

# ADVOCACY WORKSHOP ON CLIMATE CHANGE



MAY-AUG  
2014

ALL INDIA WOMEN'S CONFERENCE (AIWC)

REPORT

ADVOCACY WORKSHOP  
ON CLIMATE CHANGE

MAY-AUG  
2014

ORGANIZED BY

**ALL INDIA WOMEN'S CONFERENCE**

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# INTRODUCTION

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*“There is no question that climate change is happening; the only arguable point is what part humans are playing in it.”*

~ **David Attenborough**

There was a time when chatting about the weather was merely a veiled attempt at making small talk. Ironically, today there is a much larger, more crucial issue hidden within those very conversations.

Increasingly hotter days, harsher winters, inadequate or alternatively, excessive rains are just a few of the weather changes under discussion these days. Yet whatever the particular topic at hand, things always lead to the same conclusion – there have been some drastic changes in our climate over the past decade or so. Now while these abnormal weather patterns are observed by all, most people are clueless about their origins. Despite the critical issue of ‘Climate Change’ being a mandate on almost every agenda across global environmental forums, the common man remains largely unaware about the very concept of it. Therefore, it falls to us as environmentally conscious citizens and responsible civil societies, to educate the masses on the climate change issue and raise awareness about the drivers of this phenomenon; in addition to seeking out and advocating solutions in order to better adjust to, if not entirely mitigate, the problem.

Lately, there have been many press releases in the newspapers, following the recently released IPCC report which states that India and other developing countries will be the most adversely affected by climate change in coming years. Agricultural patterns, dairy products and the overall health and living conditions of the population are just a few of the factors that can expect to be negatively impacted; experts go as far as to predict that the inevitable shortage of food, water and basic essentials could even create situations of conflict in developing countries.

In an attempt to generate awareness about this pressing issue, the **All India Women’s Conference (AIWC)** organized a series of workshops, beginning with a national one at New Delhi, followed by five regional workshops across different states hosted by local AIWC branches.

The workshops were sponsored by **Women in Europe for a Common Future (WECF)**, a Netherlands-based NGO, as a follow up to their IWE Leadership Programme held in Warsaw, Poland in November 2013 - an event in which Mrs. Kalyani Raj, Member-in-charge, AIWC participated as one of the Mentors. The New Delhi workshop drew AIWC participants from across India and focused on the impact of climate change on essentials like water, health, energy and agriculture, as well as the adaptive measures required to resolve the issue. The regional workshops on the other hand, were participated by members from neighbouring states and addressed the unique local issues affecting them respectively.

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NATIONAL WORKSHOP

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## TIME

## AGENDA-DAY I MAY 22, 2014

|             |  |
|-------------|--|
| 9:30-10:00  | Registration   |
| 10:00-10:30 | Introduction & Spot Survey   |
| 10:30-11:30 | Inauguration <ul style="list-style-type: none"> <li>▼Welcome Address</li> <li>▼Programme Rationale</li> <li>▼Inaugural Address</li> <li>▼Vote of Thanks</li> </ul> |
| 11:30-12:30 | <b>SESSION 1:</b> UN processes relating to post-2015 goals and UNFCCC  |
| 12:30-1:00  | <b>SESSION 2:</b> Climate Change adaptation for small, marginal farmers focusing on women  |
| 1:00-2:00   | Lunch  |
| 2:00-2:30   | Documentary Screening  |
| 2:30-3:30   | <b>SESSION 3:</b> Impact of Climate Change on Gender and Energy  |
| 3:30-4:30   | <b>SESSION 4:</b> Impact on Disaster   |

## SPEAKER

|   |
|---|
| <b>Mrs. Veena Kohli</b><br>(President, AIWC)              |
| <b>Mrs. Kalyani Raj</b><br>(Member-in-charge, AIWC)       |
| <b>Mrs. Beena Jain</b><br>(Patron, AIWC)                  |
| <b>Mrs. Amareeshwari Morla</b><br>(Treasurer, AIWC)       |
| <b>Mrs. Kalyani Raj</b><br>(Member-in-charge, AIWC)       |
| <b>Mrs. Sabita Parida</b><br>(Program Coordinator, Oxfam) |
| <b>TERI</b>   |
| <b>Ms. Lydia Powell</b><br>(Senior Fellow, ORF)           |
| <b>Ms. Divya Mohan</b><br>(Associate Fellow, TERI)        |

## TIME

## AGENDA-DAY II MAY 23, 2014

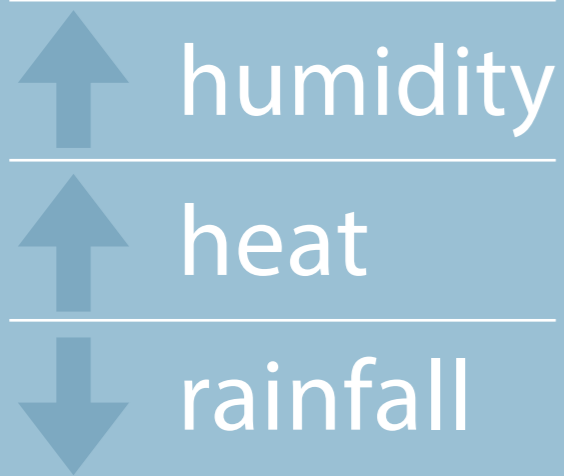
|             |   |
|-------------|---|
| 10:00-10:30 | Action Plan Review  |
| 10:30-11:00 | IPCC Report Discussion  |
| 11:00-11:30 | Tea Break   |
| 11:30-12:15 | <b>SESSION 5:</b> Livestock & Climate Change  |
| 12:15-1:00  | <b>SESSION 6:</b> Impact on Water   |
| 1:00-2:00   | Lunch   |
| 2:00-3:00   | <ul style="list-style-type: none"> <li>▼Feedback and Q&amp;A</li> <li>▼Finalization of Regional workshop</li> </ul> |
| 3:00-4:00   | <ul style="list-style-type: none"> <li>▼Closing of Workshop</li> <li>▼Certificate Distribution</li> </ul>           |

## SPEAKER

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|--|
| <b>Prof. P. Dasgupta</b><br>(JNU Faculty & co-author of IPCC Report) |
| <b>Dr. Mamta Dhawan</b><br>(Regional Manager, GALVmed)               |
| <b>Pritha Bhattacharaya</b><br>(Global Water Partnership)            |

The workshop kicked off with a spot survey conducted among participants in the attempt to gauge their general knowledge and personal observations about the climate change issue. While most participants expressed awareness about the fact that the climate was changing and affecting people in different spheres of life, there were varied opinions about the causes of this weather phenomenon. The survey results also indicated that only a minority of people had a working knowledge of the terminology associated with environmental and climate change issues. Some of the other survey findings are illustrated below:

**THE MOST COMMONLY OBSERVED WEATHER PATTERNS THAT WERE ATTRIBUTED TO CLIMATE CHANGE:**



Rising humidity, hotter days and the scarcity of rain aside, another significant consequence noted was the change in farming patterns, namely the increasingly late onset of the seeding season every year.

