibilities like water supply, firewood collection for cooking and heating, as well as for food security. It has been studied that women contribute up to 50 per cent of the agricultural workforce in the rural area. They are mainly responsible for the more time-consuming and labour-intensive tasks that are carried out manually or with the use of simple tools. Women are mainly engaged in subsistence farming, particularly horticulture, poultry and raising small livestock for home consumption.

Women have limited access to and control of environmental goods and services; they have negligible participation in decision-making and are not involved in the distribution of environmental management benefits. Consequently, women are less able to confront climate change. During natural calamities such as landslides, earthquakes, droughts and floods, women tend to work more to secure household livelihoods. It has been revealed from the many studies that at present in the

the scientific world still women, in many societies, suffer gender inequalities concerning human rights, political and economic status, land ownership, housing conditions, exposure to violence, education and health. Climate change will be an added stressor that will aggravate women's vulnerability.

Let's talk about motivational true stories the first one.....

This is based on my experience from my childhood days. My grandmother is an illiterate woman living in a village having a bounty of nature. She was a true daughter of Mother Nature who could understand nature with all her cultural values, observation and traditional understandings which she inherited from none other than, Mother Nature herself. Without the help of any weather equipment, she predicted natural changes throughout her life. At present, she is around 90 years and now she is not much active due to her poor health.

Generally, she was used to predicting the rain timing during the rainy season and I can say most of the time her prediction was correct. She was very good at understanding the cloud formation and its outcome. Being a Geographer I studied cloud types during graduation first year and I realised that she had the correct knowledge about cloud types and changes. She did have an idea about the circulation of the winds as well. But there was only one difference between her knowledge and my knowledge is, that she is familiar with the regional names of clouds, which were quite different from the scientific ones I know.

A moment came in that when I went to my village during my vacations, a few animals were reacting strangely. I couldn't comprehend that minute the reason for their different behaviours. All of a sudden my grandmother came in and pulled me inside the house and she sensed that was quite uncanny. I experienced that after 15 minutes a blasting thunderstorm fastened our heartbeats. It was unexpected and a surprise for all of us to appreciate how she saved our lives before the disaster occurred without any fancy instruments or knowledge behind such an incident. Every vacation whenever I visited my village I learnt new experiences about the primitive yet traditional bond with Mother Nature.

Let's talk about the second one.....

I would like to share one true story with you, which was narrated by a friend of mine. One of my good friends, who belongs to an average middle-class family living in a mountainous village shared this true story with me. Last year when she went to her village to spend a quality summer vacation with her family, she observed a lady who

was in her third trimester of pregnancy and was almost at her delivery stage. As a daily chore, he went inside the forest to collect dry leaves, wood for fire and fodder for her cow. In the evening when she returned my friend was shocked to see that lady was holding her newborn in one arm and a bunch of wood in another arm while she was carrying the fodder for the cow on her head. This strong portrait tells us how a woman is committed and concerned about her duties and avoiding her health.

Let's discuss our third tale...

Every year we organise and plan field trips for conducting surveys with students as a part of their curriculum and we feel fascinated to find women who are at the forefront of climate change. They are capable of micro-managing everything with limited resources provided although most of them are illiterate. Once we went for a field trip to Manali and it was the first time when I interacted with a Pahadi woman who was carrying her baby on her back without any baby belt. She astonished me as my daughter was only 9 months old at that time. I expressed my curiosity to that lady how it is possible with the single dupatta to carry her baby on her back, she replied with a gentle smile and explained it very nicely to me. That day I realised that women are very smart and can manage with limited resources no matter how bad their economic condition might be.

Let's discuss one more experience...

This story is about my friend when she was pregnant. She was at her mother-in-law's place in a village and not expecting her delivery time. She went to the field with her mother-in-law to collect resources and mid-way while returning home with fodder on her head suddenly she realised that it was almost time to deliver a baby. Somehow she reached home slowly and steadily, enduring the toughest pain and then she gave birth to little one. When I was in the same phase I recall that incident and tried to imagine the situation. It must a dreadful, helpless and difficult just to imagine but still unfortunately a major section of poor women are facing the same



*Ms. VARSHA, 3rd Year
B.A (Hons.) Geography*

Let's encourage ourselves to talk about one more story from our experience of interaction with those who are living close to nature and discuss their lifestyle. Trust me it will be so inspiring because whenever you and I feel tired meanwhile they don't know what it feels to be tiresome. You will always find them taking small yet productive steps towards climate action with a smile of gratitude on their face In fact, what I have experienced is that if you sit with them and discuss their experiences then they will surely motivate you to establish your very own connection with Mother Nature and be a woman mitigating the impact of climate-related adversities with the power of climate actions.



Ms. KARISHMA, 3rd Year
B.A (Hons.) Geography

WOMEN'S RIGHTS INTO THE GLOBAL FIGHT AGAINST ENVIRONMENTAL CATASTROPHE



By- Dr. Roshani Devi, Assistant Professor,
Indraprastha College for Women, University of Delhi
Miss Sumedha Chatterjee, MSc. Geography, IGNOU

By 2050, the impacts of climate change could lead to approximately 158 million more women and girls falling into poverty, and around 236 million more facing food insecurity. Additionally, the climate crisis contributes to a rise in conflicts and migrations, along with the spread of exclusionary and anti-rights political narratives that specifically target women, refugees, and other vulnerable groups. These concerning trends and potential solutions are outlined in a recent report by UN Women titled "Feminist Climate Justice: A Framework for Action." The report emphasises the urgent need for a gender-responsive approach to climate action, highlighting the importance of addressing the unique challenges faced by women and girls in the face of climate change. The concept of feminist climate justice advocates for the inclusion of women's rights in the broader effort to combat environmental disasters.

As the 8th Secretary General of the United Nations, Ban Ki-moon stated, "Women are disproportionately affected by climate change, but they are also a powerful force for change. When women are empowered, they are key agents of change who drive resilience and sustainability." It envisions a future where all individuals can access their human rights without facing discrimination, thriving in a world that is both healthy and sustainable. The report outlines a vision for feminist climate justice through four key principles, often referred to as the four 'R's':

1. Recognizing Women's Rights, Labour, and Knowledge: Policies should acknowledge the valuable knowledge and expertise women offer, especially from indigenous, rural, and young populations. Women have been at the forefront of climate activism and sustainable farming practices. Policies should also address women's disproportionate care responsibilities, economic disparities, and limited access to technology exacerbated by climate change.

2. Redistributing Economic Resources: To combat climate change, resources should shift from extractive industries to activities that prioritise environmental and social well-being. Policies should ensure women's access to employment, land, education, and technology, and support their economic and social resilience in a changing climate.

3. Representing Women's Voices and Agency: *Women and feminist groups advocating for gender-responsive climate action should be included in environmental policymaking at all levels. Despite some progress, women remain underrepresented in environmental ministries and delegations to climate conferences.*

4. Repairing Inequalities and Historical Injustices: *Financial commitments to address climate change should prioritise the most vulnerable countries and communities. Wealthy countries, historically responsible for most emissions, should fulfil their commitments to finance climate programs and support grassroots women's organisations. Additionally, responses should address non-economic impacts such as gender-based violence, loss of cultural heritage, and displacement from ancestral lands.*

Many people, especially women, are taking matters into their own hands due to the perceived failures of world leaders and fossil fuel polluters to address climate change effectively. Women of all ages are leading this global movement for change. Women are among the most effective advocates for ambitious climate action. Figures like Christina Figueres, former Executive Secretary of the UNFCCC, and Mary Robinson, a prominent Human Rights and Climate Justice Campaigner, are leading examples of this leadership. While traditionally underrepresented in scientific bodies like the IPCC, the number of women serving as lead authors on reports has been increasing since the 1990s.

Women and girls in Europe and Central Asia are at the forefront of the movement for feminist climate justice. They are actively involved in climate change adaptation, mitigation, and response efforts. These women are leading local, national, regional, and global climate movements, using feminist leadership to address the significant challenges posed by climate change. Without the leadership, knowledge, and active participation of women and girls in today's climate responses, it is unlikely that we will achieve sustainable solutions for a gender-equal world in the future.

There are also inspiring stories about young women at the forefront of climate action, such as Ainura Sagyn, a 33-year-old ecofeminist and software engineer from Kyrgyzstan, who is the CEO of Tazar, a mobile app promoting waste management. The app connects waste producers with recyclers and educates users. 65% of its users are unemployed women with children, who earn points for sorted waste, exchangeable for prizes like deposit money or cosmetics from female entrepreneurs.

Tazar has collected over 10 tonnes of waste since 2020. Sagyn also launched Tazar Bazaar, selling eco-friendly products from women entrepreneurs to support local businesses and promote eco-consumption. “Women, in particular, are disproportionately affected by climate change due to their lack of access to natural resources management, limited mobility in rural areas and by being excluded from decision-making processes,” says Sagyn aims to expand her startup to promote environmentalism across Central Asia.

Gabriela Isac, 29, from Moldova, is an environmental activist and co-founder of the Seed It Forward volunteer agroforestry initiative. She also works as a project coordinator at EcoVisio, a grassroots ecological non-profit. With the Seed It Forward team, Gabriela organises tree-planting events and provides consultation on environmental issues to civil society organisations, local public authorities, schools, and the general public. They educate through informational materials on trees, composting, and permaculture. To date, they have planted over 50,000 trees and bushes. Their recent environmental campaign reached more than 1.5 million people online.

“Moldova is quite vulnerable to climate change. Though the effects are not as disastrous yet as in other parts of the world, climate change increases an already existing burden on women. Women often work in rural areas and take the least-paid day jobs in agriculture. Women’s welfare is directly affected by the harvest, which in the low-tech agricultural system of Moldova highly depends on climate,” says Isac. And so many believe that the role of feminism acknowledges the interconnectedness of climate and environmental challenges and how these affect individuals in diverse ways. It recognises that everyone’s experiences of climate change are unique and valuable in finding solutions.

Women are stepping up to lead amidst the climate crisis, highlighting their disproportionate vulnerability to its impacts. They are powerful advocates for the sweeping changes necessary to secure a better future for the next generation of women and girls.

LAST OF ALL....

Ms. Trisha Sinha, 1st Year
B.A.(Hons.) Geography

Long in the middle of nowhere, there lies a tale of a lady who competed with the sun for the ounce of every beat of the heart. Valorant, chivalrous and adamant are said to be the manliest terms, but she was no less than a man to keep her sons and daughters alive along with her old mother. Vanquished dreams and lines of the palm had no hope for destiny. The war wasn't about swords, the fight wasn't about the wrong deeds, no religion, no race and no language, that was what made the blood boil, but it was all about the mercy which nature couldn't afford to provide anymore. In the endless desert of Dasht-e-Margo, where camels were the only companions, she walks with a few months-old daughter in search of shelter. The scorching heat wasn't shredding her mass, but it was the faint acceptance of death which was turning into the reality for sufferers of destiny. Belts of sand were sweeping away layer by layer as she was dragging her life along. The faces of the children seem to lose every dream that they once had. It was hard to distinguish their iris from marble. The wrinkled old lady couldn't distinguish between life and death anymore. Losing her older son to the war of disillusioned Jihad that was claimed to have saved the land of Pashtuns, only benefited the ones who spoke in front of large crowds. The younger son long ago, sacrificed his life as a suicide bomber who was promised that his family would be protected at all costs and heavens would hold a life of luxury. None of them knew whether heaven even existed and now they think of getting rid of whatever they were passing through.

The Ghorat Hazarajat Alpine Meadows provided a life catered by nature itself. The family lived happily in rural poverty. The land, the cattle, the soil and the waters from the river Helmand knew to sustain life for ages. No invader in this history has ever been able to conquer for a longer time, maybe nature itself laid boundaries to protect her offspring. Little did she know that man's greed for her resources could lead to a foreign conquest that would destroy every slightest element cherished with hers. The lady on the other hand is so connected with nature that she regrets being alive yet helpless to see everything she ever had inundated with the lost sands. They took all away, all that she had, all that made her and all that kept her alive till the time she heard of her husband's demise. Agriculture and cattle herding were becoming tough for sustenance as the political turbulence was just raising men to sacrifice in the fire of wars. Missiles destroyed the resources more than famines or inflation. No patch of land could ever be called as habitable. Ladies and children were laid to die without any

condolences or sympathy. Desolated villages were becoming frequent because man's greed was slowly turning into its ultimate goal and soon nature worshippers were losing their existence over identity. The family in its very true sense were the children of nature as never raised a finger to molest Mother Earth and the gifts of life. Tribes, Nomads, Aborigines and many more terms but in the true sense they protected nature more than the ones who claimed to be educated. It wasn't the kind of knowledge in the true sense which made a man think twice about his deeds and question his practical contribution to the land whose soils have made him.

Dasht-e-Margo was becoming true to its meaning with each passing millisecond. High hot and dry winds started blowing carrying lots of sand grains along. No oasis could be located, the throats were too dry to scream, and starvation was normalized as if breathing. The winds were getting stronger and stronger with each blow, creating a sandstorm that took on land which had nothing more to cater for lives. The urge to be alive for a second long was fading away. Finally, all the lifeless bodies surrendered on the backs getting covered with layers of sand like a linen cloth covering their deceased bodies. Nature was taking back her alter egos within herself without letting a human cause any further destruction to their lives. I wonder how brave the lady was to turn up as the leader against the realities of life. I finally understood the essence behind the title "We Are Not Afraid To Die If We Can All Die Together" written by Gordan Cook and Alan East, I can anticipate what must be going on in the minds of the children who were supposed to play near the riverside. The old lady was supposed to witness the achievements of her children and grandchildren. The lady herself wanted to live a life of culture, willing to marry off her older daughter and raise a new life within her arms. The lady herself wanted to live a life of culture, willing to marry off her older daughter and raise a new life within her arms.

You ask me the identity of this lady; I would counter-question you that which corner of the world you may not find her. They may not be meeting with the same fate, but they all are troubled by the inability to do something. Male-dominated migration due to the indirect adversities of climate change is very common around the Earth but we always forget to check the other side of the coin. Climate change is not discriminating, then who are we to discriminate, let the actions be ridden of all boundaries. Just like the holy rituals, let's take charge as these ladies can only be empowered when we take climate actions. Climate Action needs women, men, children, senior citizens, differently-abled people and all the diverse communities of homo-sapiens sapiens who are living in the Holocene Epoch to make a difference.

**DO YOUR CLIMATE ACTIONS BEFORE THE CLIMATE PUNISHES YOUR
MINDLESS ACTIONS.**

ADITI MAHAVIDYALAYA'S (WOMEN'S COLLEGE) ROLE IN CLIMATE CHANGE THROUGH SOLAR ENERGY GENERATION: IT'S PRESENT STATUS, INSTALLED CAPACITY AND FUTURE PROSPECTS

*Prof. Mamta Sharma, Principal.
Dr. Shadab Khan, Assistant Professor, Dept. of Geography.
Ms. Lucky Sindhu, Ms. Bhumika Atri,
Ms. Aashi, Ms. Monali Gupta, Ms. Shrishti, Ms. Sweta Rathor,
Ms. Neilakhonuo
Dept. of Geography (All UG Researchers: Aditi Mahavidyalaya)*

• **Introduction**

The consumption of electrical energy is increasing day by day as the population increases and the demand for electricity is constantly high in India. On the contrary, the reservoirs of natural energy sources are depleting very fast. The use of conventional energy sources as fuel has a very harmful effect on the environment surrounding us. Delhi has stopped generating its electricity from the thermal power plant and it has been shut down long back. From 2015 to 2019, Delhi has recorded only 4 days of “good air” under AQI. In this regard Aditi Mahavidyalaya of Delhi University has taken a major step by promoting and installing the use of nonconventional energy sources like solar panels in its campus. The need of time is to extract this solar energy and utilize the same in a sustainable way.

India makes a global leader in solar energy and the mission envisages an installed solar generation capacity of 20,000 MW by 2020, 100,000 MW by 2030 and of 200,000 MW by 2050. In this direction, our campus too is committed to contribute in a sustainable way by generating electricity through solar panels.

• **Objective of the study**

It is clear from the above problem and significance that solar energy is becoming an important source of energy all over India and especially in Delhi NCR, particularly our campus. It is important to investigate the performance of solar power plants. Knowledge about the performance of solar power plants will result in correct investment decisions of our different stakeholders, a better regulatory framework and favorable contribution to the grid. In this research, we will examine the various factors contributing to the performance of solar power plants, such as radiation,

temperature and other climatic conditions, design, inverter efficiency and degradation due to aging. The objectives of this study are summarized below:

- To estimate the performance of solar power plants at different locations in the campus
 - To assess the degradation of module output associated with aging as per current technology trends
 - To recommend future work in the field of solar energy by adding more area under it.
 - To review existing electric consumption in the campus and contribution to the grid since the installation of solar panels.
 - To review location and design criteria for better performance of solar plants
- In this research, efforts will be made to summarize the availability, current status, sustainable strategies, perspectives, major achievements and future potential of solar energy in the campus.

- **Research Methodology**

Solar energy has so far played an almost non-existent role in the power supply before the solar panel installation in the campus. For the present research report, information and data from a wide variety of sources will be used, which includes theoretical knowledge of solar energy technology, for both solar PV and solar thermal power plants. Data for Net Meter Billing will be analysed from sources such as TPDDL and HFM since 2019-20.