**THE MOST SIGNIFICANT FACTORS THAT WERE CONSIDERED TO BE THE CAUSE OF CLIMATE CHANGE:**



A steadily climbing population and high pollution levels (largely due to the growing number of vehicles) were largely considered to be the primary causes of climate change, followed by other factors such as the misuse of resources and over industrialization.

## INAUGURAL SESSION

The Inaugural Session began with a brief history of the AIWC by its President, Mrs. Veena Kohli, who then proceeded to acquaint the participants with the work and activities undertaken by AIWC so far, in the fields of environment, climate change and energy. She reiterated the organization's commitment towards understanding mitigation and adaptation issues; as well as working to solve them through their strong pan-India network of about 500 local branches. Mrs. Kohli ended by welcoming the participants to the workshop, articulating her hope that they would have gained several substantial key messages to take home at the end of it.

Mrs. Kalyani Raj, Member-in-charge, took the stage to explain the rationale behind the workshop and introduce the sponsoring NGO - Women in Europe for a Common Future (WECF). She outlined the proposed module and encouraged attendees to actively participate in order to make it an interactive and engaging workshop.

Next came the Inaugural address, delivered by AIWC Patron, Mrs. Beena Jain, who applauded the initiative to bring a critical issue to light through such a workshop. She went on to state that she was confident that the participants would benefit immensely from the presentations of all the invited experts.

The Inaugural session concluded with the Vote of Thanks by Mrs. Amareeshwari Morla, AIWC Treasurer, who enthusiastically urged the participants to exploit the opportunity to learn and get the maximum out of this workshop.

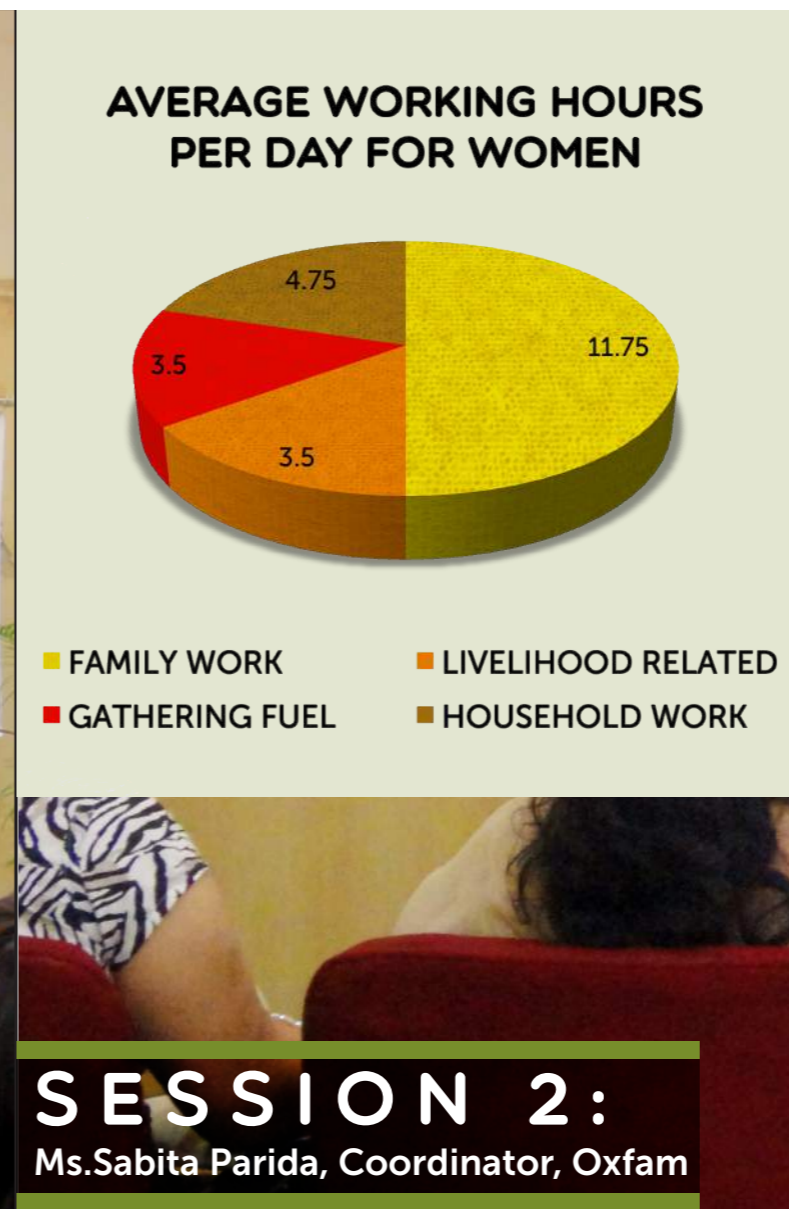




**SESSION 1:**  
Mrs.Kalyani Raj, Member-in-charge, AIWC

**UN PROCESSES COVERING SDGS, UNFCC AND CLIMATE CHANGE**

Mrs.Kalyani Raj began by familiarising participants with the principal organs of the UN and then, over the course of her session, proceeded to detail out two of its most important ongoing processes – Post-2015 (SDG) and UNFCCC (COP). Starting with the former, Mrs.Raj briefly reviewed MDG targets and goals, specifically those relating to the enrollment of girls in primary school and decent employment for women; and then went on to talk about Rio+20, the inter-governmental process, the involvement of major groups and OWGs. She then explained the COP process, highlighting the development of negotiations following the Kyoto Protocol, Bali Action Plan, Durban Convention and Article 23 on Gender Balance, before coming to the topic of the Indian National Action Plan of Climate Change. The session came to a close with Mrs.Raj encouraging all the participants to engage in the process and contribute to the ongoing discussion through the various forums available.



**SESSION 2:**  
Ms.Sabita Parida, Coordinator, Oxfam

**CLIMATE CHANGE ADAPTATION FOR SMALL, MARGINAL FARMERS FOCUSING ON WOMEN**

Ms.Sabita Parida spoke about how farmers in India were adapting to climate change considering their agricultural lifestyles were completely dependant on appropriate weather conditions. Recent extremities in climate have had a huge, adverse impact on the social and economic situation of Indian farmers – almost 50% of their sown area falls under the category of ‘unirrigated land’, which indicates the lack of a coping mechanism in India. Asserting the fact that women farmers contributed 80% in agriculture without any land rights, Ms.Parida went on to present an Uttarakhand case study which attributed the significant increase in the time-effort burden on women to collect fuel and fodder, to climate changes and depleting natural resources. She ended by stressing the need to promote climate-resilient agriculture practices, the diversification of cropping patterns and income resources; as well as develop measures to restore natural resources and build a coping mechanism.





The first two sessions were followed by lunch, after which a documentary film produced by TERI was screened. Based on one of the rural districts in India, Gorakhpur, the film made a huge impact on the audience. Gorakhpur is the second largest city in the mid-Gangetic plains of India and the documentary tells the story of a city grappling with the dual pressure of urbanization and climate change. While addressing the enormous challenges in Gorakhpur, the film also managed to highlight a case of local governments and citizens working together to make the city more resilient and self-sustainable.

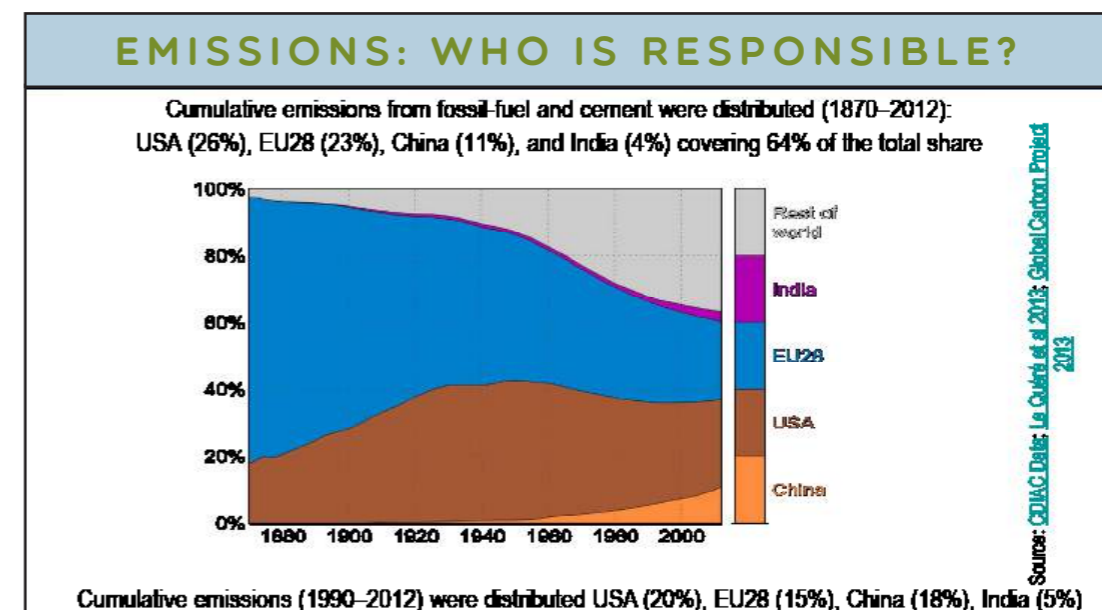
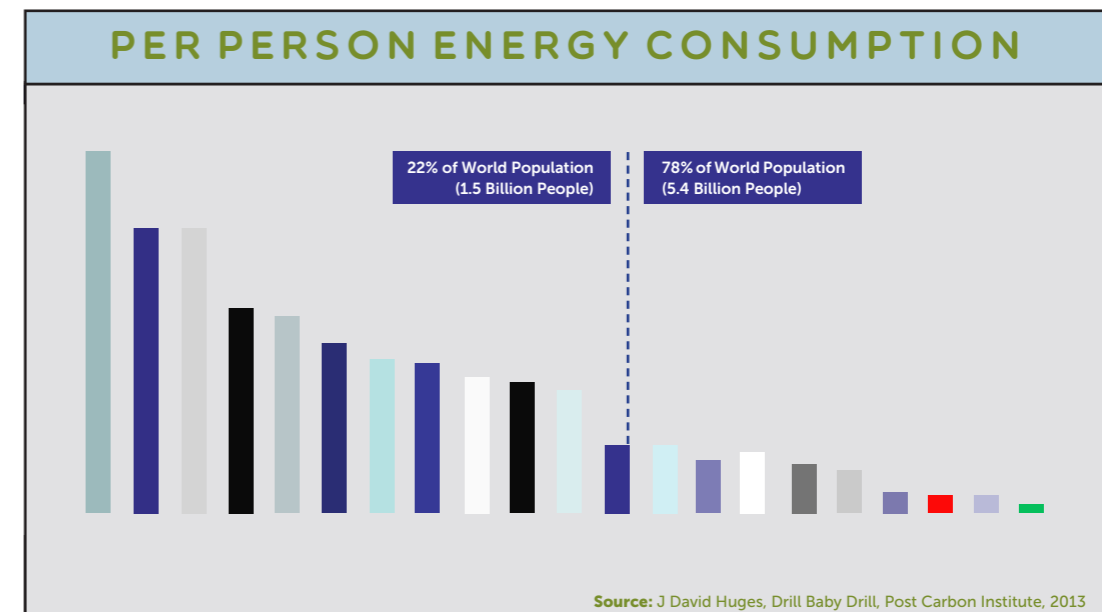
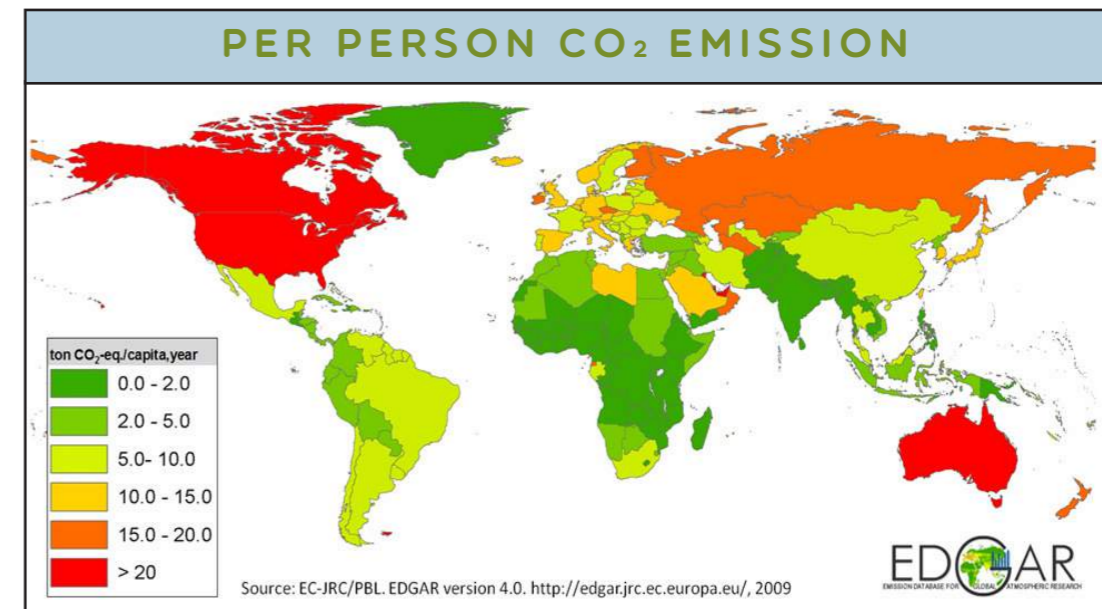




**SESSION 3:**  
Mrs. Lydia Powell, Senior Fellow, ORF

**IMPACT OF CLIMATE CHANGE ON GENDER AND ENERGY**

Mrs. Lydia Powell spoke on the relationship between Gender & Energy, touching upon relevant aspects of both that influenced climate change adaptation and mitigation. While emphasizing the negative role of fossil fuels as drivers of climate change, despite their positive contribution to GDP growth, Mrs. Powell also highlighted the fact that energy generation emitted the most GHG and that renewable energy is a very feasible mitigation tool. She went on to address the meta-narrative of climate change, which proves that about twice as many people suffer extreme deprivation and insecurities of climate variability today, as they did at the end of 19th century; thus reiterating the fact that carbon intensity has had minimal improvement with increased economic activity since 2005. Participants raised questions on the proposal of the recently formed ministry's plan to combine energy, coal and petroleum ministries into one head, even as Mrs. Powell discussed the plan's advantages and flaws.