Data from the above mentioned sources will be analysed by using different statistical techniques along with the help of software such as Excel and SPSS.

Solar Plant in Aditi Mahavidyalaya

Name of SPV Plant : Aditi Mahavidyalaya, University of Delhi, New Delhi

Capacity of SPV Plant : 100.98 KWp

Solar Plant Type : RESCO Model

Date of Commission : 04thDec 2019

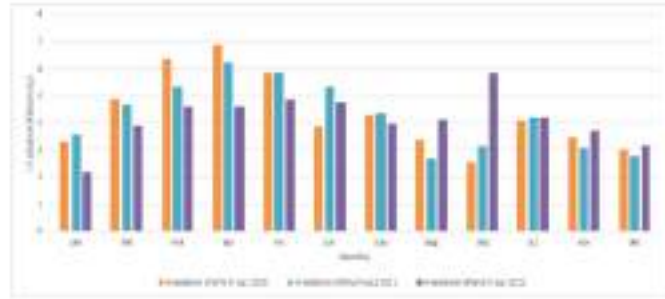
Aditi Mahavidyalaya -JMR					
Plant Capacity	100.98				
From	To	Duration	Month	Units Generated (kWh)	Yield
Starting	12/31/2019		Dec-19	2396.51	
12/31/2019	1/31/2020	31	Jan-20	6282.00	2.01
1/31/2020	2/29/2020	29	Feb-20	8663.00	2.96
2/29/2020	3/31/2020	31	Mar-20	11768.00	3.76
3/31/2020	4/30/2020	30	Apr-20	12276.00	4.05
4/30/2020	5/31/2020	31	May-20	11798.00	3.77
5/31/2020	6/30/2020	30	June-20	8414.00	2.78
6/30/2020	7/31/2020	31	Jul-20	9540.00	3.05
7/31/2020	8/31/2020	31	Aug-20	6643.00	2.12
8/31/2020	9/30/2020	30	Sep-20	5040.00	1.66
9/30/2020	10/31/2020	31	Oct-20	7983.00	2.55
10/31/2020	11/30/2020	30	Nov-20	6468.00	2.14
11/30/2020	12/31/2020	31	Dec-20	6243.00	1.99
12/31/2020	1/30/2021	30	Jan-21	6398.00	2.11
1/30/2021	2/28/2021	29	Feb-21	7952.00	2.72
2/28/2021	3/30/2021	30	Mar-21	10025.00	3.31
3/30/2021	4/30/2021	31	Apr-21	12191.00	3.89
4/30/2021	5/31/2021	31	May-21	11436.00	3.65
5/31/2021	7/1/2021	31	Jun-21	11705.00	3.74
7/1/2021	7/31/2021	30	Jul-21	9773.00	3.23
7/31/2021	8/31/2021	31	Aug-21	6675.00	2.13
8/31/2021	9/30/2021	30	Sep-21	7891.00	2.60
9/30/2021	10/29/2021	29	Oct-21	9450.00	3.23
10/29/2021	11/30/2021	32	Nov-21	7701.00	2.38
11/30/2021	12/31/2021	31	Dec-21	6614.00	2.11
12/31/2021	2/1/2022	32	Jan-22	5563.00	1.72
2/1/2022	3/2/2022	29	Feb-22	9175.00	3.13
3/2/2022	3/29/2022	27	Mar-22	10573.00	3.88
3/29/2022	4/29/2022	31	Apr-22	11971.00	3.82
4/29/2022	6/2/2022	34	May-22	13469.00	3.92
6/2/2022	7/1/2022	29	Jun-22	11139.00	3.80
7/1/2022	8/3/2022	33	Jul-22	10588.00	3.34
8/3/2022	8/30/2022	27	Aug-22	9182.00	3.34
8/30/2022	10/1/2022	32	Sep-22	10156.00	3.34
10/1/2022	11/1/2022	31	Oct-22	9941.00	3.34

11/1/2022	12/1/2022	30	Nov-22	8118.00	3.34
12/1/2022	1/6/2023	36	Dec-22	8370.00	3.34
8/3/2022	8/30/2022	27	Aug-22	9182.00	3.34
8/30/2022	10/1/2022	32	Sep-22	10156.00	3.34
10/1/2022	11/1/2022	31	Oct-22	9941.00	3.34
11/1/2022	12/1/2022	30	Nov-22	8118.00	3.34
12/1/2022	1/6/2023	36	Dec-22	8370.00	3.34
1/6/2023	1/25/2023	19	Jan-23	4057.00	3.34
1/25/2023	2/25/2023	31	Feb-23	8857.00	3.34
2/25/2023	3/23/2023	26	Mar-23	9731.00	3.34
3/23/2023	4/29/2023	37	Apr-23	15562.00	3.44
4/29/2023	5/28/2023	29	May-23	11748.00	3.44
5/28/2023	6/29/2023	32	Jun-23	12615.00	3.44
6/29/2023	7/27/2023	28	Jul-23	8434.00	3.44
7/27/2023	8/31/2023	35	Aug-23	13310.00	3.44

S. No.	2022	Draw From TPDDL (A)	Inject to TPDDL (B)	Carrollise Consumption	Unit Bought Forward	Unit carried Forward	Bill Rs.	Time Period
1	January	1574	3811	-2238	-25520	-25520	61668.28	1/02/21 to 31/02/22
2	February	941	2716	-1775	-27804	-27804	8473.31	1/03/22 to 28/02/22
3	March	3021	7400	-4379	-4379		23728.00	01/03/22 to 31/03/22
4	April	4199	3842	357	-4379	-4022	23807.05	01/04/22 to 30/04/22
5	May	4628	3557	1071	-4022	-2951	24423.70	01/05/22 to 31/05/22
6	June	5919	2186	3733	-2951	-2951	30248.53	01/06/22 to 30/06/23
7	July	6657	2160	4497	0	0	71827.35	01/07/22 to 31/07/22
8	August	6657	2807	3750	0	3750	63223.46	01/08/22 to 31/08/22
9	September	5414	2304	3110	0	3110	56024.10	01/09/22 to 30/09/22
10	October	3878	5982	-2104	0	-2104	24836.25	01/10/22 to 31/10/22
11	November	3653	4736	-1083	-2104	-2104	24836.25	01/11/22 to 30/11/22
12	December	3808	4596	-788	-3167	-3925	25366.16	01/12/22 to 31/12/22

Source: TPDDL Bills

Irradiation (KWh/m sq.) 2020 - 2022				
S. no.	Months	Irradiation (KWh/m sq.) 2020	Irradiation (KWh/m sq.) 2021	Irradiation (KWh/m sq.) 2022
1	January	3.28	3.55	2.18
2	February	4.89	4.69	3.89
3	March	6.37	5.36	4.62
4	April	6.91	6.25	4.61
5	May	5.86	5.87	4.87
6	June	3.85	5.37	4.75
7	July	4.28	4.38	3.98
8	August	3.38	2.68	4.12
9	September	2.57	3.16	5.86
10	October	4.09	4.19	4.19
11	November	3.47	3.07	3.72
12	December	2.99	2.79	3.19
	TOTAL	51.94	51.36	49.98



Monthly Irradiation Trends: Across the three years, there are variations in monthly irradiation levels. March and April generally have high irradiation, whereas December and January have lower levels.

Yearly Comparison: The total irradiation for each year shows a slight decline from 2020 (51.94 KWh/m²) to 2021 (51.36 KWh/m²) and further to 2022 (49.98 KWh/m²).

*Average Irradiation: The average irradiation for each year is approximately:
 2020: 4.328 KWh/m²
 2021: 4.28 KWh/m²
 2022: 4.165 KWh/m²*

January, February, and December: These months consistently have the lowest irradiation across all years. January is the lowest in all three years, followed by December and February.

March and April: These months consistently have high irradiation levels across the three years. March has a slightly higher irradiation compared to April.

May to July: May and June show moderate levels of irradiation, consistent across the years. July tends to have slightly lower irradiation compared to May and June.

August to November: August has varying irradiation levels across the years, but it's generally lower in 2021. September has a noticeable increase in irradiation levels in 2022 compared to the other years. October and November have consistent levels of irradiation across the years.

Yearly Trends: There's a slight decrease in total irradiation from 2020 to 2022. However, the average monthly irradiation remains relatively consistent, with variations seen in specific month.

. Graphical representation of unit generated (JAN 2020-DEC 2022)

Month	Units generated(KWh)
Jan20-Dec20	101118
Jan21-Dec21	107811
Jan22-Dec22	118245



This graph shows the graphical representation of units generated from January 2020 to December 2022 in Aditi Mahavidyalaya by solar plant. Firstly calculate the monthly data for every three years like January 2020-December 2020, January 2021-December 2021, January 2022 -December 2022. After doing the calculation, the line graph has been created where it shows the Unit generated in KWh. In 2020, 101118 units generated and slightly increase of 107811 units that mean 6693 units were added in 2021. In 2022, maximum units were generated this year i.e. 118245.

Comparison of Units (2020-2022) in different months.

S.NO	Months	Units 2020	Units 2021	Units 2022
1	January	6282	6398	5563
2	February	8663	7952	9175
3	March	11768	10025	10573
4	April	12276	12191	11971
5	May	11798	11436	13469
6	June	8414	11705	11139
7	July	9540	9773	10588
8	August	6643	6675	9182
9	September	5040	7891	10156
10	October	7983	9450	9941
11	November	6468	7701	8118
12	December	6243	6614	8370



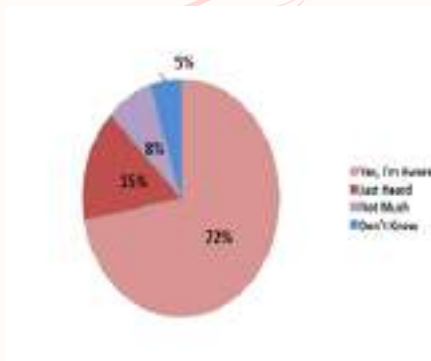
The bar diagram illustrates the units generated at Aditi Mahavidyalaya solar plant between 2020 and 2022 at 1-year intervals of months. In 2020, it can be seen that the number of units generated starts with 6282 KWh in January and increases and reaches its peak of 12276 (April) after which it falls slightly in September (5040) and increases a little in December (6243). In 2021, starting units are 6398, it increases until its peak (APR) 12191 after which sometimes less sometimes more units generation is recorded until (December) with 6614 units.

In 2022, January recorded the few units as compared to the other two years and it slightly increased until May and recorded the highest number of unit generation 13469. 2022 produces more units every month if compared with the data of 2020 and 2021. Overall, April-May receives the highest number of units in 2020, 2021, 2022 because of the location of the northern hemisphere due to the tilt of the earth's axis about 23.5 degrees and lengthening daylight hours.

Primary Survey Analysis: Primary survey conducted in the month of October 2023. The total size of the sample was 300 respondents within the college. The respondents were selected randomly from B.EL.ED, B.A. (Hons.), B.A. Prog. and B.A. Pass course. The analyses of the collected data are as follows:

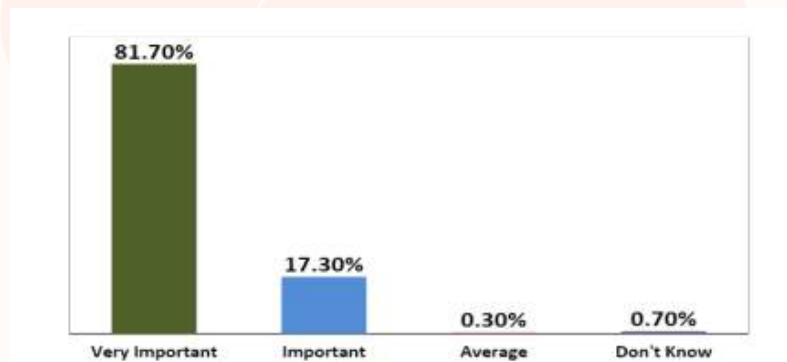
1. Are you aware of solar energy panels installed in our college?

The below pie-chart demonstrates the percentage of individuals who are aware of the solar panel installation on college premises. According to the data, the majority of the respondents (72%) are aware that solar energy panels have been installed on campus.



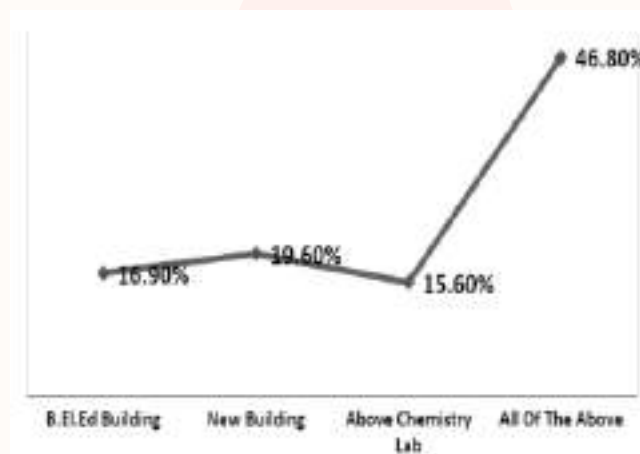
2. How important do you think solar energy is?

This bar graph depicts how important respondents believe solar energy is. According to the data received, the vast majority of respondents (81.70 %) believe that solar energy is very important.



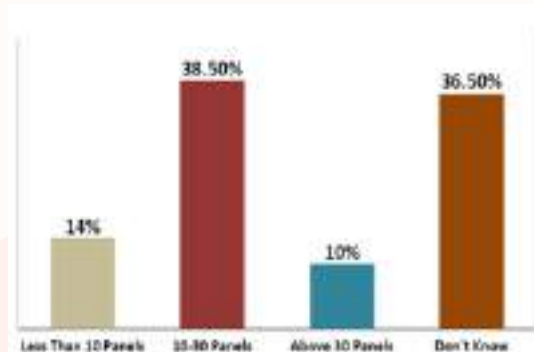
3. Where are the solar panel installed in our whole college?

According to the line graph, 46.80% of respondents believe that solar panels have been installed in all buildings, while 19.60% believe that solar panels have only been installed in new buildings, and approximately 16% and 17% believe that the panels have been installed in the rooftop of the chemistry lab and the b.el.ed building, respectively.



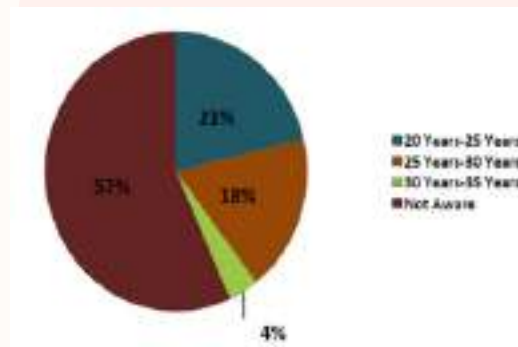
4. How many solar panels do you think are installed at our college?

The bar graph illustrates awareness of students about solar panel installation in college. It can be seen that 36.50% of students don't know about solar panel installation in college and 38.50% of students think 10-30 panels are installed in our college. Only 10% of students think that above 30 panels are installed in our college.



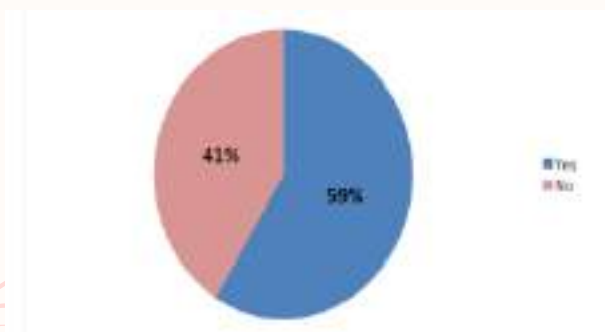
5. What is the average longevity of a solar panel installed in college campus?

From this pie chart it is clear that the majority of students don't have knowledge about the average longevity of solar panels installed in college. 21% of students respond the average longevity is 20-25 years and only 4% of students responded 30-35 years.



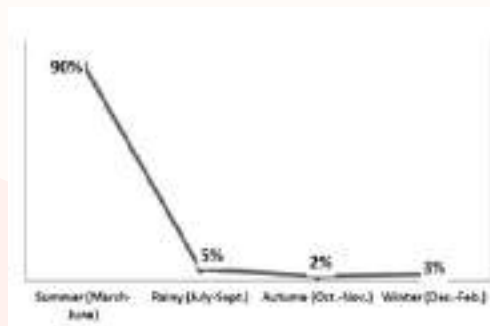
6. Are you aware that our college fulfills its energy demand solely from installed solar panels and supplies to TPDDL too?

This pie clearly shows that most of the students are aware that our college fulfills its energy demand from solar panels and also supplies energy to TPDDL. 41% of students are not aware about this.



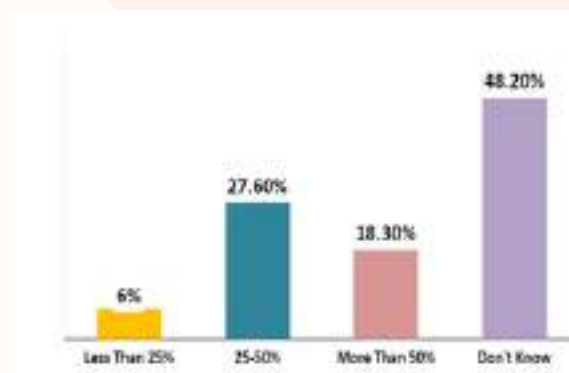
7. In which season electricity generation is at peak?