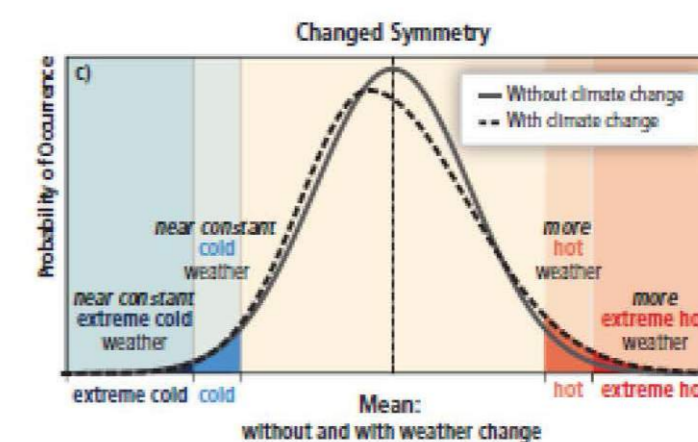
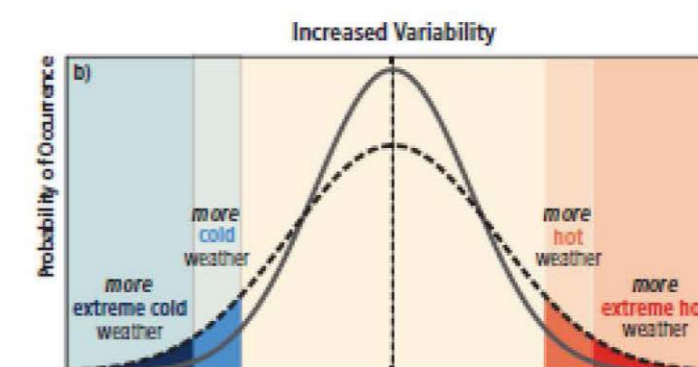
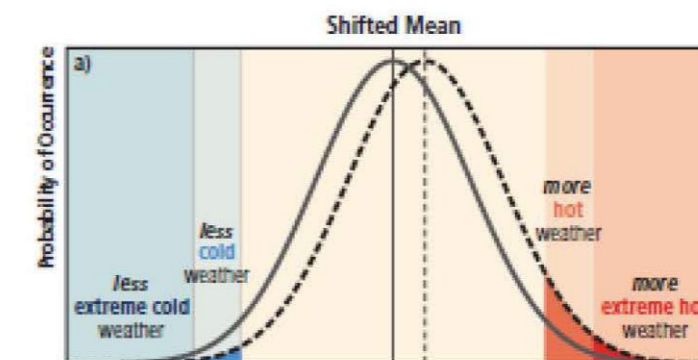
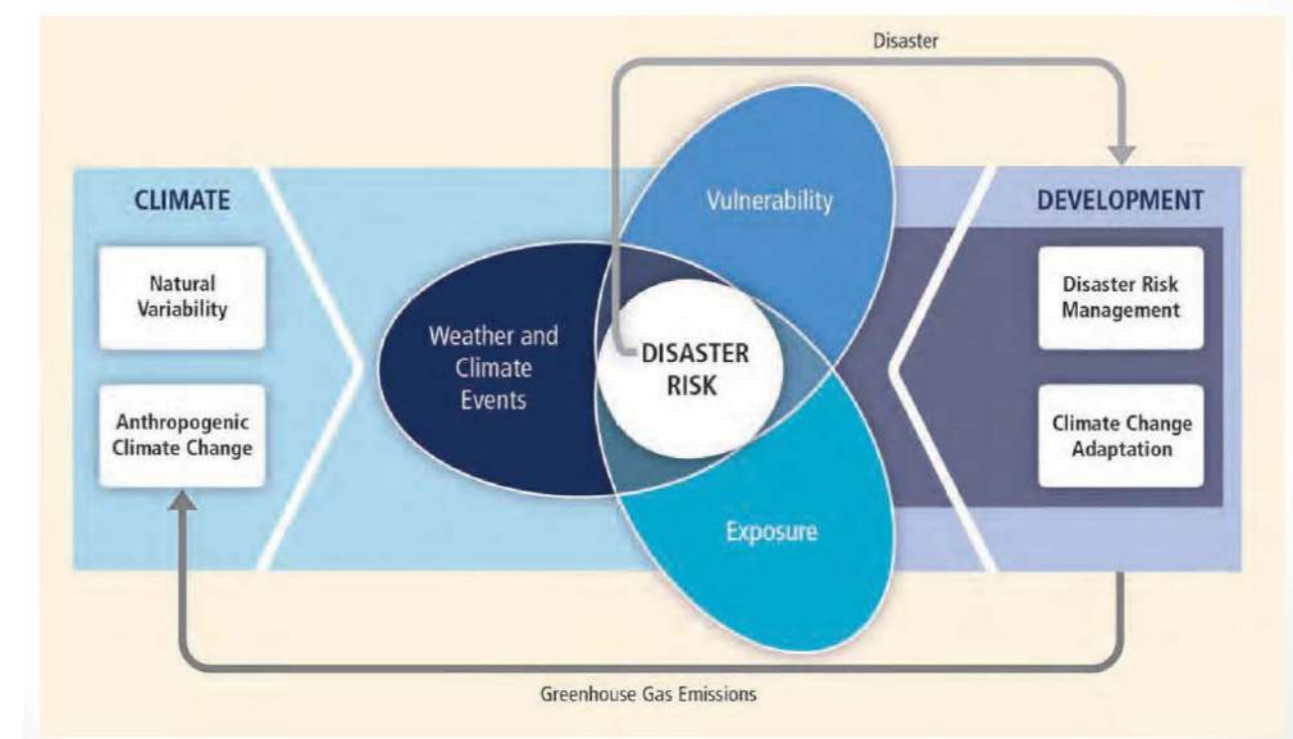




**SESSION 4:**  
Ms. Divya Mohan, Associate Fellow, TERI

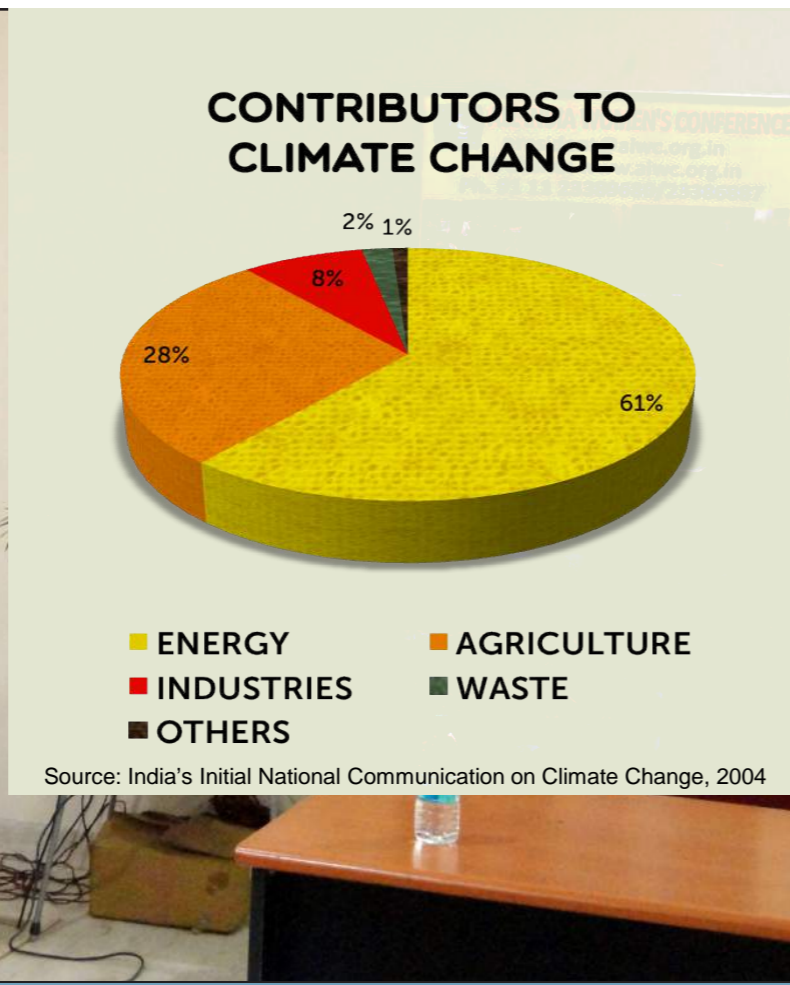
## IMPACT OF DISASTER

Ms. Divya Mohan, Associate Fellow, TERI, took the stage to define how climate change and disaster risk were intrinsically linked, beginning by distinguishing between direct and indirect losses – direct damages could be fixed monetarily, unlike irreversible damages like loss of human life, negative impact on heritage or the ecosystem etc. She stressed that proper development practice, policy and outcomes were critical to shaping disaster risk and any shortcomings in these could increase risk. Pointing out how inequalities influenced local coping and adaptive capacity, thereby posing challenges to disaster risk management and adaptation on a local or national level; Ms. Mohan further proved her case with an example. A study conducted by TERI in the Jalna district of Maharashtra, focused on a village of small and marginal farmers, who suffered low rainfall, water shortage, unsuitable soil conditions and other issues. This scenario reflected the gap and mismatch between top government policy and local needs; and the study went on to show how with public participation, good soil management, construction of ponds and the designing of endogenously-generated responses; more adaptive solutions could be developed. The session ended with a discussion of other traditional methods of disaster risk reduction.





**SESSION 5:**  
Dr. Mamta Dhawan, RM, GALVmed



## LIVESTOCK AND CLIMATE CHANGE

Dr. Mamta Dhawan began by observing our dependence on livestock for agriculture, dairy products and many other needs and then went on to explain how the negative impacts of climate change affect the quality and quantity of feeds and cause an increase in vector disease. This leads to heat stress on livestock, closely followed by behavioural and metabolic changes in the animals, which obviously affects the final quality of dairy products produced. She also pointed out that deforestation was drawing wild animals out of their natural habitats and their inevitable interaction with humans has resulted in nearly 75% increase in zoonotic diseases. Dr. Dhawan proposed a few solutions: the 'onehealth' approach and multi-stakeholders working together in this direction, long-term ecological and epidemiological research on how environmental changes influence diseases; and the promotion of indigenous coping mechanisms. The post-presentation discussion was centred on our bodies' decreasing immunity due to the consumption of genetically grown vegetables; as well as some preventive methods to combat such issues. The participants also sought answers on good food habits and practices; like healthy ways of washing vegetables, the preservation of food in refrigerator and cooking food in specific ways.