The students responded that the electricity generation is at peak in summers i.e, March to June in comparison to other months. The reason behind this can be that the earth came close to the sun and sunshine is very bright at the Tropic of Cancer (northern hemisphere of earth). In other seasons, the sunshine is very hazy due to rainfall and fog in winters.



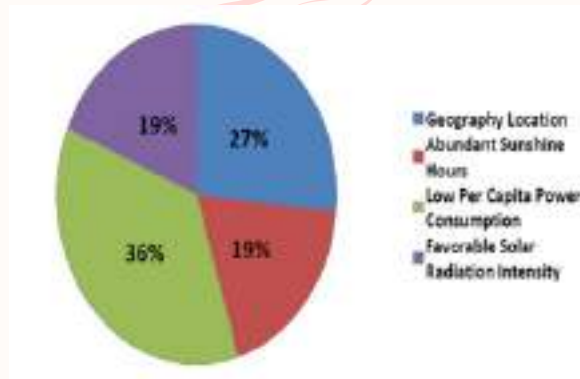
8. How much does your institution save electricity bills by installing the solar panel system?

The campus has a good number of installations of solar panels which helps the institution to save electricity and the resources. By implementation of solar panels, college saves the electricity bill. But, the students are not aware of the saving percentage of the electricity bill. Maybe the information regarding this is not being shared by the institute to its students and also students never tried to know.



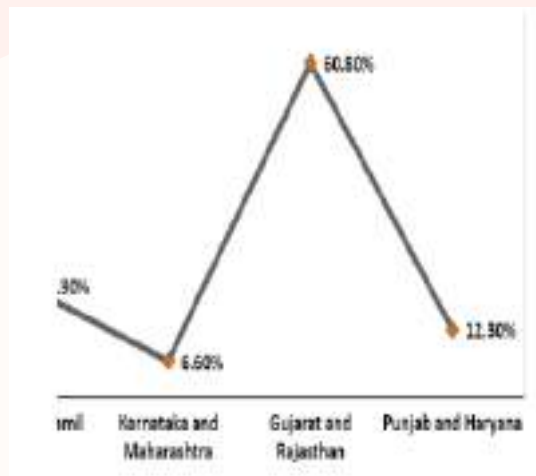
9. Which of the following is NOT a reason why Delhi has abundant potential for solar energy generation?

The responses show that Low Per Capita Power Consumption is the main reason for Delhi's inappropriate power generation in abundance. Promoting rooftop solar power to promote clean energy and reduce the carbon footprints, thus, reduction in greenhouse gas emissions. Low per capita power consumption indicates that the electricity demand is moderate which indicates that the current power infrastructure is not burdened.



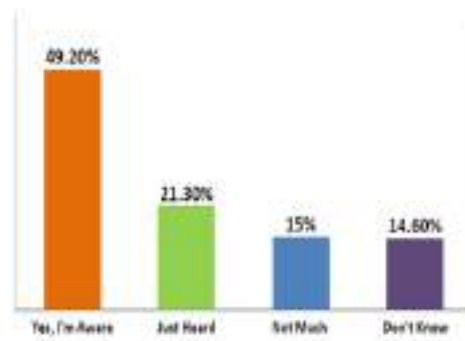
10. Which states in India have the greatest potential for tapping solar energy?

As per the respondents Gujarat and Rajasthan have the great potential for tapping solar energy which is 60.80% because the number of sunshine days are maximum in these two states which provides ideal conditions for solar power generation. Kerala and Tamil Nadu have the capacity 20.30% whereas Punjab and Haryana have the capacity of 12.30% while Karnataka and Maharashtra have the potential of trapping solar energy is 6.60%.

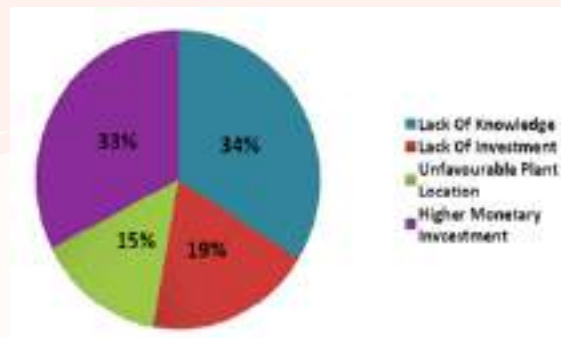


11. Are you aware that the government is providing subsidies for installing these solar panels?

As the bar depicts that 49.20% respondents are aware of the subsidies and 21.30% respondents have just heard and 15% respondents haven't heard much and 14.60% respondents don't know, As this suggestion that there should be awareness campaign so that people could install solar panel.

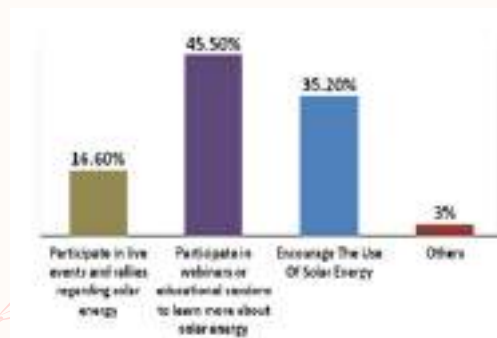


12. What challenges does a common man face in installing solar panels at their home?
 As the bar illustrate 34% respondents have lack of knowledge, 19 % respondents have lack of investment, 15% unfavorable plant location and 33% Higher monetary investment. To facilitate these challenges to install solar panels it is crucial to raise awareness, offer subsidies and financial incentives.



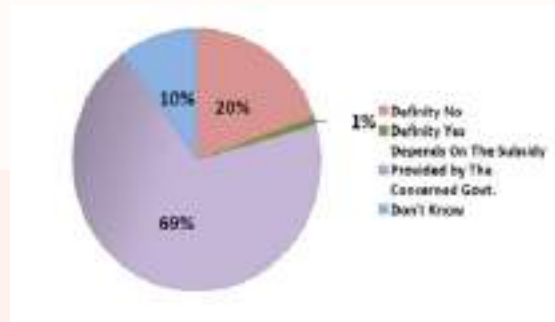
13. Which of the following initiatives would you most likely take to promote in your community for boosting solar energy?

As the bar depicts, 45.5% of the respondents would like to promote solar energy in their community by participating in webinars or educational sessions. 35.20% of the respondents are ready to encourage the use of solar energy. 16.60% of the respondents agree to participate in live events and rallies to promote solar energy and 3% chose to use other means.



13. Do you think that in the next five years, you will be able to install the solar panels on your rooftops?

Now, as far as 'installing solar panels' are concerned, 69% of the respondents agreed to install if provided by the concerned govt. 20% of the respondents refused to install. 1% respondent definitely agreed whereas 10% respondents selected don't know.



• Conclusion

Delhi is the capital of India. Delhi has limited land area that is why Delhi is focusing on rooftop PV solar panels installation and we have almost 300 sunny days in Delhi. The climatic conditions are favourable for solar panel installation. Delhi is actively working on increasing its solar energy capacity. By formulating policies and installing rooftop solar panels to overcome the limitation of ground based solar projects. The last solar policy was launched in 2016 and recently Prime Minister launched solar panel policy for each household in Delhi in 2024. By 2016 the solar installed capacity has grown 38.12 to 211.2 in 2022. South Delhi has high solar installed capacity in Delhi. Delhi has a master plan which aims to achieve more than 50% of energy to come from solar power by 2030.

References

- *Ashok Kundapur, *The Manual for a Planet Savvy Solar Home**, Navneet Publications India Ltd., 2016
- *C Hemalatha, etal (2014): "Advancement in solar panels and improvement in power production with indoor application", IJAREEIE, Vol-3, Issue-4, Apr-2014)*
- *Chetan Singh Solanki, *Solar Photovoltaics: Fundamentals, Technologies, and Applications**, PHI Learning Private Limited, 2018
- *Ehsanul Kabir, etal (2017): "Solar energy: potential and future prospects", Article in renewable and sustainable energy reviews, 894-900.*
- *G. N. Tiwari, I. Dincer, *Advanced Solar Distillation Systems: Basic Principles, Thermal Modeling, and Its Application**, Academic Press, 2020
- *G.D. Rai, *Non-conventional Energy Sources**, Khanna Publishers, 2013
International Energy Agency (IEA). "Key World Energy Statistics 2009".
- *J.K.B. Bishop and W.B. Rossow. "Spatial and temporal variability of global surface solar irradiance." J. Geophys. Res. 96, 16839(1991)*
- *National Geophysical Data Centre (NGDC), NOAA Satellite and information service.*
- *Om Prakash, *Solar Energy: An Introduction**, Alpha Science International Ltd., 2015
- *Parimita Mohanty, Bikash Mohanty, *Solar Energy: Principles, Advancements and Applications**, Springer, 2018
- *R. C. Patel, *Solar Energy: Fundamentals, Design, Modeling and Applications**, CRC Press, 2020
- *Renewable Energy Statistics 2022-IRENA International Renewable Energy Agency*
- *Renewables 2021 - International Energy Agency*
- *S.C. Bhatia, *Solar Energy: Principles and Applications**, PHI Learning Private Limited, 2013
- *S.P. Sukhatme, *Solar Energy: Principles of Thermal Collection and Storage**, Tata McGraw-Hill Education, 2008
- *Snapshot 2021 - International Energy Agency*
- *Snapshot 2022 - International Energy Agency*
- *Solar Energy – wiki*
- *Solar Photovoltaic Power Potential by Country - World Bank*
- *Solar Power by Country - Wiki*
- *V. Kannan, *Solar Power Generation: Technology, New Concepts & Policy**, TERI Press, 2015

E-content

1. <https://ddc.delhi.gov.in/events/national-consultation-delhi-solar-policy>
2. <https://india.mongabay.com/2023/01/delhi-proposes-community-solar-rooftops-to-encourage-renewable-growth/>
3. <https://www.saurenergy.com/solar-energy-news/27-delhi-metro-stations-ready-for-solar-plants-in-phase-iv>
4. https://m.timesofindia.com/city/delhi/with-30k-sqm-of-roof-space-rrts-to-make-hay-while-the-sun-shines/amp_articleshow/93463564.cms
5. <https://www.hindustantimes.com/delhi/delhi-s-solar-energy-policy-to-see-the-light-of-day-next-month/story-ZGZ8FT35FCURMtGugxuiRM>
6. <https://theprint-in.cdn.ampproject.org/v/s/theprint.in/india/governance>
7. <https://www.asianage.com/metros/delhi/090317/rs-2000-crore-for-energy-focus-on-solar-panels.html>
8. <https://optimizeias.com/floating-solar-farms-on-delhis-water-bodies-the-first-one-at-bawana-lake/#:~:text=The%20Bawana%20power%20plant%20has,more%20efficient%20than%20rooftop%20o>
9. https://www.researchgate.net/publication/308302825_Future_Scope_of_Solar_Energy_in_India
10. <https://mnre.gov.in>
11. <https://youtu.be/GQHfJhbwJW>
12. <https://www.businesstoday.in/latest/corporate/story/adani-green-energy-among-top-10-renewable-energy-companies-globally-for-esg-performance-385721-2023-06-15>
13. <https://www.dtnext.in/news/tamilnadu/renewable-energy-meets-50-of-tns-rising-power-demand-718935>
14. <https://www.mercomindia.com/lower-electricity-tariff-solar-hours>
15. <https://energy.economictimes.indiatimes.com/news/power/open-access-solar-capacity-addition-falls-37-pc-to-518-mw-in-jan-mar-mercom-india/101021131>
16. <https://www.livemint.com/companies/news/nlc-india-to-set-up-subsidiary-for-renewable-energy-battery-storage-plans-to-invest-24-000-crore-by-2030-11688149401228.html>
17. https://mnre.gov.in/ling/documents/uploads/file_f-1608040317211.pdf

"मै नारी"

डॉ० शीतल शर्मा, सहायक आचार्य,
भौगोलिक विभाग, अदिति महाविद्यालय

मै नारी

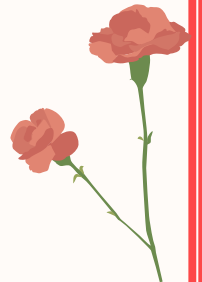
अबला नहीं

सबकी हूँ प्यारी, हाँ मै हूँ नारी
घर ,गाँव, गली, मुहल्ला या ही महानगर
मेरे बिना सब सुना है चाहे हो कोई अगर
सब फूलें प्रकृति के साथ मेरा यही विश्वास
मैं हूँ नारी, अबला नहीं, सबकी हूँ प्यारी।।

मेरे गाँव के घर आँगन का हाल सुनो
घर पे बालक गली में कुत्ते
ची- ची करती मेरी गौरिया, पूँछ हिलाती बिल्ली रानी
आँगन में बैठी मेरी गौरा (गाय)
सबका रखना मुझे ख्याल क्योंकि..
मै हु नारी , अबला नहीं, सबकी हूँ प्यारी।।

आओ चलों अब चढे पहाड़
छोटी-2 पगडंडियों पर चलते रहना मेरे यार
पीठ पर बच्चा, हाथ में थैला
बगल में दबाये लकड़ी का बंडल, चलती हूँ मैं सुबह शाम क्योंकि..
मैं हूँ नारी, अबला नहीं सबकी हूँ प्यारी।।

आगे बढ़ों अब चलो नगर महान
गगनचुंबी इमारतों में रखा सभी साजो सामान
फिर भी घर परिवार का जुड़ा मुझसे मान- सम्मान
मुझसे बढ़ी सबकी अपेक्षाएं आपार क्योंकि..
हाँ मैं हूँ नारी, अबला नहीं, सबकी हूँ प्यारी।।



BRIEF REPORT ON PARTICIPATION OF WOMEN IN PERFORMING CLIMATE ACTION

By- Aditi Singh, 2nd Year
B.A.(Hons.) Geography

This report delves into the crucial role of women in leading and driving climate action initiatives worldwide. It explores the intersectionality of gender and climate change, highlighting how women are disproportionately affected by environmental degradation and climate-related disasters. Furthermore, the paper examines the various ways in which women are actively engaged in climate solutions, from grassroots activism to policy-making and scientific research. Through case studies and examples, it illustrates the pivotal role of women in mitigating climate change and building more resilient communities.

• INTRODUCTION

Climate change poses one of the greatest challenges of our time, with far-reaching environmental, social, and economic implications. Amidst this crisis, women emerge as powerful agents of change, playing pivotal roles in addressing climate change at multiple levels. This report aims to shed light on the significant contributions of women to climate action efforts globally.

• GENDER AND CLIMATE ACTION

Women and men experience the impacts of climate change differently due to existing gender inequalities and social norms. Women often bear the brunt of climate change, particularly in developing countries, where they are disproportionately affected by factors such as food insecurity, water scarcity, and displacement. Additionally, women are more vulnerable to the adverse health effects of environmental degradation and are often excluded from decision-making processes related to climate adaptation and mitigation.

• WOMEN AS AGENT OF CHANGE

Despite facing significant challenges, women are actively involved in combating climate change and spearheading innovative solutions. From community-based initiatives to international advocacy campaigns, women are leading efforts to promote sustainable development, enhance resilience, and mitigate greenhouse gas emissions. Their contributions span various sectors, including agriculture, renewable energy,

conservation, and disaster risk reduction.

- **CASE STUDIES**

- **Solar Sister**

This organization empowers women in sub-Saharan Africa by providing them with training and support to become clean energy entrepreneurs. By distributing solar products and clean cooking technologies, Solar Sister not only reduces carbon emissions but also enhances women's economic empowerment and improves access to sustainable energy.

- **Indigenous Women's Leadership in Environmental Conservation**

Indigenous women, often the primary stewards of natural resources in their communities, play a crucial role in protecting biodiversity and traditional knowledge. Examples include the activism of Berta Cáceres in Honduras and the Chipko movement led by women in India, both advocating for forest conservation and indigenous rights.

- **Youth Climate Activism**

Young women, such as Greta Thunberg, have emerged as prominent voices in the global climate movement, mobilizing millions of people to demand urgent action on climate change. Their activism highlights the intergenerational and intersectional dimensions of climate justice.

- **Policy Implications**

Governments and international organizations must recognize the importance of gender-responsive climate policies and ensure women's meaningful participation in decision-making processes. Integrating gender perspectives into climate action plans can enhance effectiveness, equity, and social co-benefits. Additionally, investing in women's education, training, and leadership opportunities is crucial for building resilient and sustainable communities.

- **CONCLUSION**

Women are not just victims of climate change but also powerful catalysts for positive change. By harnessing their knowledge, leadership, and agency, we can accelerate progress towards a more just, equitable, and sustainable future. Empowering women at the forefront of climate action is not only a matter of social justice but also a strategic imperative for addressing the complex challenges of climate change.