**SESSION 6:**  
Ms. Pritha Bhattacharya, GWP

## IMPACT ON WATER

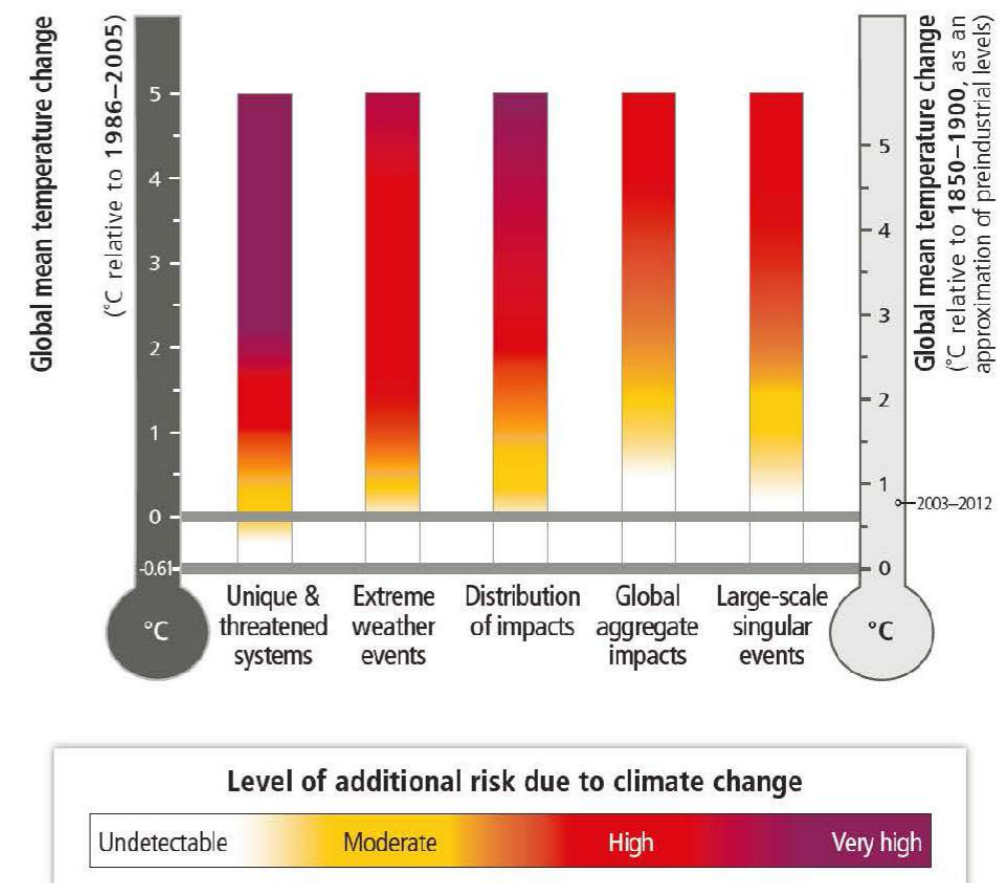
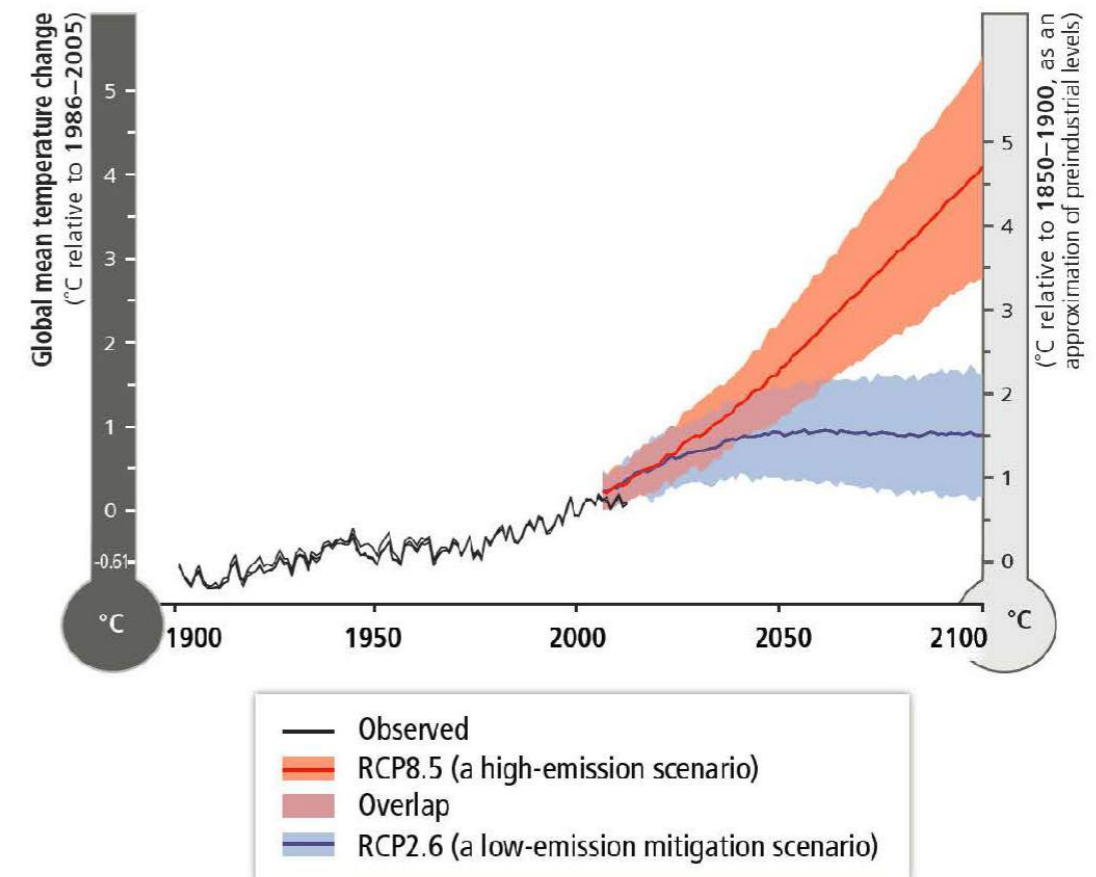
Ms. Pritha Bhattacharya of Global Water Partnership (GWP) started with an introduction to India Water Partnership (IWP), outlining its large contribution to the relief of those adversely affected by climate change. Established in 2001, the primary objectives of the IWP were to resolve interstate disputes on water, promote the use of low-cost water and safe drinking water, highlight the critical issue of states, encourage traditional methods and improve the water vows of South Asian countries. This mission statement was further illustrated with a documentary about a village in Maharashtra that was suffering a severe lack of water until they took matters into their own hands. They resolved their water shortage issues by engaging community participation, influencing government agencies to enforce and implement approved plans; and generating greater awareness amongst the public about water conservation. The documentary screening was followed by a lively discussion on probable solutions to urban water vows, waterborne diseases, mandatory rainwater harvesting policies and public vigilance after the implementation of the same.



**DISCUSSION:**  
Professor P. Dasgupta, IPCC Report

**IPCC REPORT**

The final session of the workshop saw Prof. P Dasgupta, co-author of the recently released IPCC report, succinctly sum up all the significant points and deliberations made by the speakers, in an insightful statement: *“Climate change is a risk multiplier.”* She defined the key concern around climate change as the rise in global temperature from the preindustrial level and proceeded to outline the same in the Indian scenario – a definite decline in the seasonal rainfall, an increase in extreme rainfall particularly in Central India, a shift in production and lastly, an eventual displacement in population. Prof. Dasgupta also highlighted two primary factors under nutrition from reduced food production from poor regions, and the lost work capacity among the poor and vulnerable population. She concluded by explaining how climate change was impacting various spheres of human life, food production, sea life and biological systems throughout the world.





FEEDBACK AND Q&A SESSION



CERTIFICATE DISTRIBUTION



**SNAPSHOT:**  
NATIONAL WORKSHOP - DELHI





**TRIVANDRUM**  
JULY 10, 2014



**ALLAHABAD**  
JULY 26, 2014



**BATALA**  
AUG 2-3, 2014



**MUMBAI**  
AUG 6-7, 2014



**KOLKATA**  
AUG 20-21, 2014

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## REGIONAL WORKSHOPS

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The Regional Workshops were scheduled to be held in the main four zones of India as well as in a rural city that was part of a predominantly agricultural belt. The regional workshops were based on the same module pattern as the national workshop in New Delhi; they too began with Mrs.Kalyani Raj taking the Inaugural Session to focus on MDG review and explain the Post-2015 and UNFCCC process, while the sessions that followed were centred on local issues relating to climate change.



The Trivandrum workshop was inaugurated by the Executive Vice Chairperson of the Council of Science & Technology who, among other things, spoke of the innovative schemes initiated by the Kerala government, particularly for women in the field of science. He reiterated the need for participation by women at the grass root levels of planning climate change policy and implementing it.

One of the Technical Specialists with UNDP Mr.Sarun Savith highlighted the urgent need for every individual to change his current lifestyle; while on a bigger scale, both developed and developing countries should be urged to maintain safeguards, which neither impede their development process nor disturb the available natural resources. Based on the National Action Plan on Climate Change, every state in India has also drafted State Action Plan; and the State of Kerala being a coastal region, plans to develop eco-tourism as a primary industry. This endeavour however, can be greatly impacted by climate change and therefore, must be secured against it.

Mr.Hari Kumar from Department of Energy Efficiency spoke on generating awareness about the more efficient ways of managing available energy, both on a domestic and commercial level. He even suggested a home energy audit to ensure its efficient use.