WOMEN IN CLIMATE CHANGE



*Dr. Swati Bidhuri, Assistant Professor,
Department of Geography, Aditi Mahavidyalaya*

Girls and women do not experience climate change in the same ways as boys and men. The reason? Historical and structural gender inequalities — which also affect how, and to what extent, girls and women can lead, make decisions, take action, and advance solutions to combat climate change. Explicit and implicit social norms and laws have imposed differentiated powers, roles, and responsibilities on women and men in all aspects of life. Girls and women — especially those living in the Global South — bear an unequal responsibility for securing food, water, energy, and other vital resources as well as for caring for the young and elderly — all of which place them at greater risk of experiencing detrimental climate impacts. For example, girls and women often suffer the most when heat waves, droughts, severe storms or other extreme climate events strike. They face physical and mental health complications, bear the burden of travelling farther to collect scarce food, water, and firewood, and are often forced to stay behind in disaster-prone areas to care for the vulnerable.

‘Women are completely at the forefront of climate solutions in everyday life’. Farhana Yamin, lawyer and climate activist. Despite women’s leadership in the grassroots climate movement and their particular vulnerability to climate change, gender has yet to be adequately integrated into climate plans, policies, and strategies. The 2022 SDG Gender Index, published by Equal Measures 2030, a leading global partnership on accountability for gender equality and the Sustainable Development Goals (SDGs), provides a snapshot of where the world stands on the vision of gender equality embedded in the 2030 Agenda. The results of the index are staggering: Insufficient progress has been made on gender equality at the global level between 2015 and 2020. Of the 17 SDGs, Goal 13 (climate action) was among the three lowest-scoring goals. What’s more, even high-performing countries on the index were found to have weaknesses on gender equality under SDG 13.

Why Climate Change Action Needs Women?

UN Climate Change News, 8 March 2023 – As we celebrate International Women’s Day today, it’s important to recognize the vital role that women play in tackling climate change. While climate change affects everyone, it does not affect everyone equally. Vulnerability to climate change is exacerbated by inequity and marginalization linked to gender, ethnicity, low income, and other social and economic factors. When solutions to climate change address these realities, they are more effective. This is where women come in. There are five reasons why women are essential for climate action.

- *Reason 1: Climate action requires 100 percent of the population - Half of the world’s population is comprised of women and girls, yet they are often left out of the conversation when it comes to climate change. But if we want to achieve the Paris Agreement goal of limiting global temperature rise to 1.5 degrees Celsius, we need everyone on board. That means more women and girls need to be empowered and involved. We need women, in all their diversity, involved at all levels – from climate negotiations to boardrooms to forests and fields, especially in sectors and regions hit hard by the ravages of climate change. Indigenous women, in particular, have been at the forefront of environmental conservation and have invaluable knowledge and expertise that can help build resilience and reduce greenhouse gas emissions. By including more women in climate action, we can create a more sustainable and equitable future for all.*
- *Reason 2: Empowering women means better climate solutions - Women make up nearly half of the agricultural labor force in developing countries. When provided with the same access to resources as men, women can increase their agricultural yields by 20 to 30 percent. This boost in productivity not only improves total agricultural output by 2.5 to 4 percent, but it can also help reduce world hunger by 12 to 17 percent, according to the UN. Empowering women in agriculture can also have a positive impact on climate adaptation. By providing appropriate technology and resources, we can promote more sustainable farming and conservation practices. And by reducing poverty, we can help individuals better adapt to the effects of climate change. Investing in women and girls has far-reaching benefits for communities and countries. In fact, research shows that countries with high representation of women in parliament are more likely to ratify international environmental treaties.*

- ***Reason 3: Women are key to building climate resilience in communities - When it comes to building climate resilience in communities, involving women is crucial. In fact, the UN reports that communities are more successful in resilience and capacity-building strategies when women are part of the planning process. Women are usually first responders in community responses to natural disasters, leaders in disaster risk-reduction, and contribute to post recovery by addressing the early recovery needs of their families and strengthening community building. Involving women in community planning and disaster response efforts, we can build stronger, more resilient communities that are better equipped to face the challenges of climate change.***
- ***Reason 4: Climate change affects us all, but not equally - Climate change affects everyone, but it doesn't impact everyone equally. It is well-established that climate change has a greater impact on the world's most vulnerable people, whether in developed or developing countries, and exacerbates existing inequalities. Women often face higher risks and greater burdens from the impacts of climate change in situations of poverty and due to existing roles, responsibilities and cultural norms. For example, in many societies, women are responsible for household energy, food, water and care for the young and elderly. Particularly in developing countries, the consequences of climate change can increase the burden for women and girls, for example, causing them to travel further to obtain daily supplies, leaving less time for paid work and potentially exposing them to greater risk to their safety. But here's the good news: investing in gender equality and women's empowerment has far-reaching benefits, including environmental conservation, poverty reduction, and achieving the Sustainable Development Goals (SDGs). And by tackling climate change with a gender lens, we can also address women's rights and promote greater gender equality.***
- ***Reason 5: Countries recognize the importance of gender in climate planning - The good news is that women and girls are becoming increasingly empowered to contribute to, and benefit from, climate action. Within the UN Climate Change process, many countries have shared how they are integrating gender across different priority sectors within their national climate action plans (Nationally Determined Contributions) and National Adaptation Plans. The Gender Action Plan agreed by governments under the UN Framework Convention on Climate Change (UNFCCC) calls for women's full, equal, and meaningful participation in the international climate process and to ensure a prominent role for women in decision-making and in climate action.***

Governments meeting under the UNFCCC adopted a goal of gender balance in national delegations and in national climate policy and action in 2012. Since then, the UN Climate Change secretariat has reported annually on the gender composition of national delegations and policy and decision-making bodies under the UNFCCC and the Paris Agreement.

What is needed now is for countries to be deliberate in how they seek to achieve gender parity in local, national and international climate policy and decision-making roles. "Exploring the Nexus of Gender and Environmental Governance: A Review of Gender and Green Governance" by Bina Agarwal.



*Ms. ASMITA , 2nd Year
B.A (Hons.) Geography*

WOMEN: GUARDIANS OF EARTH'S HARMONY

Ms. Mansha Verma, 2nd Year
B.A.(Hons.) Geography



*In the realm where skies are weeping,
And Earth's sorrow softly creeps,
There blooms a call, a silent plea,
For women's hands to set us free.
In whispers of the forest deep,
Where ancient secrets gently sleep,
There echoes forth a humble plea,
For women's hearts to hear and see.
Amidst the rivers, clear and wide,
Where life's abundance does abide,
There flows a wish, a fervent plea,
For women's souls to set us free.
For in the tapestry of time,
Women's voices intertwine,
With nature's song, a symphony,
A call to act, to set Earth free.
In nurturing embrace, they hold,
The seeds of change, so bold,
With tender care and empathy,
They nurture hope for you and me.
Their wisdom shines in every ray,
Their strength endures, come what may,
With fearless hearts, they'll lead the way,
In the dance of change, they'll have their say.
So let us heed this urgent call,
Together rise, both great and small,
With women's grace and unity,
We'll shape a world of harmony.*

*For in the quest for climate action,
Women's voices gain traction,
Their presence vital, plain to see,
For a sustainable world, we need women's key.*

पैरों पर कुल्हाड़ी



सिया रसिक, पीएचडी स्कॉलर,
सीएसआरडी, जेएनयू

अपने ही पैरों पे, कुल्हाड़ी मारने लगे हैं
जब से लोग लकड़ी काटने लगे हैं।

दीवारों पे दीवार, घरों पे घर
परिदे अब छतों पे उड़ने लगे हैं।

हमारा भी तो बहुत मन था, दुनिया बदले
जंगल में अब रास्ता बनने लगे हैं।

शौक़ में ही जीते रहें, फिर शौक़ में ही मर गए
शहर के बाहर भी अब शहर बनने लगे हैं।

आओ लोगों को भी बताएं कामयाबी की दास्ता
जो लोग चोरी करते थे, किताब लिखने लगे हैं।

पेड़ की छांव में बैठकर बहुत की हमने धूप की बात,
फिर चुपचाप गाड़ी में बैठ के सफ़र करने लगे हैं।



GLIMPSES OF

WORLD POPULATION DAY



TEACHER'S DAY



DEBATE COMPETITION

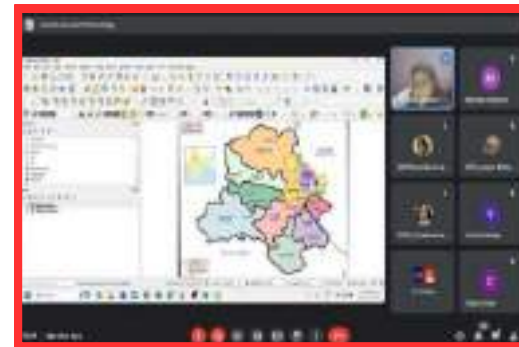


DHARITRI 2023-24

PANEL DISCUSSION



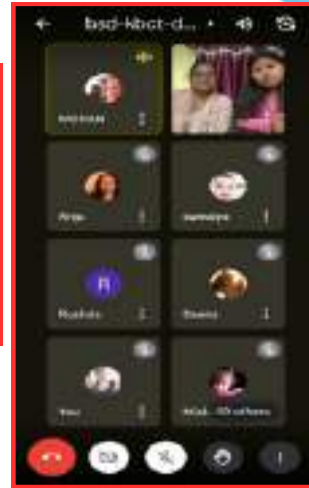
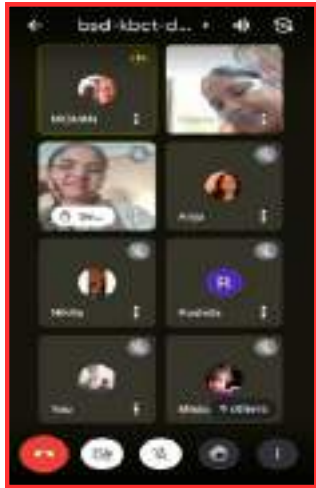
ONLINE WORKSHOP ON "GEOSPATIAL TECHNOLOGIES"



WORKSHOP ON FUNDAMENTALS OF REMOTE SENSING



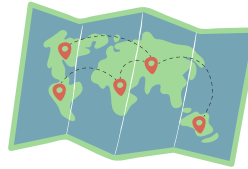
PARENT'S TEACHERS MEETING (ONLINE MODE)



LOCAL TRIP: VISIT TO SANJAY VAN, SOUTH DELHI AND JNU CAMPUS



LONG EXCURSION FIELD TRIP



B.EL.ED. SECOND YEAR STUDENT'S FIELD TRIP



EARTH DAY





GEO-FEST 2023-24



Glimpses





FRESHERS AND FAREWELL



**B.A PROGRAMME
FEST AND FAREWELL**



**CLIMATE ACTION NEEDS
EVERY WOMEN TO LEAD**



WOMEN AT THE FOREFRONT: PIONEERS OF ENVIRONMENTAL RESILIENCE AND CLIMATE JUSTICE

*Donisha Choudhary, Alumni
Delhi School of Economics*

In the scorching heat of Jeth, the shade of the neem tree provided a cool respite, almost like a gentle breeze from an unseen hand, soothing the bustling market. Amidst this tranquillity, a question lingered in the air, akin to a stone skipping across a pond. The question was like a puzzle, leaving me pondering. In my attempt to unravel its mystery, I tossed a stone and watched as ripples formed in the pond, lost in the cacophony of chirping birds. Before I could contemplate further, the curious minds around me started asking questions. Now, I wonder, will a mother continue to smile through her tears?

It is true. Can we keep ourselves content by causing pain? Has God truly bestowed a sacred place upon mothers, while we gift them sorrow? We seem to be doing just that, plunging into a never-ending cycle of consuming our resources greedily. By cutting down trees, we have destroyed the allure of nature, stripping it bare. We have robbed it of its essence, turning it into a toxic wasteland. The pollution born from the womb of knowledge has become a poison to the environment. Due to the rise in population, the exploitation of non-renewable resources has become rampant. In the aftermath of some events, even civilizations may crumble. These actions are slowly leading us towards our destruction.

Our Earth bears the burden, and we continue to exploit it like demons, inflicting cruelty upon it. But when the thread of its patience snaps, the clouds of destruction come rolling in, tearing everything asunder. A single act has plunged humanity, nature, and the innocent into a crisis. In a few days, the vibrant colours of the picturesque scenes will be marred by the devastation caused by the raging storms. There will be no colour of joy, no playful rustling of the breeze, only the eerie silence of unanswered questions. In this scenario, women play a crucial role in the management and protection of natural resources. They are actively involved in safeguarding and managing water, land, and forests. Women often also manage other resources such as agriculture and gardening. They contribute significantly to their families and communities by not only staying connected but also by actively

Expanding on the metaphorical narrative, the shade of the neem tree symbolizes the protection and resilience that nature offers us. It is a reminder that even amid chaos and turmoil, there is a calming presence that we can turn to for solace. The stone skipping across the pond represents the questions and challenges we face, causing ripples of uncertainty and doubt. But just like the stone eventually sinks, so do our worries and fears when we find the answers and solutions we seek. The pond itself is a reflection of our world, with its serene surface hiding the depths of complexity and interconnectedness. The chirping birds signify the vibrancy of life, while the bustling market represents the constant activity and movement of our society. Amidst all this, the question of a mother's enduring smile cuts through the noise, reminding us of the sacrifices and strength of women. In the grand scheme of things, our actions are like tossing stones into the pond, creating ripples that spread far and wide. Every decision we make, and every resource we consume, has an impact on the delicate balance of nature. The challenge lies in finding harmony between our needs and the needs of the planet, ensuring a sustainable future for generations to come.

As we contemplate these questions, we must also consider the role of spirituality and faith in our relationship with the environment. The mention of God and the divine gift of a sacred place for mothers prompts us to reflect on our responsibilities as stewards of the Earth. Are we truly honouring this gift, or are we squandering it for short-term gains? The reference to "Durga" the fierce goddess of Hindu mythology, highlights the strength and resilience of women in the face of adversity. Just as Durga battles the forces of evil, women around the world are fighting against climate change and environmental degradation. Their unwavering determination and courage are a source of inspiration for us all.

In conclusion, the narrative weaves together themes of nature, spirituality, and the role of women in climate change. It urges us to reflect on our actions and their impact on the world around us. It reminds us of the interconnectedness of all living beings and the need for harmony and balance in our relationship with the Earth. As we navigate the challenges of climate change, let us draw strength from the resilience of nature and the courage of women who are leading the way towards a more sustainable future.



ASSESSING WOMEN'S VULNERABILITY TO CLIMATE CHANGE: A CASE FROM RISHIKESH CITY (DOIWALA BLOCK), UTTARAKHAND



*Ms. Ekta Sahrawat, Assistant Professor,
Department of Geography, Aditi Mahavidyalaya*

Climate change has been happening since centuries but the raised red alarm for climate change has been only recognized in the recent decades. The impacts of climate change is seen on the entire globe, be it flora or fauna, living or dead. Among the most vulnerable of all the sections are the women, children and the specially abled persons. So it becomes extremely necessary to acknowledge the fact that gender discriminations has been at the core while addressing the crisis of climate change and it is these women's efforts and initiatives that will be required to get the global solution for this crisis. Uttarakhand is witnessing more number of natural human-induced disasters due to climate change. The Rishikesh City of Uttarakhand is assessed as a high Fluvial Risk flood zone due to flowing of perennial River Ganga and other non-perennial rivers such as River Chandrabhaga, River Song and Sukhi Nadi which drains into the Ganga during monsoon accompanied by heavy rainfall and cloud burst. Hence, floods and landslide are one of the major natural disasters of the state. Doiwala Block, in Rishikesh City (Uttarakhand) is experiencing continuous floods and landslides from last decade. Scientists have assessed 64% increased of these disasters as result of continuous global warming, a major concern for climate change

*Identifying the most vulnerable females out of the all the females
Though females of each age group, socio-economic and cultural-ethnic groups are vulnerable to climate change but not all of these females have been equally vulnerable. Some are more vulnerable whereas some are relatively least vulnerable. Women who are more vulnerable are-*

- *Very young or aged women*
- *Pregnant women*
- *Single women*

- *Illiterate women*
- *Women with least income and employment opportunities*
- *Women living in rural, less advantageous areas, living on the extreme margins*
- *Women more dependent on natural resources*
- *Women engaged in primary sector of agriculture or fishing*
- *Women with lack of power plays, with limited mobility and accessibility*
- *Women living in urban slums*

Women living in rural areas recognize the risks for climate change more than those living in urban areas.

Vulnerability of Women in Doiwala Block, in Rishikesh City (Uttarakhand), according to Census of India (2011), 88967 females belong to the category of non-working females out of total female population of 106443, in Doiwala Block. This accounts for 83.58% of non-working females in Doiwala block despite female literacy being 85.8%. This indicates that most women are engaged in household responsibilities and have low mobility and accessibility. These females are majorly dependent on agricultural produce or money arising out of tourism activity. These Women in Doiwala belongs to low income groups, mostly involved in rural settings and are extensively dependent on natural resources.

Impacts of Climate Change on women of Doiwala Block on various aspects-

1) Food and Water security - Untill 2010 securing, food, water and fuel was quite easy for the females in Doiwala Block. After 2010, there are continuous floods and landslides and Uttarakhand floods of 2015 has even worsened the condition. Women in the region are facing acute shortage of food as they have to walks for kilometers to obtain supply of cheaper fruits and vegetables. Forest produces have become insufficient and collection of fodder and fuel is challenging. The Dept of Agriculture, Uttarakhand in its Annual Report, 2023 stated that 74% women are finding it difficult to secure same amount of produce out of agriculture because of changing rainfall and heat patterns in the state.

2 Livelihood- 83.58% of females in the Doiwala block are non-working and this percentage has been increasing since 2010 as most female find it difficult to sustain the agricultural practices as a result they are becoming more dependent and vulnerable. Tourism as source of their livelihood suffers when there is too much rainfall, heat or cold.

4) Health It is these females who have to bear all the cost of cleaning the house, rearranging everything after floods, arranging for food and drinkable water. In situations where the females were unable to collect adequate water from nearby areas were forced to drink contagious water leading to problems such as cholera, typhoid.

Strategies adopted by women in Doiwala block to overcome/ combat climate action and reduce the impact of climate change on them-

1) Learning of skills- NGOs like Aastha Swasthya Paryavam Vikas Smiti working in the region have started to provide skills to better manage resources to create their own small locally useful resources. Some Women have started painting the pebbles of both small and big sizes to gain financial freedom. This provides them means to overcome problem of food shortages.

2) Crop management and climate-resistant crops- –Women have started to look judiciously for rabi and kharif crop in their region. Women in the region have also started regrowing of millets in place of high yielding variety of rice and wheat for its drought resisting qualities. Crops on two year rotational system is promoted in a practice called ‘Sari System’

3) Reverting to old agricultural practices- Preparing of land, weeding and hoeing, and harvesting have again done using minimal technology and more by manual works to save the natural biology of soil.

4) Recycling and restoring- Women in order to combat impact of climate change on them have started to recycle resources and in this manner are minimizing the carbon footprints. They not only recycle water but have learnt to recycle plastic and replace single-use plastics. Women in the region have restored 5% of the barren land.

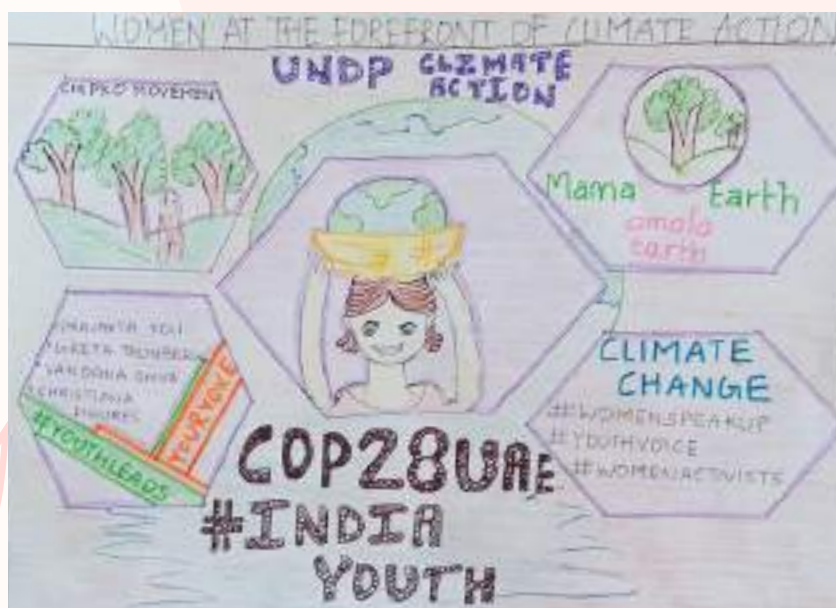
5) Minimal use of fertilizers- Women in the region have reduced their use of fertilizers by 42% as said by the Dept of Agriculture, Uttarakhand which has allowed for the natural growth of crops in the region.

6) Use of natural ways for cooling purposes- To cool the house of roof, women either sprinkle water on their roofs or use some cloth roof to protect the homes from heat strokes rather than using ACs.

7) *Formation of SHGs and women as leaders for climate action – Employed Silk Workers Cooperative Society Ltd Doiwala and Silk Home Industrial Co operative Society Ltd Doiwala have started the initiative to enable women to adopt sustainable agriculture and take care of urban forestry. Silk producing and silk garment manufacturing is also undertaken making women more economic independent.*

8) *Climate compatible infrastructure- Women in the region have resurfaced canals and irrigation tank and came up with the idea of low carbon building design.*

Climate change is far more complex terminology and is a ‘threat multiplier’ It impacts all, but women are the major sufferers but at the same time it is because of these women only that the climate change can decelerate and be the active change in promotion and sustenance of the climate . It is seen worldwide that women have come up with the most unique ways to combat the adverse climate action. Climate actions definitely need women at the forelines and without gendered uniformity, there is little scope for accomplishing the progressions expected to battle the climate change and guarantee a practical and sustainable for all.



Ms. AMRITA SINGH , 2nd Year
B.A (Hons.) Geography,
Miranda House College

WOMEN IN CLIMATE ACTION



Ms. Avantika Dubey, 3rd Year
B.A. (Hons.) Geography

Climate change is a real and undeniable threat to our entire civilization. Climate change is increasing the frequency and intensity of extreme weather events such as heat waves, droughts, floods and tropical cyclones, aggravating water management problems, reducing agricultural production and food security, increasing health risks, damaging critical infrastructure and interrupting the provision of basic services such as water and sanitation, education, energy and transport. The effects are already visible and will be catastrophic unless we act now. Climate action is any policy, measure, or program that reduces greenhouse gases, builds resilience to climate change, or supports and finances those goals. Climate action is therefore enormously diverse, ranging from cities committing to more efficient building standards, companies putting a price on carbon in their investment decisions, or a coalition of companies and farmers' groups that deploys climate-smart agriculture practices. To address climate change, countries adopted the Paris Agreement at the COP21 in Paris on 12 December 2015. The Agreement entered into force less than a year later. In the agreement, all countries agreed to work to limit global temperature rise to well below 2 degrees Celsius, and given the grave risks, to strive for 1.5 degrees Celsius. Implementation of the Paris Agreement is essential for the achievement of the Sustainable Development Goals and provides a roadmap for climate actions that reduce emissions and build climate resilience. To tackle climate change, we need to increase our efforts at all levels significantly. There are many developments globally – investments in renewable energy have surged. However, more work is required. The world must overhaul its energy, industry, transport, food, agriculture, and forestry systems to ensure that we can restrict global temperature rise to well below 2°C, possibly even 1.5°C. In December 2015, the world took a crucial initial step by agreeing to the Paris Agreement, where all countries pledged to combat climate change. Nevertheless, more urgent actions are necessary to achieve these goals.

A changing climate affects everyone in the world but it's the world's poorest and most vulnerable, especially women and girls who bear the brunt of environmental, economic and social shocks. The reasons women and girls are more vulnerable to climate change are often socially constructed. Food production, household water supply and energy supply for heating and cooking. As climate change impacts increase these tasks become more difficult and more time-consuming but

women are also at the forefront of the solutions. Climate adaptation interventions designed with recognition of the multiple roles women and men play in risk governance and climate resilience at both local and national levels have the potential for achieving gender-equal outcomes. The successful implementation of interventions targeting women's empowerment and gender equality supported by adequate resources has produced significant results. Developments in the project countries suggest some progress has been made. For instance, the mainstreaming of gender equality and social inclusion has been included in the revised Climate Change Policy 2019 of Nepal as one of its seven objectives; the earlier version of the policy (2011) did not include any gender-related objectives. In Bangladesh, it has been noted that, through constant government and non-government sector initiatives, women are better sensitized to climate change issues and better informed in terms of preparedness for future disasters. In Pakistan, there have been efforts towards a meaningful inclusion of women through steps such as the development and implementation of gender-equality strategies and action plans based on a comprehensive analysis of community-based disaster risk management, climate-resilient infrastructure, sustainable livelihood, climate-smart agriculture, etc.

While women, especially indigenous women and women in the global south, are leading frontline climate action and activism, they are underrepresented in environmental decision-making at all levels. Gender-differentiated tasks, including women's responsibility for most unpaid household labour, and unequal power relations within families and communities, can limit women's opportunities to participate in local environmental governance. The common prerequisite of land tenure for community natural resource decision-making also limits women's input. UN's Report on Women estimates that 64% of women globally do not have equal land rights to men in practice. At national and international levels, women continue to face glass ceilings that prevent them from reaching environmental leadership positions. Gender parity in national-level environmental decision-making is rare, and employees of environmental ministries are on average one-third of women. Although the gender balance of government delegations to climate negotiations has improved, UNFCCC research found that men spoke 74% of the time in plenary meetings between May and June last year. Gender-responsive policy measures can help to overcome these systemic barriers. Land tenure reform can support women's land ownership, inheritance and use rights, for example, by mandating that land registration by couples includes both names. Policies like gender quotas can support women's career progression in environmental institutions. Investment in social services, especially childcare, can lighten the load of unpaid household labour on women, as can flexible

working policies and paid parental leave. Creating and enforcing laws and policies against sex and gender discrimination, including gender-based violence, can ensure that climate change spaces are inclusive participating in the protection of water, land, and wildlife. Additionally, women often organize themselves to assist during natural disasters. They have organized channels for providing shelter, supplying essential goods, and ensuring social security during times of crisis. In this way, women play an important role in the management and protection of natural resources and in assisting their communities during natural disasters. Their contribution is crucial to the conservation and preservation of our environment, and we should understand and support their capabilities.

Expanding further on the role of women in climate change, essential to recognize the various ways in which they are making a difference. Women are not just victims of climate change; they are also powerful agents of change and resilience. Their knowledge of local ecosystems, traditional practices, and community networks make them invaluable in climate change adaptation and mitigation efforts. In many communities around the world, women are the primary caregivers and providers of food, water, and fuel for their families. This places them at the forefront of the impacts of climate change, as they are directly affected by changes in weather patterns, water availability, and natural disasters. However, it also gives them a unique perspective and motivation to find sustainable solutions.

Women are leading initiatives in sustainable agriculture, promoting crop diversity, organic farming, and water conservation practices. They are also active in reforestation efforts, planting trees to combat deforestation and restore degraded lands. Women's groups and cooperatives are working together to develop clean energy solutions, such as solar panels and biogas digesters, reducing reliance on fossil fuels and mitigating carbon emissions. Furthermore, women are often the first responders in times of climate-related disasters. They provide crucial support in emergencies, organizing relief efforts, distributing aid, and caring for the vulnerable members of their communities. Their resilience and resourcefulness in the face of adversity are inspiring and essential for community survival and recovery. In policymaking and advocacy, women are also making significant contributions. They are advocating for gender-responsive climate policies that consider the unique needs and perspectives of women and girls. They are raising awareness about the intersection of gender and climate change, highlighting how women's empowerment and gender equality are essential for effective climate action. Overall, the role of women in climate change is multifaceted and essential. They are not just victims; they are leaders,

innovators, and agents of change. Empowering women and supporting their efforts in climate change adaptation and mitigation is crucial for building a sustainable and resilient future for all and safe for all. These measures all contribute to addressing the complex issue of culture change. Ensuring access to quality education for girls is also a key pathway for gender parity in climate leadership. Girls' education can be a force for gender equality in families and communities and is closely associated with a country's female political representation. Climate education for girls, including technical environmental training, can increase their resilience and build their capacity to critically engage with climate information and lead climate solutions. In developed and developing countries alike, girls' participation in STEM (science, technology, engineering and maths) education on an equal platform with boys can enable them to access traditionally male-dominated "green" jobs and contribute to an equitable just transition. Women's involvement is a pivotal factor in climate action for various reasons. Firstly, women often bear a disproportionate burden of climate change impacts like food insecurity, water scarcity, and heightened vulnerability to natural calamities. Engaging women in climate initiatives ensures that their distinct needs and viewpoints are considered, leading to more effective and comprehensive solutions.

Secondly, women frequently spearhead grassroots efforts, advocating for sustainable practices and instigating change at the local level. Their leadership in climate action is vital for nurturing resilience, safeguarding biodiversity, and lessening the repercussions of climate change. By empowering women to engage in decision-making processes, access resources, and spearhead initiatives, we can fully utilize their potential as agents of positive transformation.

Thirdly, women's participation in climate action can pave the way for sustainable and fair outcomes. By advocating for gender equality in climate endeavours, we can guarantee that women enjoy equal access to resources, opportunities, and decision-making platforms. This approach can help rectify existing gender disparities and foster a more inclusive and sustainable future for all. Moreover, women's engagement in climate action can inspire innovative solutions to combat climate challenges. Women entrepreneurs are at the forefront of driving sustainable technological and practice advancements. Supporting female-led enterprises in the eco-friendly sector can expedite shifting towards a low-carbon future. By investing in women entrepreneurs and facilitating their business expansion, we can unveil fresh strategies to tackle climate change hurdles. Ultimately, women's active involvement in climate action is indispensable for constructing a more resilient and inclusive world for future generations. Let us acknowledge and celebrate the pivotal role of women in sculpting a greener, more sustainable plan.

TREE MOTHER

*Ms. Madhu Kumari, 3rd Year
B.El.Ed*



Saalumarada Thimmakka, she also known as "Tree Mother," is an inspirational figure from Karnataka, India. Born in 1910, she is renowned for her extraordinary dedication to environmental conservation and tree planting.

Thimmakka and her husband, Chikkaiah, were a poor couple who were unable to have children. Despite their hardships, they decided to adopt and care for trees instead. They started planting banyan trees along a stretch of road near their village, Kudur, in the state of Karnataka.

Despite facing ridicule and opposition from their community, Thimmakka and her husband persisted in their mission. They nurtured and cared for the trees, even during times of drought and adversity. Over the years, their efforts resulted in the planting of hundreds of trees, earning Thimmakka widespread recognition and respect.

Her selfless dedication to the environment has garnered numerous awards and accolades, including the Padma Shri, India's fourth-highest civilian award. Today, Saalumurada Thimmakka's legacy continues to inspire people around the world to take action for the preservation of nature and the planet.

WOMEN OF RESOLUTION AND RIGHTS



*Ms. Krishna Mahesh Patel, Student,
Vapi Public School, Vatar, Gujarat*

*Before 1848, women did not have any rights,
Now they have a resolution for fights.
You might have heard of Greta Thunberg,
Because of her rights, she got to save the icebergs.
Due to migration, many men move to the city,
Which is the greatest pity.
Women of that household have to fight,
To save their family from poverty and plight.
Dreamt I saw a world with free and inspired women,
With proper guidance, they will make sustainable linen.
By doing organic farming, they try to stop nature's alarming,
So, we can protect Earth's atmosphere Ring.
Climate Change is an undesirable threat to our civilization,
Which could harm our nation.
That is why we need women in climate action,
As they can help us create a better reaction.*



WOMEN AT THE FOREFRONT: EMPOWERING AGENTS OF CHANGE

Ms. Khushi Sharma, 2nd Year,
B.A Program

Climate change is one of the most pressing challenges of our time, impacting every corner of the globe. In the face of this crisis, women have emerged as key leaders and change agents, playing crucial roles in climate action. This essay explores the unique contributions of women in addressing climate change and the importance of empowering them to drive sustainable solutions.

Its impacts are vast and varied, ranging from extreme weather events to sea-level rise, from loss of biodiversity to food and water insecurity. Addressing climate change requires collective action, and women play a crucial role in driving this action forward.

1. ****Women as Guardians of the Environment****

Women have traditionally been the primary stewards of natural resources in many societies. Their deep-rooted connection to the land and water has given them a profound understanding of environmental challenges. This knowledge is invaluable in devising effective strategies for conservation and sustainable resource management. Women's empowerment is a key driver of climate action. When women are empowered, they are better able to participate in decision-making processes and advocate for sustainable solutions. Studies have shown that women are more likely to prioritize environmental issues and adopt sustainable practices in their daily lives. By empowering women, we can unlock their potential as agents of change in the fight against climate change.

2. ****Women as Innovators****

Women are at the forefront of developing innovative solutions to climate change. From sustainable agriculture practices to renewable energy technologies, women-led initiatives are driving change at the grassroots level. Their creativity and resourcefulness are vital in finding practical, locally relevant solutions to complex environmental problems. Women's leadership is also critical in driving climate action at all levels. From grassroots activists to political leaders, women are leading the charge for climate justice. For example, Greta Thunberg, a young Swedish activist, has inspired millions of people around the world to take action on climate change through her advocacy and activism. Women leaders like Christiana, former Executive Secretary of the UN Framework Convention on Climate Change, have played a key role in shaping international climate policies.

3. *Women as Advocates and Educators*****

Women are powerful advocates for climate action, raising awareness and mobilizing communities to take a stand against environmental degradation. Through education and outreach programs, they are empowering individuals to adopt sustainable lifestyles and become active participants in the fight against climate change.

Women are also driving innovation and entrepreneurship in the field of climate action. Women-led businesses are at the forefront of developing sustainable technologies and practices. For example, women entrepreneurs in developing countries are pioneering solutions to address energy poverty and promote renewable energy access. By supporting women-led businesses, we can accelerate the transition to a low-carbon economy.

4. *Women as Resilient Leaders*****

Women are often disproportionately affected by the impacts of climate change, yet they demonstrate remarkable resilience in the face of adversity. Their ability to adapt to changing environments and lead their communities towards sustainable practices is a testament to their strength and determination. However, women are also at the forefront of building community resilience to climate change. Through their knowledge and experience, women are developing innovative solutions to adapt to changing climate conditions and protect their communities.