Dr. Amar Fettle, State Nodal Officer spoke on health and climate change, stressing on the responsibility of every individual to work towards reducing the contributing factors of climate change.

The discussion thereafter, was centred around agriculture and led by Prof. Prakash, who explained how the increase in salinity, the overuse of fertilizers and pesticides and the change over to cash crops, have led to the scarcity of staple food, particularly for the poor. He then outlined coping mechanisms such as a kitchen garden, organic cultivation and terrace farming, to mitigate the impacts of climate change.

The impact of climate change on marine life was also discussed, with Dr. Biju Kumar from the Department of Aquatic Biology & Fisheries stating that marine species had changed their geographical ranges due to the impact of climate change.





**ALLAHABAD**  
Host: AIWC Allahabad City Branch



India's biggest river, the Ganges, flows through Allahabad and has been the main source of water for the entire surrounding area. In the past decade however, there has been growing concern regarding the river's pollution levels; and various efforts have been recommended for its cleaning. The Allahabad workshop focused on this issue among others, with excellent deliberations given by the experts on the subject. The Key Note speaker was Justice Arun Tondon, a retired judge with a long association with the Clean Ganges campaign, who outlined the immediate and essential steps required to reduce the pollution in the river; going on to advocate mitigating measures such as reducing deforestation and instead, planting trees on the riverbank to prevent soil erosion. Dr.Dutta, an environmental scientist, stressed on how the origin of the river shouldn't be disturbed by canals for irrigation, since this increased the threat of disaster. This was followed by a discussion on tribal women, who are faced with an ever-increasing burden on themselves - collecting fodder and fuel under the adverse effects of climate change. Some research scholars who participated in the workshop also presented their views on the Ganges cleaning and the overall impact of the climate change. The workshop was an overall success and was briefly graced by the presence of Member of Parliament Mr.S.S.Gupta and the Municipal Commissioner, who assured all possible support for the cause.

**गंगा की दारुण दशा पर बुद्धिजीवी व्यथित**

अखिल भारतीय महिला परिषद द्वारा कार्यशाला का आयोजन

इसके लिए गंगा की रक्षा करना अत्यंत आवश्यक है। जो पीके पोषण से बढ़ती जनसंख्या से होने वाली मुश्किलों से आगूह किया। पर्यावरणविद डॉ. वैकंटेस दत्ता ने कहा कि पिछले 50 वर्षों से प्रकृति का विनाश हो रहा है। यदि नदी व भूजल में तलमेल सही नही रहा तो स्थिति खराब हो जाएगी। पर्यावरणविद सुरेश भाई ने गंगा सहित दूसरी नदियों के उद्धार स्थल से 150 किलोमीटर तक कोई विकास योजना न चलाने पर जोर दिया। हितैषी सब में शोध छात्रों ने जलवायु परिवर्तन एवं गंगा रक्षा के संदर्भ में व्याख्यान दिया। कार्यक्रम में 'पोलीथिन देश' नामक फिल्म को सौंदर्य का सोवार्पण हुआ। स्वागत पर श्री अश्विनी जैन ने मुख्य वक्ता के रूप में जी बहामुद्दीन धरोहर हमें दी उसे हम खत्म करते जा रहे हैं। गंगा जल में आज भी प्रदूषित पानी छोड़ा जा रहा है। संसद श्यामाचरण गुल ने कहा कि गंगा रक्षा के लिए केंद्र सरकार खाका तैयार कर चुकी है, आने वाले दिनों में उसका अंतर सबके सामने होगा। लेकिन आम आदमी को भी गंगा की प्रदूषित न करने व पेड़ों की रक्षा का संकल्प लेना चाहिए। मुख्य वक्ता कल्याणीसिंह ने कहा कि महिलाओं को घर के साथ समान की जागरूक करना होगा। छोटे-छोटे घरेलू कामों से जलवायु परिवर्तन को रोका जा सकता है। आशा गंधी ने कहा कि हमारी प्रकृति

### गंगा में गिर रहा सात करोड़ लीटर गंदा पानी

अखिल भारतीय महिला परिषद एवं ग्लोबल ग्रीन की कार्यशाला में बोले न्यायमूर्ति अरुण टंडन

इलाहाबाद (क्यूरो)। अखिल भारतीय महिला परिषद एवं ग्लोबल ग्रीन के संयुक्त तत्त्वधान में 'जलवायु परिवर्तन की चुनौती एवं समाधान' गंगा के किनारे संदर्भ में विषय पर रजिस्टर की कार्यशाला आयोजित की गई। एनसीजेडसीसी सभागार में हुई कार्यशाला में शोध छात्रों ने जलवायु परिवर्तन एवं गंगा के संदर्भ में विचार प्रस्तुत किए। मुख्य अतिथि न्यायमूर्ति अरुण टंडन ने कहा कि तत्कालीन सात करोड़ लीटर गंदा पानी अकेले गंगा नदी में जा रहा है। बिईबना यह है कि सुप्रीम कोर्ट और हाईकोर्ट की

50 वर्षों में प्रकृति के अत्यधिक दोहन से बढ़ी समस्या पर्यावरण वैज्ञानिक डॉ. वैकंटेस दत्ता ने कहा कि पिछले 50 वर्षों में पलन कितना हो रहा है, सबके सामने है। नेशनल मेंबर इंजल कलाहमेट चैन कल्याणी राज ने कहा कि जिस प्रकार एक रिश्तित महिला पूरे परिवार को शिक्षित बना सकती है, उसी तरह हर क्षेत्र में महिलाओं का सकात्मक विकास उन्हें और समाज को और विकसित करता है। छोटे-छोटे कामों से भी जलवायु परिवर्तन को रोका जा सकता है। जो पीके पोषण से कहा कि

जलवायु परिवर्तन की चुनौती एवं समाधान विषय पर नैतिकता में शोध का विमर्शन करते अतिथि।

जनसंख्या पर नियंत्रण न किया गया तो गंधी परिवार होंगे। मुख्य वक्ता पर्यावरण वैज्ञानिक डॉ. वैकंटेस दत्ता ने कहा कि पिछले 50 वर्षों में प्रकृति का विनाश दोहन किया गया, उनका पर्यावरणविद सुरेश भाई ने कहा कि नदियों के उद्धार से लेकर 150 किलोमीटर तक

दूर तक किसी भी तरह की विकास योजना नहीं चालू की जानी चाहिए। अशा गंधी ने भी विचार व्यक्त किए। पीके पर पॉलीथिन देश नामक फिल्म को सौंदर्य का अन्वेषण हुआ। सुरेश भाई को संस्था की ओर से नदी मित्र पुरस्कार प्रदान किया गया। विरिष्ट अतिथि सांसद श्यामाचरण गुल थे। अध्यक्षता कर रहे जलवायु गंगा ने अतिथियों का स्वागत किया। इसमें मनोज श्रीवास्तव, सुधाश राठी, रजनी गुलाटी, संजय पुर्याधी, डॉ. एपी सिन्हा, डॉ. उमा शर्मा, कामिनी जैन, साधना, रजन, विनोद, रामेश्वर सिंह जीरा, राजेश अतिथि अतिथि थे।





**MUMBAI**  
Host: AIWC Mumbai Main Branch

After the initial introduction to the concept of the workshop and awareness about the SDG and UNFCCC processes by Mrs.Kalyani Raj, the first session by Dr. Kulkarni from India Water Partnership focused on water issues. He spoke about monsoon variability over recent years, which is resulting in drought situation in several locations. He discussed case studies undertaken by IWP in several places, which found that with the public participation, water solutions were locally actioned without waiting for government interference. He reiterated the need for recharging wells, preservation of water bodies and efficient water management.