5. *Empowering Women for Climate Action*****

Empowering women is not only a matter of gender equality but also a strategic imperative for effective climate action. When women are given equal access to resources, education, and decision-making roles, they can significantly enhance the resilience of communities and drive sustainable development.

Education is a powerful tool for empowering women and building climate resilience. Women's education is closely linked to lower fertility rates and higher levels of environmental awareness. By investing in girls' education, we can create a more sustainable future for all. Women are also key agents of change in raising awareness about climate change and its impacts. Through education and advocacy, women are mobilizing communities to take action and reduce their carbon footprints.

6. *Policy Implications*****

Policymakers must recognize the critical role of women in climate action and integrate gender perspectives into climate policies and programs. This includes ensuring women's representation in decision-making processes and providing them with

the necessary support to participate fully in climate action.

****Conclusion****

Women are essential agents of change in the fight against climate change. Their unique perspectives, skills, and experiences are invaluable in finding sustainable solutions to environmental challenges. By empowering women and recognizing their contributions, we can create a more equitable and sustainable future for all.

Women's role in climate action is multifaceted and essential. From empowering communities to driving innovation, women are at the forefront of the fight against climate change. As we work towards a more sustainable future, it is crucial that we recognize and support the contributions of women in shaping a more resilient and environmentally sustainable world. By empowering women and harnessing their potential, we can create a more equitable and sustainable future for all.



*Ms. PREMLATA, 3rd Year
B.A (Hons.) Geography*

THE TOUGHEST CHALLENGE OF ALL



Ms. Kanjika Kumari
B.A Program

*I dream of severing those lips,
Those who touched me without consent.
I yearn to grasp their collars tight,
And launch them skywards, to where birds soar in flight.*

*It sounds like mere fantasy, doesn't it?
For silence reigns supreme in the end.
The fear of retaliation binds us,
Whispers of harm, of solitude in our stand,
A spectacle for the indifferent, moving on without a glance.*

*I considered surrender, to endure in silence,
Hoping for an end with minimal violence.
Wishing it would cease without leaving a mark,
A naivety in thinking the ordeal would be stark.*

*"Women's safety" echoes as a hollow phrase,
To you, perhaps, but in its depth, a piercing gaze.
Understand its weight, and you might find,
Tears streaming for the peace we're yet to find.*

*Indifferent to whether they're family or friends,
In their eyes, women's identities blend.
To those switching channels at the mention of assault,
It's time to prepare, for it's our collective fault.*

*This battle demands unity, not just idle worship or praise,
A call to action, beyond the superficial gaze.
Encourage the women around you to stand tall,
Remind them their strength can outlast the fall.*

*They're not just echoes of fear, but warriors in their own right,
In this struggle for safety, we must all unite.
Tell them they're sufficient, embodying strength and grace,
In this fight for dignity, together, we must face.*

SUSTAINABLE ROLE OF WOMEN IN CLIMATE ACTION

*Ms.Sanskriti Bhadoriya
B.A Programme*



*I still believe in the old fashioned ways of showing a women respect and honor !
- Angela Merkel*

In today's world where equality relies in every single aspect of the globe in every nation climate action does not see the world equally which also can't be achieved .climate actions are more drastically seen on the more vulnerable side of the society of which small sector, and barely sustaining working women are a great part, particularly in developing countries due to existing cultural norms and responsibilities. In no. of societies women are frontally kept responsible for overutilization and consumption of energy, food , water other sustainable living needs and care for young and elderly thus the consequences of climate change increase the burden for women and girls such as making them move to further away in search of jobs in unfavourable and unsafe environment.

Also women are great responsibility takers and policy builders thus functioning of any top to bottom climate action policy by government if implemented taking care of women interests. By involving women in community planning and disaster response efforts ,we can build stronger more resilient communities that are better equipped to face the challenges of climate change

CLIMATE CHANGE AND WOMEN

*Ms. Ekta Sahrawat, Assistant Professor,
Department of Geography, Aditi Mahavidyalaya*

*Climate Change is evident,
You are tenant,
you pay rent,
it's the females who bent,
for climate action event.*

*Temperature rise,
Earth fries,
Plants dies,
icebergs cries,
she realize.*

*Climate change makes her the most vulnerable,
Making her life very miserable,
Walk more to secure food and water unreasonable,
Lost Livelihood unclaimable,
Freedom and life unjustable.*

*She being the earner of bread,
Have responsibility at dread,
The experiences she spread,
Listen to reduce climate change ahead.*

*She's realizing its extent,
Solutions, suggestions sent.
Vocal to vent,
Save the planet all she meant.*

*She knows all,
What to call, call for the local ,
Knowledge, expertise and focal.
To best deal climate glocal.
All she needs chance, education and leadership,
To make best partnership.
For the climate change membership,
She wants fellowship.*

*So lets recognize her importance,
For climate action assurance,
And better governance,
For all of our sustenance.*

WOMEN LEADERS IN CLIMATE ACTION

*Ms. Vandani Sinha
B.A Programme*



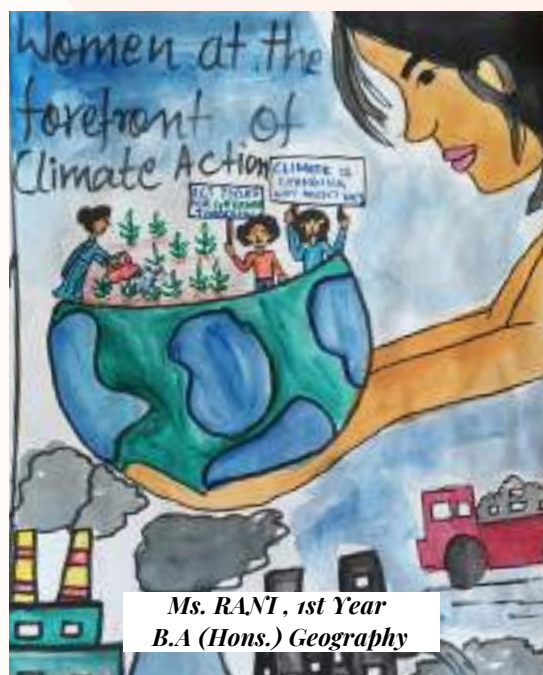
Women have been at the forefront of climate action, with their voices and actions playing a crucial role in advocating for environmental protection and sustainability. From grassroots activism to global policy-making, women are driving change and inspiring others to take action. Some examples of the role of women in climate action are as Greta Thunberg, a young climate activist, famously said “We need to start treating the crisis like a crisis. Women have taken this message to heart and are leading the charge in addressing the urgent need for climate action.”

One such woman is Christiana Figueres, former Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC). In her book “The Future, We Choose” she writes We can choose a future where we live in harmony with nature...or we can choose a future where our children will look back on us with disdain for squandering their inheritance. Her words serve as a powerful reminder of the responsibility we all share in protecting the planet.

Another influential woman in climate action is Dr. Vandana Shiva, an Indian scholar and environmental activist. She has been a vocal advocate for sustainable agriculture and biodiversity conservation, promoting traditional farming methods that prioritize community well-being over profit-driven practices. In her book, “Earth Democracy”, she writes “Earth belongs to all species...and it is our duty as citizens of the Earth to protect; these women are just a few examples of the countless individuals who are working tirelessly to combat climate change. Their quotes serve a inspiration for us all to take action and create a more sustainable future for generations to come.

The role of women in climate action is crucial in addressing the global issue of climate change. Women are disproportionately affected by climate change, particularly in developing countries where they often have limited access to resources and face greater risks from natural disasters. However, women are also powerful change agents and have been instrumental in leading efforts to mitigate the effects of climate change. Studies have shown that when women are included in decision-making processes related to climate change, more sustainable solutions are developed. Women bring unique perspectives and knowledge to the table, as they often have a deep understanding of their local environment and community needs. Additionally, women-led initiatives have been successful in promoting renewable energy and reducing greenhouse gas emissions. Despite the important contributions made by women in climate action, they continue to be underrepresented in leadership positions within the field. Efforts must be made to address this gender imbalance and ensure that women's voices are heard at all levels of decision-making related to climate change.

In conclusion, recognizing the vital role of women in climate action is key to effectively addressing the challenges posed by global warming. By empowering women and including them in decision-making processes, we can work towards a more sustainable future for all.



Ms. RANI, 1st Year
B.A (Hons.) Geography

WOMEN INCLUSION IN CLIMATE ACTION



Mr. Shivansh Srivastav
Graduated in B.A (Hons.) Geography
University of Allahabad

Across the world, diversity is the hallmark of effective institutions. The inclusion of women is one crucial element in operationalizing this value. The institutions tasked with climate action must be obligated to demonstrate their commitment to diversity, including gender diversity. Climate change affects everyone, but it doesn't impact everyone equally. It is well-established that climate change has a greater impact on the world's most vulnerable people, whether in developed or developing countries, and exacerbates existing inequalities. Women often face higher risks and greater burdens from the impacts of climate change in situations of poverty and due to existing roles, responsibilities and cultural norms. For example, in many societies, women are responsible for household energy, food, water and care for the young and elderly. Particularly in developing countries, the consequences of climate change can increase the burden for women and girls, for example, causing them to travel further to obtain daily supplies, leaving less time for paid work and potentially exposing them to greater risk to their personal safety. In spite of their vulnerability, women are not only seen as victims of climate change, but they can also be seen as active and effective agents and promoters of adaptation and mitigation. Investing in gender equality and women's empowerment has far-reaching benefits, including environmental conservation, poverty reduction, and achieving the Sustainable Development Goals (SDGs). And by tackling climate change with a gender lens, we can also address women's rights and promote greater gender equality.

For a long time, women have historically developed knowledge and skills related to water harvesting and storage, food preservation and rationing, and natural resource management. In Africa, for example, old women represent wisdom pools with their inherited knowledge and expertise related to early warnings and mitigating the impacts of disasters. contribute effectively to enhancing local adaptive capacity and sustaining a community's livelihood.

For this to be achieved, and in order to improve the adaptive capacity of women worldwide particularly in developing countries, the following recommendations need to be considered (as per UNFCCC):

- Adaptation initiatives should identify and address gender-specific impacts of climate change particularly in areas related to water, food security, agriculture, energy, health, disaster management, and conflict. Important gender issues associated with climate change adaptation, such as inequalities in access to resources, including credit, extension and training services, information and technology should also be taken into consideration.*
- Women's priorities and needs must be reflected in the development planning and funding. Women should be part of the decision making at national and local levels regarding allocation of resources for climate change initiatives. It is also important to ensure gender-sensitive investments in programmes for adaptation, mitigation, technology transfer and capacitybuilding.*
- Funding organizations and donors should also take into account women-specific circumstances when developing and introducing technologies related to climate change adaptation and to try their best to remove the economic, social and cultural barriers that could constraint women from benefiting and making use of them. Involving women in the development of new technologies can ensure that they are adaptive, appropriate and sustainable. At national levels, efforts should be made to mainstream gender perspective into national policies and strategies, as well as related sustainable development and climate change plans and interventions.*

The Gender Action Plan agreed by governments under the UN Framework Convention on Climate Change (UNFCCC) calls for women's full, equal, and meaningful participation in the international climate process and to ensure a prominent role for women in decision-making and in climate action. Governments meeting under the UNFCCC adopted a goal of gender balance in national delegations and in national climate policy and action in 2012. Since then, the UN Climate Change secretariat has reported annually on the gender composition of national delegations and policy and decision-making bodies under the UNFCCC and the Paris Agreement.

When it comes to building climate resilience in communities, involving women is crucial. In fact, the UN reports that communities are more successful in resilience and capacity-building strategies when women are part of the planning process.

Additionally, women are usually first responders in community responses to natural disasters, leaders in disaster risk-reduction, and contribute to post recovery by addressing the early recovery needs of their families and strengthening community building. By involving women in community planning and disaster response efforts, we can build stronger, more resilient communities that are better equipped to face the challenges of climate change. To be successful, climate solutions need to be more inclusive, innovative and collaborative...simply put, they require Women in Climate. Chipko movement, nonviolent social and ecological movement by rural villagers, particularly women, in India in the 1970s, aimed at protecting trees and forests, is the best example of a women-led movement. Women are fighting to address the impacts of climate change in every sector—as scientists, philanthropists, legislators, tribal leaders and CEOs—and leading major victories for our planet. A prominent thinker quotes – “There was such a rich diversity of professional experiences and social backgrounds — that made everything really dynamic and fruitful. The sistership and solidarity was really present in the room.”

Crucially, women take an intersectional approach, building inclusive, trust-based, and resilient networks that centre the knowledge and perspectives of diverse community-led and structurally excluded groups. Additionally, women leaders play major roles in emergency responses to disasters, developing gender-responsive climate solutions and building alternatives for just transitions. Including more & more women in climate action would be a game changer in achieving the goals set by the UN and under the Paris Agreement.



औरत माँ है जननी है

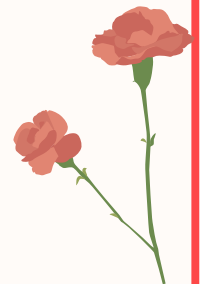
अल्पना सुहासिनी



औरत मां है जननी है और धरती मां की प्रतीक है
वह चाहे तो बदल के रख दे इस दुनिया की लीक है
मां ने सदा सहेजा सब कुछ वो पर्यावरण सहेजेगी
जब भी धरा उत्पीड़न होगा उसको लानत भेजेगी
मां संवारेगी इस धरती के हर इक ज़ख्म औ वार को
मां ही सबको समझा बुझाकर हर इक ख़्वाब सहेजेगी
पर्यावरण माहौल बदलकर बदलनी पुरानी लीक है
औरत मां है जननी है.....

धूल धुएं और प्रदूषण को महिलाएं दूर भगाएंगी
प्लास्टिक उपयोग बंद कर हरियाली को लाएंगी
फ़िर से हवा शुद्ध होगी और खुशबू होगी अब हर ओर
महिलाएं ही मिलकर धरती का मौसम नया बनाएंगी
क्योंकि ये हैं वाकिफ़ कि कया धरती की तकलीफ़ है
औरत मां है जननी है

औरत मां है जननी है और धरती मां की प्रतीक है
वह चाहे तो बदल के रख दे इस दुनिया की लीक है



WOMEN AND CLIMATE CHANGE: A VITAL INTERSECTION

*Dr. Swati Bidhuri, Assistant Professor,
Department of Geography, Aditi Mahavidyalaya*

Climate change affects everyone, but it does not affect everyone equally. Women, in particular, bear a disproportionate burden due to their existing vulnerabilities and societal roles. Here are some key points:

- 1. Gendered Impacts: Extreme weather events and environmental shifts disrupt traditional gender roles. For instance, in some African countries, men migrate to urban areas for employment, leaving women responsible for land and households without corresponding legal rights or social authority.*
- 2. Gender-Based Violence: Climate-induced disasters exacerbate gender-based violence. Conflict-prone regions at risk of extreme weather events witness higher rates of violence against women. In Colombia, Mali, and Yemen, women and girls face increased risks due to the combined effects of climate change, environmental degradation, and conflict.*
- 3. Child Marriage: In communities hit by climate-related disasters (such as droughts and floods), child marriage becomes a coping mechanism. Girls marry early to secure funds or assets and recover possessions. Unfortunately, this perpetuates gender inequality and denies girls educational opportunities.*
- 4. Everyday Tasks: Women and girls often bear the brunt of collecting firewood and water. Adverse climate impacts force them to travel farther from home, increasing exposure to violence outside their households.*
- 5. Empowering Women: Recognizing women's resilience, innovation, and solution-oriented approaches is crucial. Their active participation is essential for achieving climate goals set at the international.*
- 6. Gender Roles and Extreme Weather Events: In rural areas, extreme weather events often lead to male migration to urban centres in search of employment. This leaves women behind, responsible for managing land and households without necessarily having the corresponding legal rights or social authority.*

Gender-based violence tends to increase following climate-induced disasters. Conflict-prone regions at higher risk of extreme weather events also experience prevalent gender-based violence.

7. Child Marriage as Coping Mechanism: In some communities, child marriage becomes a means of coping with climate-related disasters. For instance, in Bangladesh, Ethiopia, and Kenya, families marry off their daughters to secure funds or assets and recover losses caused by droughts, floods, and storms.

8. Educational Challenges: Girls are forced to drop out of school due to climate impacts. Tasks like collecting firewood and water, traditionally assigned to women and girls, become more difficult as they have to travel farther from home. Longer journeys also increase their exposure to gender-based violence.

9. Women as Climate Solution-Multipliers: Despite these challenges, women are not mere victims. They are survivors, innovators, and solution-multipliers. Their active participation is crucial for achieving climate goals.

10. The Call for Inclusive Climate Action: Achieving the goals of the Paris Agreement requires involving all of humanity. Women's active participation is crucial. Women are not just victims; they are survivors, innovators, and solution-multipliers. Their perspectives and contributions are essential for sustainable climate action.

In summary, recognizing the unique challenges faced by women and empowering them to be part of climate solutions is vital for a more resilient and equitable future.