Mr.K.Narayanan, an IIT Professor, talked about the socioeconomic impact of climate change, particularly on women. He explained how an IIT study, conducted in one of the states where seven villages had disappeared due to inundation of water between 2001-08, had found that in any such disaster situation, there formed an extra burden on women to feed and take care of the family. Quite a number of vulnerable families went hungry for days because the women were not able to venture out for firewood during heavy rains or floods. Some other key findings of this study were that women-led households were in a better situation to face challenges; and that in general, women were able to cope better and more efficiently with a disaster situation.



The study also reiterated a well-known fact: the poorest of the poor always end up having to fight for their survival, even during normal cold weather. The extremity of climate change, therefore, poses a dangerously strenuous burden on them.

Mr.Parthasarathy took the stage to speak on adapting to climate change, emphasizing the need for human beings to surrender to the power of nature and be humble towards it. He talked about women-led adaptation skills, particularly in the agriculture sector, quoting how women farmers had been able to save their crops and combat the negative impacts of soil erosion by applying traditional knowledge. He went on to say that while assessing the vulnerability of any location, the government needed to take into the account the adaptation skills of the resident too, and not just the exposure to risk alone. He also mentioned migration, livelihood diversification and alternate professions as some other traditional adaptation techniques.

In the concluding session, Mr.M.K.Narayana, another Professor from IIT, spoke about mitigation measures through solar and alternate energy. He presented a project that IIT has undertaken – distributing free solar lanterns to school children, as well as training women in repair of solar equipment.



The host branch involved the Environment Society of India for the Batala workshop and their members highlighted the various mitigation and adaptation measures propagated by the Society to combat climate change. A Professor from the Agriculture Institute described how the crop patterns were changing and the farmers were coping with the soil erosion, touching upon the issue of migration due to consistent crop failure. There was also a discussion about health, the particular impact of climate change on women and the need for a lifestyle change. The workshop was participated by students from the College of Nursing, who interacted very actively and even performed a small skit to convey how each one of them would try to take up small scale mitigation steps as an individual mission.





The Kolkata workshop had an array of wonderful speakers through the course of it. The first day saw Environmental Economist Ms.Indrila Guha begin her presentation with a tribute to environmentalist Wangan Mathai. She spoke about how consumers are driven by the market at the cost of available resources and stressed the need to educate the youth on issues of climate change, as well as motivate them to be conscious of depleting resources. Switch to CFL, use public transport, use energy efficient electric appliances and be a smart water consumer, were just a few of the recommendations she urged the audience to adopt, as individuals.

Dr.J.Chatterjee, a Kolkata University professor, came on next to define and offer theoretical explanations for climate change and the Green House effect, Chloro Fluro Carbons (CFC), smog pollution, acid rain and the utility of ozone layer. He also reiterated the need to add an organic component to chemical fertilizers.

Following this, Dr.D.Ghosh, also an Environmentalist, took the stage to speak about the need for preservation of ecosystem and the rivers.

Day two of the Kolkata workshop began with The Mayor of Kolkata Council, Mr.Debasis Kumar, kicking off the session with his thoughts on maintaining the balance between urbanization and environmental conservation. He envisaged a greener Kolkata with the cooperation of residents and hoped that in future, a country may be categorized as a 'powerful nation' on the basis of the greening processes undertaken by it, rather than the size of its investment in nuclear weapons. He also suggested that organizations like AIWC, campaign against the use of plastic bags below 40 microns.

Mr.Nandan Mall, an authorized e-waste recycle agent, presented a real eye-opener for many who lacked knowledge about the damages caused by wrong disposal of old electronic items. His highly informative presentation had the full attention of the audience, when they learned that the world generated around 50 million tons of e-waste a year, of which India was responsible for around 1.25 tonnes. What further shocked them was that most of this e-waste was being sold to unauthorized waste collectors resulting in human exposure to chemicals like lead, mercury and cadmium, which harms the nervous system and impairs the senses. He thereby advised the disposal of e-waste strictly only through the authorized agents as listed by the Pollution Control Board of India.

# CONCLUSION

The workshops were successful in identifying specific impacts of climate change as well as discuss probable and practical solutions. In fact, the participants themselves were able to come up with simple and handy methods through which they could contribute to energy and water conservation, generate awareness among wider public and contribute effectively to combat adverse impacts of climate change. All together, the workshops impacted around five hundred women, through whom we hope to further reach many more. The key findings from the entire event are given below, followed by several recommendations based on the invaluable feedback of all the workshop participants.

## KEY FINDINGS

- Several villages in western and eastern India, which were once rich in natural resources are now facing a draught-like situation due to monsoon variability.
- Seven villages in Kendrapara district of Orissa have disappeared as a result of the rise in sea level and water inundation.
- Vulnerability assessment seldom forms a part of disaster management plans.
- DRR resilience needs to be assessed before identification of vulnerable zone
- Energy poverty is missing from the overall poverty index.
- The poorest of the poor, like the homeless, already suffer during extreme weathers; climate change effects will add to their woes and could even prove fatal.
- With the growing need for material development and consumption, man's humility towards nature is fast reducing with adverse consequences.

- Women-led households adapt to climate change more efficiently.
- During any post-disaster situation, most rehabilitation plans are not gender sensitive.
- Unplanned and hasty adaptation projects like 'bund' in one location, can become the very cause of disaster in other locations.
- Due to gender-based violence and other fears, people choose risks during any post-disaster situation.
- In spite of the Samata Judgement, the privatization of natural resources continues.

## RECOMMENDATIONS

- ▼ Build the capacity of women to participate equally with men in all development and climate change policies, plans and implementation strategies.
- ▼ Endeavour to influence government to make commercial establishments more environment-friendly.
- ▼ Identify strategies to make government and other responsible authorities more accountable.
- ▼ Resolve to take climate change mitigation as an individual responsibility.
- ▼ Make the awareness of climate change an integral part of the syllabus in both school and college education.
- ▼ Adopt 'each one teach one' approach to raise awareness about climate change.
- ▼ Empower public participation forums to urge government agencies to form sustainable policies and ensure the effective implementation thereof.
- ▼ Encourage car pools to reduce vehicular pollution and fuel wastage.
- ▼ Encourage intervention by civil societies in rural areas to reduce deforestation.
- ▼ Adopt a neighbourhood policing approach for water conservation and push authorities to inflict penalties for wastage of water.
- ▼ Reduce the cost of solar panels to affordable levels to promote their use.