A QUICK REMARK ON THE SIGNIFICANCE/ROLE OF WOMEN IN CLIMATE ACTION



*Ms. Ekta Sahrawat, Assistant Professor,
Department of Geography, Aditi Mahavidyalaya*

Women are crucial to the battle against and moderation of the results of climate alter, which is one of the numerous reasons why women are required for climate action. The perspectives below are a few of the essential reasons for why women's association in climate activity is significant:

- ***Vulnerability and Impact:** Women are regularly excessively affected by climate alter, especially in developing countries where their jobs depend more intensely on characteristic assets. Water deficiencies, moving cultivating methods, and extraordinary climate can all have a negative affect on women's generally and financial well-being. Local knowledge, expertise and adaptation: Women regularly have critical conventional and nearby information on horticulture, economical advancement, and asset administration. By their association within the decision-making prepare, it is guaranteed that the plans for climate adjustment are grounded in reality and setting. By ensuring that methods for climate adaptation are grounded in realistic and contextual frameworks, their involvement in decision-making processes promotes more efficient and long-lasting solutions.*
- ***Community leadership:** When it comes to community-based projects, women are frequently in the lead. Their ability to lead in their local communities is essential for putting sustainable practices into action and building climate change resilience. Women's involvement guarantees inclusive, community-based, and top-down climate policies and programs.*
- ***Education and Empowerment:** Fighting Climate Change Requires Investing in Women's Education and Empowerment. Women who are empowered and educated are better able to adopt sustainable habits, make wise decisions for*

their families, and help their communities become more resilient to climate change.

- ***Biodiversity and Conservation:** Women frequently have important positions in agriculture, natural resource management, and biodiversity preservation. Acknowledging and assisting them in these areas can enhance conservation initiatives and encourage environmentally friendly behaviours that help slow down the adverse impacts of climate change.*
- ***Energy availability:** Women handle domestic energy management in various places of the world. Involving women in the switch to sustainable and renewable energy sources can result in more equitable and effective solutions that guarantee that access to energy increases while simultaneously bringing attention to the requirements and difficulties faced by women.*
- ***Politics and decision-making:** The creation and execution of successful climate policies depend on the participation of women in political and decision-making processes. Diverse viewpoints and life experiences help to create more inclusive and thorough plans that address the various ways that climate change affects various populations.*
- ***Innovation and entrepreneurship:** The involvement of women in climate-related innovation and entrepreneurship is on the rise. Positive transformation and economic resilience can be fostered by supporting women-led projects and companies in sectors including green technology, sustainable agriculture, and renewable energy.*

Thus, for climate action to be inclusive and effective and to address the difficulties posed by climate change, I think it needs women's perspective, expertise, and leadership. Forging gender parity and women's empowerment is crucial to creating a sustainable future.

महिलाओं की आवश्यकता

खुशी कुमारी सिंह, प्रथम वर्ष,
बी.ए. (ऑनर्स) भूगोल

सफल होने के लिए जलवायु संसाधनों को,
अधिक समावेशी होने की आवश्यकता है।
सीधे शब्दों में कहें तो,
उन्हें जलवायु में महिलाओं की आवश्यकता है।
प्रशस्त करती हैं मार्ग महिलाएं,
टी. एन. सी. की व्यापक जलवायु रणनीति का हिस्सा बनकर,
जलवायु संकट के निवारण को अपना प्रथम कर्तव्य समझकर।।

ग्रह को बचाने के लिए जलवायु समाधानों को,
अधिक सहयोगात्मक और नवीन होने की आवश्यकता है।
सीधे शब्दों में कहे तो उन्हें जलवायु में महिलाओं की
आवश्यकता है।।

वैज्ञानिक, परोपकारी, विधायिका, आदिवासी नेता,
और सीओ के रूप भी महिलाओं ने जलवायु परिवर्तन प्रभावों को संबोधित
कर ग्रह के लिए एक बड़ी लड़ाई को जीता।।

जलवायु कार्यवाही में एक नया उमंग जगाये,
प्राकृतिक जलवायु समाधानों को आगे बढ़ाने वाली महिलाओं का एक
विविध नेटवर्क बनाये।
क्योंकि, सफल होने के लिए जलवायु समाधानों को अधिक सुदृढ़ होने की
आवश्यकता है,
और सीधे शब्दों में कहे तो उन्हें जलवायु में महिलाओं की आवश्यकता है।।

MOTHER'S PAIN

*Ms. Sarang Gewali, MBA Student,
IMI, Delhi*

*In Mother Earth's embrace, a woman stands,
Guardian of nature, with nurturing hands.
A homemaker's heart, a society's grace,
She weaves threads of love, an intricate embrace.
With a gentle touch, she tends her mother land,
A steward of Earth, in her steadfast command.
As winds of change whisper, she's quick to respond,
Sole beacon of hope, in a world grown fond.
A symbiotic dance, like a river's gentle flow,
In unity with nature, her wisdom does grow.
Woman and Mother Earth, intertwined in fate,
She can protect our Mother, Mother Earth of every home.*



S-HEROS IN CLIMATE ACTION

By- Charu, 3rd Year,
B.A Programme

As per the Feminist Climate Justice Report: A Framework for Action report, By 2050, climate change will push up to 158 million more women and girls into poverty and lead to 236 million more women into hunger. Isn't these findings shocking? To a certain extent - A big Yes!! The findings of this report show the extreme vulnerabilities that exist concerning women, in the backdrop of climate change. Now, the natural question that will arise to your mind is what is this climate change and if it is a change for the whole of our planet then why consider specifically women in this discussion? Well, there's a motto behind that and we will get a hang of it as we approach the end of the article.

• GENDER AND CLIMATE: A DOUBLE INJUSTICE

As laymen, we have a broad understanding of climate change and we recognize the fact that this climate change can bring catastrophic impact to humanity. However, climate change-induced disasters may more severely affect the vulnerable population. And of course! in the patriarchal world, one major vulnerable section is women- nearly half (3.95 billion) of the world population. A report by Climate Action Network shows that women perform an additional 12-14 hours of work due to climate displacement and migration. In times of food shortage (due to unfavourable conditions) it is the women who sacrifice under the gender-biased expectations of altruism. But these effects on women, get compounded when it enters into a social sphere, for instance, in the water-scarce areas (drought-prone) of Maharashtra (India) there's the concept of "water wives" prevailing i.e. men of the village will start taking more wives to ensure water availability in house. Doesn't this seem terrible? So what should be done so that mitigating policies of climate change equally relieve women?

• FEKO WARRIORS: UNVEILING THE POWERHOUSE OF WOMEN IN CLIMATE ACTION

In the 21st century, the first thing to start with is, shattering the conception that someone else is needed to formulate policies to alleviate women from climate stress, women are themselves the agents of change and promoters of adaptation and mitigation. Since time immemorial women have developed knowledge and skills related to water harvesting and storage, food preservation and rationing, and natural resource management. Women are closer to nature as evident in the Chipkoo movement (in India), Nobel laureate Wangari Mathai spent her whole life promoting environmentalism and she deliberately promoted that environmental action is more than planting trees It's about planting ideas. hence incorporating women in climate change mitigation efforts would be a win-win situation both for women as well as the environment Therefore enabling women participation in climate action is not only the right thing to do, it is also the smart thing to do.

- **SHATTERING GLASS CEILING: FROM PRESENCE TO IMPACTFUL PARTICIPATION**

It must be acknowledged that participation alone does not serve the purpose. The presence of women in the decision-making is not enough. Women's participation can be of 3 types: Presence, Partial participation, and meaningful participation. In the initial two, the women are present in decision-making fora but may lack the agency it is present to speak, or even if then there could be a glass ceiling concerning their participation i.e. they may be given limited opportunities to speak about limited areas. The need of the hour is meaningful participation i.e. from tokenism to leadership roles in which women are given a say in all areas from policy making to its implementation supported through capacity building and strengthening of their knowledge and confidence. Instead of a top-down approach, the approach that is needed is bottom-up i.e. from the grassroots level. It is proved beyond doubt that women are better leaders in times of crisis, for instance, a study of 194 countries found that pandemic responses were systematically better in women-led countries. women have started "Silent Spring" as described by Rachel Carson, inspired a generation of grassroots action for the earth, ultimately leading to the founding of "Earth Day"

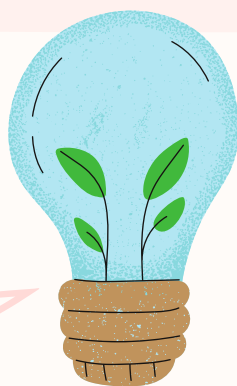
- **SUSTAINABLE S-HEROS: WOMEN IN DYNAMIC ACTION**

According to the UN, women can increase agricultural yields by 20-30% when provided the same resources as men, women farmer feeds the world, and their agriculture systems are rooted in the tradition passed on to generations adapted to specific variations in land. In the political sphere, studies show that where

have higher social and political status, the countries have 12% lower CO2 emissions. Women often lead on environmental and social legislation when elected to public office, for instance, after winning re-elections New Zealand, PM Jacinda Arden and her 40% women cabinet declared a “Climate emergency”. In the context of forest preservation (greenery), a study in India found that with a high proportion of women in leadership, re-generation rates and canopy growth have increased. Recently Global Landscape Forum (GLF) celebrated 16 female leaders who have worked to preserve and restore natural capital, for example- Sumarni Laman’s tree planting program is helping to restore biodiversity across Indonesia. In India, Vandana Shiva created one of the first Community seedbanks called “Navdanya” meaning -nine seeds to symbolize the protection of biological and cultural diversity. In the economic sphere also Yale University found that women worry more about climate change than men. This potential can be leveraged to transition more rapidly to a sustainable clean energy economy as there is the prevailing concept of “Green jobs” but the challenge is that these are not inclusive, women are out of the race as of now due to existing socio-economic vulnerabilities.

From the above discussion, we get a fair idea about the potential of the hand that rocks the cradle. I am pretty sure that by now you have got the answer to the question that I asked before starting the article -why is there a need to consider women in climate action? By concluding this article I would again reiterate that the endeavour to protect the earth and survive in the Anthropocene stage requires a collaborative effort, which, the Agenda 2030(SDG) says “cannot leave anyone behind ”Gender equality is a pre-requisite and new world order must include women leading the way. The hand that rocks the cradle can also nurture the environment gracefully.”

“Drawing the Synergies between gender, climate action and sustainability”



THE FEMININE FORCE

*Ms. Diya Pandya, 2nd Year,
B.A.(Hons.) Geography*

*In the heart of the earth, where the green roots twine,
Women stand strong, in the face of time.
With hands that nurture and minds that know,
They sow the seeds, and help them grow.*



*Climate warriors, in fields and labs,
Balancing equations, and data tabs.
Their voices echo, in halls of power,
A clarion call, for the eleventh hour.*

*In the heat of the desert, or the polar chill,
Women strive with indomitable will.
To protect our planet, our shared home,
For the generations yet to come.*

*They teach, they learn, they inspire,
Fueling the world with a greener fire.
In every action, in every deed,
Women are the change we need.*

*So here's to the women, in climate action,
Driving change, with passion and dedication.
May their strength and wisdom continue to inspire,
A world united, to lift us higher.*



DRAWING THE SYNERGIES BETWEEN GENDER, CLIMATE ACTION AND SUSTAINABILITY



*Ms. Aastha Borthakur, M.A Geography,
Delhi School of Economics, University of Delhi*

Nestled in the northeastern part of India, Assam is a state brimming with vibrant culture, breathtaking landscapes and a rich tapestry of history. From its lush tea gardens to the mighty Brahmaputra River, Assam offers a mesmerizing blend of natural beauty and cultural heritage that captivates visitors from around the world. As the largest city in Northeast India, Guwahati exudes a magnetic charm that blends ancient history with modern vibrancy. Amidst the urbanscape of the city, located at the outskirts is the Ramsar site designated, Deepor Beel (urban wetland). The Deepor beel is a sprawling freshwater lake, surrounded by lush greenery and teeming with diverse wildlife, which serves as a sanctuary of serenity amidst the urban bustle. In addition to migratory birds, the wetland is home to a variety of aquatic species including fishes, turtles and otters. The wetland provides vital ecosystem services as it helps in regulating floods in the city.

However, once this thriving haven of biodiversity and natural beauty is now facing the grim reality of degradation. Despite its Ramsar site designation and ecological significance, the wetland has fallen victim to a host of human-induced pressures, including pollution, encroachment and habitat destruction. The degradation of this fragile ecosystem not only threatens the rich biodiversity it supports but also jeopardizes the well-being of local communities dependent on its resources. One of the primary threats to Deepor Beel is pollution stemming from various sources such as untreated sewage, industrial effluents and solid waste disposal. The influx of pollutants into the lake has led to water quality deterioration, harming aquatic life and disrupting the delicate balance of the ecosystem. The dwindling fish stock, the deteriorating quality of fish in the lake and the increasing growth of the invasive water hyacinth species has been affecting the local communities particularly the women who are closely associated with the local ecosystem of the wetland.

Three villages located around the wetland are completely dependent on the wetland for their sustenance by fishing. Women traditionally in India have always been stalwarts in protecting the environment from where they obtain resources. This has been evident from the various environmental movements like the Chipko movement, Narmada Bachao Andolan, Navdanya Movement etc. A very interesting initiative has been taken up by six women of the Keotpara village in Deepor Beel who are closely associated with the wetland for various needs. Recently on my field visit to Deepor Beel, I met these amazing women who despite facing lots of odds are working not just to protect the environment but also to help other women in the area become financially independent. The initiative taken by them named 'SIMANG' which means Dreams is a fantastic example to show the intersectionality of gender, climate action and sustainability. Mitali Das, Mainu Das, Bhantia Das, Situa Das, Rumi Das and Mamoni Das were introduced to Rachel McHenry, the Director of Design, at 7Weaves Social. Together these women discovered the potential that water hyacinth holds and how it can be used in a way to make contemporary products out of it.

While interacting with Rituraj Dewan from North East Centre for Technology Application and Reach (NECTAR) he shared 'The idea started with converting water hyacinth into fibre and turning it into a product. The idea was further developed when a team of Swiss designers visited for 15 days and trained the girls. They even took back the products created to their own country to see if it could find a market there. Further, my interaction with Mitali gave me more insights about this initiative which started in 2019. But when COVID-19 came calling, the six women decided to train all the nine communities in this tedious art. When asked about the process Mitali highlighted 'The first step was the collection of Meteka, which is what water hyacinth is called in Assamese, from the lake. Each mat requires 2kg of this aquatic plant which is achieved after drying 12kgs of it.'

Nonetheless, all of it is collected from the Deepor Beel and every step of the way, the nine traditional communities are involved. It takes about 15 days for the plant to dry completely.' She also mentioned that initially, all the women used to come together to cut the plant in a certain way that was suitable for weaving and dry it out completely. But since Covid 19, the dried plants have been delivered to their homes. But now we have started again working at our hall'.



The fibre is then weaved using traditional Assamese loom, something the community is already acquainted with and they are required to work for 20 hours a week to earn Rs 6000 which is the minimum wage any weaver earns. A stark fact which grappled my attention during the entire conversation with these women was that they did not have high education qualifications. In fact, most of them were illiterate except the six women and some others who had just studied till middle school. But to think so closely and actually take actions to protect the environment and bridge the synergies between gender and climate action is commendable. This case study is a classic example of how the intersectionality of gender, climate action and sustainability can bring wonders to the people as well as to the environment. Unfortunately, the gender equation with the environment is often overlooked and neglected. Despite of the fact that these women have been working relentlessly to protect the environment and make a living for themselves, they are not getting the required media coverage or support from the government to help them gain prominence.

Therefore, there is an urgent need for the government to engage in conversations with the SIMANG group and help formulate policies and provide them with the much-needed support to help them do better. Not just for the SIMANG group but for the state as a whole where women are engaging in environmental stewardship the government should recognize them and help in drawing the synergies between gender, climate action and sustainability.

WOMEN DRIVING CLIMATE CHANGE

*Ms. Meghna Singh, 2nd Year
B.A. (Hons.) Geography*

Climate change stands as one of the most pressing challenges of our time, demanding urgent action and innovative solutions to mitigate its impacts and build resilience. In this global effort, the role of women in climate action has emerged as both indispensable and transformative. From grassroots activism to leadership in policy-making and scientific research, women are driving change across diverse sectors and communities. This essay explores the multifaceted contributions of women in climate action, examines the challenges they face, and underscores the importance of empowering women as key agents of environmental sustainability. Empowering Women as Agents of Change Women's involvement in climate action spans a spectrum of roles and responsibilities, reflecting their diverse talents, expertise, and experiences. At the grassroots level, women are leading environmental initiatives that promote sustainable practices, conservation efforts, and community resilience. Through advocacy campaigns, educational programs, and social mobilization, women are raising awareness about climate change and mobilizing local communities to take action.

Furthermore, women are increasingly taking on leadership roles in environmental organizations, government agencies, and international institutions. Their leadership is instrumental in shaping climate policies, driving innovation, and promoting gender-responsive approaches to climate adaptation and mitigation. Women leaders bring unique perspectives, skills, and insights to environmental decision-making processes, enriching the discourse and advancing more inclusive and effective solutions.

- **Challenges and Barriers**

Despite their significant contributions, women in climate action continue to face numerous challenges and barriers that hinder their full participation and leadership. Gender inequalities, social norms, and cultural biases often limit women's access to resources, decision-making power, and opportunities for advancement. In many societies, women confront systemic discrimination, unequal access to education, and limited economic empowerment, which undermines their ability to engage meaningfully in climate initiatives. Moreover, women are disproportionately affected by the impacts of climate change, exacerbating existing vulnerabilities and

inequalities. Women in rural communities, indigenous groups, and marginalized populations bear the brunt of environmental degradation, food insecurity, and displacement, yet their voices and experiences are often marginalized in climate policy and planning processes. Addressing gender disparities and promoting gender equality are critical for building inclusive and resilient responses to climate change that prioritize the needs and rights of all individuals. Investing in women's education, training, and capacity-building initiatives can equip them with the skills, knowledge, and confidence to engage effectively in environmental governance and advocacy. Creating inclusive spaces for women's voices and perspectives in decision-making processes can ensure that their priorities and concerns are integrated into climate policies and programs.

Furthermore, promoting women's economic empowerment and entrepreneurship in green sectors can unlock new opportunities for sustainable livelihoods and innovation. By supporting women-led initiatives in renewable energy, conservation, and sustainable agriculture, societies can harness their creativity, resourcefulness, and resilience to address climate challenges and foster economic development.

- **Conclusion**

Women's leadership and participation are indispensable for advancing climate action and achieving the goals of environmental sustainability, social justice, and human well-being. By recognizing and empowering women as key agents of change, we can unlock new pathways for innovation, collaboration, and resilience in the face of climate change. As we strive to build a more sustainable and equitable world, let us harness the power of Women's voices, knowledge, and leadership to drive transformative action and inspire positive change. Together, we can create a future where women and men stand as equal partners in safeguarding our planet and securing a better tomorrow for generations to come.



BOOK REVIEW OF GENDER AND GREEN GOVERNANCE BY BEENA AGARWAL



*Dr .Namrata Handique, Assistant Professor,
Department of Geography, Aditi Mahavidyalaya*

*In **Gender and Green Governance: The Political Economy of Women's Presence Within and Beyond Community Forestry**, Bina Agarwal navigates the intricate terrain where gender dynamics intersect with environmental governance, particularly focusing on the domain of community forestry. Published by Oxford University Press, this seminal work offers a compelling analysis of the nuanced relationships between gender, power structures, and sustainable natural resource management.*

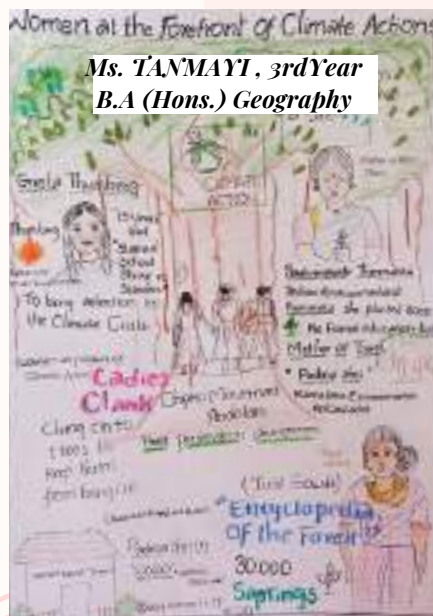
Agarwal embarks on a rigorous exploration of the role women play within the community forestry initiatives worldwide. Drawing from extensive fieldwork and empirical research, she unveils the multifaceted contributions of women to forest management, challenging traditional narratives that often overlook their agency and expertise. Through a meticulous examination of case studies from India, Nepal, and other regions, Agarwal illustrates how Women's inclusion in decision-making processes enhances the ecological resilience of forests and improves the socioeconomic well-being of local communities. One of the book's strengths lies in its interdisciplinary approach, seamlessly integrating insights from feminist economics, political ecology, and development studies. Agarwal skillfully employs theoretical frameworks to dissect the power dynamics underlying gendered participation in forestry governance, shedding light on the structural barriers that hinder Women's full engagement in environmental management initiatives.

*Moreover, **Gender and Green Governance** contributes significantly to the ongoing discourse on environmental justice by elucidating how gender inequalities intersect with broader issues of class, ethnicity, and caste within the context of natural resource governance. By foregrounding the voices of marginalized women, Agarwal underscores the importance of inclusive policy frameworks that recognize and address intersecting forms of oppression.*

recognize and address intersecting forms of oppression. Throughout the book, Agarwal advocates for transformative change, advocating for policies that go beyond tokenistic gestures of gender mainstreaming to foster substantive gender equality in environmental decision-making. She calls for the recognition of women's customary rights to land and resources, emphasizing the pivotal role of grassroots women's movements in advocating for policy reforms that promote environmental sustainability and social justice.

While Gender and Green Governance “offers invaluable insights into the nexus of gender and environmental governance, some readers may find the text dense and academically oriented.” However, Agarwal’s lucid prose and compelling storytelling ensure that even complex theoretical concepts are accessible to a wide audience, including scholars, policymakers, and activists invested in gender-responsive approaches to sustainable development.

In conclusion, Bina Agarwal’s Gender and Green Governance stands as a seminal work that not only enriches our understanding of the intricate interplay between gender dynamics and environmental governance but also serves as a rallying cry for transformative action. By placing women at the forefront of discussions on community forestry and environmental sustainability, Agarwal’s work ignites a path towards more inclusive and equitable forms of environmental governance, ultimately paving the way for a greener, more just future.



PANEL DISCUSSION

G20: BHARATIYA JNANA PADDHATI: GLOBAL MESSAGE (SPECIAL REFERENCE TO ITALY)

*Dr. Anju Singh,
Ms. Mansha Verma, Student Editor*

The Department of Geography of Aditi Mahavidyalaya organized a Panel Discussion under the G-20 presidency on a noteworthy theme “G20: BHARATIYA JNANA PADDHATI: GLOBAL MESSAGE (SPECIAL REFERENCE TO ITALY)”. The panel discussion was initiated with an insightful welcome address by Prof. Mamta Sharma, Principal, Aditi Mahavidyalaya on the rich heritage and traditional knowledge of Indian scholars of the country. The convener delivered the background address, Dr. Anju Singh on the conception of the whole idea behind the panel discussion. The occasion was graced by the esteemed Prof. Rana P.B.Singh, renowned and eminent connoisseur of cultural landscapes and heritage studies, chairperson of the panel discussion. The outstanding deliberations on the Indo-Italiano preview of culture and cultivating the future were shared. He talked about Leonardo da Vinci and his work on Vitruvius man, similar to Upanishads in India. A deep connection between the culture of Bharat and Italy is portrayed through the comparison of the town plan of Imola to that of the Symbolic map of Kashi. The students are captivated by the description of timeless scriptures, enlightened by the philosophies of sages and awed by the scientific prowess of ancient minds described in the discourse.

The other discussants were Prof. Seema. M. Parihar, Kirorimal College, University of Delhi, Prof. Parveen. K. Pathak, CSRD, Jawahar Lal Nehru University and Dr. Saurabh, Deputy Proctor, University of Delhi. Prof. Seema. M. Parihar has withdrawn the attention of the students to the Indian knowledge system and enlightened the students on the structure of the Bhagwad Gita and the importance of reading, understanding and implementing the lessons learnt in due course of this process. Prof. Parveen. K. Pathak discussed the five elements of Life-creativity, critical, collaboration, communication, and compassion as path to move from darkness to light and ignorance to knowledge and from death to immortality and hope. Dr.Saurabh has described the significance of Sanskrit in understanding the civilization, culture, and history of our country.

Dr.Saurabh has described the significance of Sanskrit in understanding the civilization, culture, and history of our country. Sanskrit is vital to understand the culture because of its extensive use in religious literature primarily in Hinduism because most Indian languages have been directly derived from or strongly influenced by it. The event has also witnessed the radiant presence of Prof. Pooja Khanna, Nodal Officer of the G-20 presidency, Aditi Mahavidyalaya, University of Delhi.

The event was culminated by the concluding remarks and vote of thanks by Prof. Punyatoya Patra, Teacher In charge, Department of Geography, Aditi Mahavidyalaya. She emphasized that the Indian Knowledge system as well-structured process of knowledge transfer rather than just a tradition and highlighted some secrets of India's profound wisdom, where realms of humanities and sciences intertwine to create a tapestry of enlightenment. In nutshell, the panel discussion proved to a transformative journey where the past illuminates the present and the knowledge of ages becomes the foundation for our intellectual exploration. The students are captivated by the description of timeless scriptures, enlightened by the philosophies of sages and awed by the scientific prowess of ancient minds described in the discourse.



LOCAL TRIP

SOUTH DELHI, SANJAY VAN AND J.N.U

*Ms. Ekta Sahrawat,
Ms. Khushi Kumari Singh, Student Editor*

Geography is unique, and to understand it in the true sense one needs to reunite with the landscape and the Department of Geography firmly believes in this principle. On April 6, 2024, the faculty and students of the Department of Geography embarked on an enriching field trip to Sanjay Van followed by a visit to Jawaharlal Nehru University (JNU). The purpose of this journey was to delve into the essence of geography through direct observation, mirroring ancient practices as well as understanding the impact of climate change in the current times.

The day began at Gate No. 1, where we gathered in anticipation of a journey that would blend theoretical knowledge with practical experience. Divided into groups by class, each led by a dedicated professor, we set off on a 5.6 km trek through Sanjay Van. The trail, adorned with vibrant Bougainvillea flowers and cherished by the burgeoning summer, provided a picturesque backdrop as we immersed ourselves in the natural world. The trek was not merely physical but a reconnection with nature after days spent amidst the hustle and bustle of college life.

Our first major stop was Mayur Pahari, a rocky outcrop where students eagerly climbed and explored, soaking in the surroundings teeming with wildlife and indigenous flora. The journey continued to Sanjay Van's highest viewpoint, a challenging ascent that tested our endurance under the midday sun. Despite the physical demands, the panoramic view from the top, showcasing Delhi's skyline juxtaposed with greenery, left an indelible mark on our collective memory.

Reuniting at Gate No. 1, we bid farewell to Sanjay Van and boarded buses bound for JNU, a beacon of academic excellence and progressive thought. The sprawling campus greeted us with its iconic architecture and a sense of intellectual energy that permeated the air. Following a tour through the School of International Studies, where walls adorned with portraits of eminent scholars spoke volumes about JNU's legacy, we gathered at the canteen for a well-deserved lunch.

The afternoon continued with a visit to the Centre for the Study of Regional Development, where we engaged in a thought-provoking session with Prof. Kaushal Kumar Sharma. His insights into the practical applications of geography resonated deeply, emphasizing how geography surrounds us in everyday life, shaping our understanding of the world. Prof. Sharma's encouragement to explore beyond textbooks and embrace continuous learning left a lasting impression on our minds. The trip not only broadened our academic horizons but also fostered camaraderie among students and faculty. It underscored the importance of experiential learning in bridging the gap between theory and practice, inspiring us to approach geography with a newfound appreciation for its relevance in contemporary issues such as climate change and urban development.

As we reflected on the day's experiences, it became evident that field trips are not just a break from routine but essential tools for understanding real-world phenomena. Our time at Sanjay Van and JNU reaffirmed our commitment to exploring geography not as a subject confined to classrooms but as a dynamic discipline that informs our interactions with the environment and society at large.

In conclusion, this field trip was a transformative experience that deepened our understanding of geography and its applications. It reinforced our belief that true learning happens when we step outside the confines of academia and engage directly with the world around us. As aspiring geographers, we left Sanjay Van and JNU with renewed enthusiasm and a sense of purpose to contribute meaningfully to our field.

“DHARITRI” GEO-FEST 2024

*Dr. Sheetal Sharma,
Dr. Namrata Handique*

Geo-Fest is not just an event or a celebration, it illustrates the department’s steadfast commitment to preserving the environment for future generations. This provides a platform for the students to discuss and communicate with other scholars. It is also one of the good examples of cooperation and how to organise an event. “Dharitri” – The Geographical Society organised an Annual Inter-college Geo-Fest on 18th April 2024 on the theme “Women at the forefront of climate action”, which was inspired by the UN International themes. To speak on the theme, a dynamic feminist academician Prof. Anindita Datta, Head, Department of Geography, Delhi School of Economics, University of Delhi was invited as resource person. She delivered a talk on the topic “Women at the forefront of climate action: Feminist Solidarity, mutual aid and Gendered Possibilities to build back better in crisis and recovery”. She begins by stating that Disasters are typically perceived as tragedies resulting in the loss of lives and property. However, adding a different perspective to it, she argues that disaster is a ‘window of opportunity’ to build back better that is they present a chance to address pre-existing conditions, such as sex equity. Through the process of recovery and rebuilding after a calamity strike, we can actually create a more utopian and more egalitarian society.

To speak on the theme, a dynamic feminist academician, Prof. Anindita Dutta, Head, Department of Geography, Delhi School of Economics, University of Delhi was invited. Her research interests are in the area of Feminist Geography, Conceptual traditions in Geography and Social Geography of India. She is particularly interested in visibilising indigenous feminisms, spaces of resistance, everyday geographies and in issues of gendered and epistemic violence.



ACTIONS

- *Preparative: Risk management, Pre-disaster, preparedness*
- *Ameliorative: Relief provision, responses during and after in minimizing effects of disaster*
- *Restorative: Enables of recovery*

She also talked about two case studies. The first case study focuses on gendered spaces and water shortage in Gujarati villages prone to drought (Sabarkantha, Banaskantha, Kutch, Mehsana), where women take control of the water and manage it to create healing spaces. The second case study focuses on women's experiences of grief and healing following natural disasters on a south Pacific island. Vanuatuan and Cook Islandian women are adept at spotting the warning signs of impending storms; as a result, they harvest crops, get them ready for storage, assist one another in communal kitchens, and make sure that all of the family's supplies—including flashlights and batteries—are charged and ready for emergencies. Thus, women play the preparative, ameliorative and restorative roles in climate action.

It provides a platform for discussion, cooperation, and communication. this year's Geo Fest theme is "Women at the forefront of climate action", honouring the priceless efforts of female activists, leaders, scientists, and campaigners who are significantly advancing the cause of combating climate change.

To create awareness among the students, a group dance followed by a Nukkad Natak was performed by our students with a focus on the significance of role of women in society and climate change. Further in line, various inter-college competitions were organised namely, Tulika the Poster making competition, through my lenses (Reel making and Photography competition, Magellan of Globe the Map Pointing and Quiz and Khul ja-sim-sim the Treasure Hunt, wherein, total around 150 students from different colleges of Delhi University were participated. Furtherance to that, the prize distribution ceremony and the group photography session was conducted at last.

EARTH DAY PLANET V/S PLASTIC

*Dr. Namrata Handique,
Ms. Trisha Sinha, Student Editor*

On April 22, 2024, students and faculty members of Aditi Mahavidyalaya convened to celebrate Mother Earth's Day. Organized by the ECO Club in collaboration with the Departments of Geography and History, the event transcended mere observance; it ignited a collective resolve to reciprocate the countless gifts bestowed by Mother Earth since time immemorial. Central to the day's theme, "plastic v/s planet," was a poignant reminder of our role as stewards of the Earth, entrusted with the responsibility to mitigate the environmental impact of plastic pollution.

The event featured a distinguished guest speaker, Mr. Aditya Patel, Assistant Director at DRDO, Ministry of Defence, Government of India. Mr Patel's address commenced with an engaging interactive session, probing the audience's awareness and stance on the pervasive issue of plastic usage. He traced the origins of the global plastic dilemma to historical milestones like the Stockholm Conference, emphasizing how plastic, once hailed as a revolutionary material, has now permeated every facet of our lives. Despite its undeniable utility in daily conveniences, Mr Patel underscored the imperative to draw a clear distinction between essential use and reckless disposal.

Highlighting the sobering reality of plastic's environmental impact, Mr Patel delved into its classification into micro-plastic, macro-plastic, and nano-plastic categories, each posing unique threats to ecosystems and public health. He brought to light alarming instances where microplastics have infiltrated the human food chain, even reaching concentrations in mother's breast milk. Such contamination disrupts the ecological balance and exacerbates health crises, linking plastic pollution to rising instances of lifestyle diseases. From a governmental perspective, Mr Patel elucidated India's initiatives to combat plastic pollution, including the recognition of institutions striving for "plastic-free" status. He lamented, however, the gaps in policy implementation due to insufficient research and fieldwork, calling upon educational institutions like universities and colleges to lead by example. Emphasizing the pivotal role of youth in effecting change, he urged proactive engagement through research initiatives and community outreach to realize the vision of a sustainable future.

In concluding his address, Mr. Patel invoked a call to action, quoting, "Indiscipline leads to another indiscipline but discipline can also lead to discipline." Drawing parallels to James Clear's "Atomic Habits," he advocated for cultivating small, impactful habits towards environmental stewardship. He affirmed that the battle against plastic pollution is not a war against the material itself but against its irresponsible usage and the consequential harm inflicted upon our planet and its inhabitants.

The event concluded with renewed commitments from students and faculty alike to adopt sustainable practices in daily life and to advocate for systemic change within their communities. It underscored the imperative for collective action and personal responsibility in safeguarding our planet for future generations. As we reflect on Mother Earth's Day 2024 at Aditi Mahavidyalaya, it stands as a poignant reminder that through education, awareness, and concerted effort, we can aspire towards a harmonious coexistence with nature, where humanity's progress is not at the expense of the environment but in tandem with its preservation

DHARITRI

ELEVENTH ISSUE

2023-2024



DEPARTMENT OF GEOGRAPHY

ADITI MAHAVIDYALAYA

UNIVERSITY OF DELHI