



**DEPARTMENT OF SCIENCE, TECHNOLOGY & ENVIRONMENT**  
GOVERNMENT OF TRIPURA



**Department of Science & Technology**  
Ministry of Science & Technology  
Government of India

**NMSHE** NATIONAL MISSION FOR  
SUSTAINING THE HIMALAYAN  
ECOSYSTEM



वसुधैव कुटुम्बकम्

ONE EARTH • ONE FAMILY • ONE FUTURE

## **Change for Climate Change**



**E-Newsletter**  
April – June 2023

**Tripura Climate Change Cell**  
**Department of Science, Technology & Environment**  
**Government of Tripura**

# “There’s no going back from some changes in the climate system...”

➤ Recent changes in the climate are widespread, rapid, and intensifying, and unprecedented in thousands of years.

➤ It is indisputable that human activities are causing climate change, making extreme climate events, including heat waves, heavy rainfall, and droughts. more frequent and severe.

➤ Climate change is already affecting every region on Earth, in multiple ways. The changes we experience will increase with further warming.

CO2 Concentration Highest



Sea Level rise



Arctic Sea ice area Lowest



Glaciers retreat



Extreme heat



Heavy Rainfall



Drought



Fire weather



Ocean Acidifying



Five key elements i.e.

*‘Panchamrit’, to deal with the challenges of Climate Change.*

*First- India will take its non-fossil energy capacity to 500 GW by 2030.*

*Second- India will meet 50 percent of its energy requirements from renewable energy by 2030.*

*Third- India will reduce the total projected carbon emissions by one billion tones from now till 2030.*

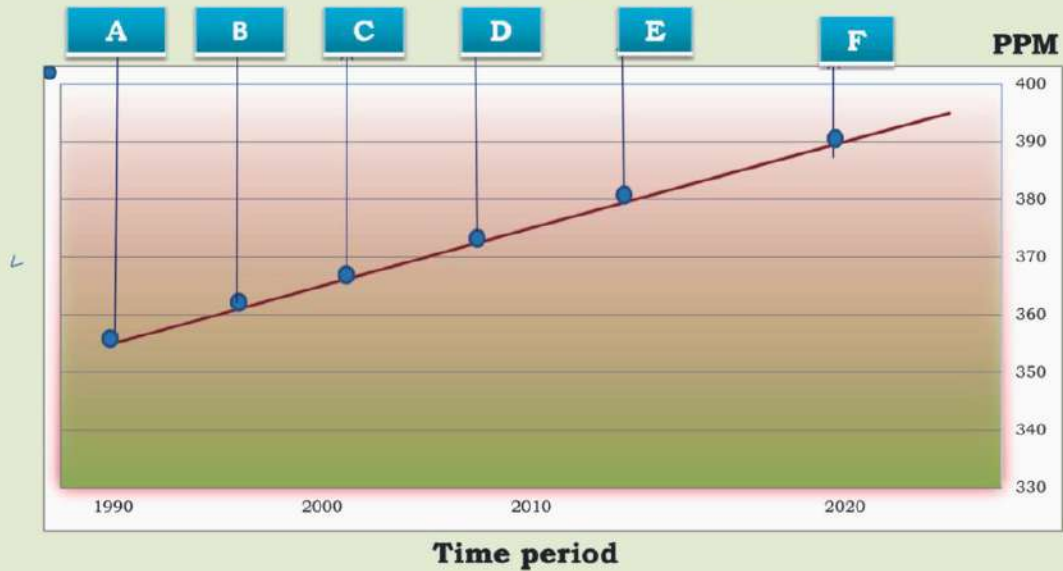
*Fourth- By 2030, India will reduce the carbon intensity of its economy by more than 45 percent.*

*And fifth- by the year 2070, India will achieve the target of Net Zero.*

*These ‘Panchamrits’ will be an unprecedented contribution of India to climate action.” – Hon’ble Prime Minister Narendra Modi.*



## IPCC key findings(Since 1990)



**A: IPCC 1<sup>st</sup> Assessment Report (1990)-Emissions resulting from human activities is substantially increasing the atmospheric concentrations of the greenhouse gases.**

**B: IPCC 2<sup>nd</sup> Assessment Report (1995) -The atmospheric concentration of greenhouse gases has grown significantly. These trends can be attributed largely to human activities.**

**C: IPCC 3<sup>rd</sup> Assessment Report (2001)-There is new and stronger evidence that most of the warming observed over the last 50 years is attributable to human activities.**

**D: IPCC 4<sup>th</sup> Assessment Report (2007)-Warming of the climate is unequivocal. Most of the observed increase in global temperatures since the mid 20th century is very likely due to increase in GHG gases.**

**E: IPCC 5<sup>th</sup> Assessment Report (2014) - Human influence on the climate system is clear and recent anthropogenic emissions of greenhouse gases are the highest in history.**

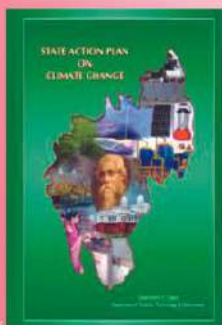
**F: IPCC 6<sup>th</sup> Assessment Report (2021)-It is unequivocal that human influence has warmed the atmosphere, ocean and land.**



The State Action Plan on Climate Change (SAPCC) is a comprehensive plan that outlines strategies and actions to address the impacts of climate change in a particular state. In the case of Tripura, the SAPCC, Tripura was first prepared in 2012 and approved by the Expert Committee and National Steering Committee on Climate Change of the Ministry of Environment, Forest & Climate Change, Government of India.

However, in line with the Nationally Determined Contributions (NDC) and Sustainable Development Goals (SDG), the MoEF & CC recommended that the SAPCC for Tripura be revised. To accomplish this task, CTRAN Consulting Ltd was entrusted with the responsibility of revising the SAPCC for Tripura.

The revision process will likely involve a thorough assessment of the current climate change situation in Tripura, as well as an analysis of the state's vulnerabilities and adaptation needs. Draft revised SAPCC already submitted to MoEF & CC for their concurrence. Overall, the revised SAPCC for Tripura is expected to provide a roadmap for sustainable development that integrates climate change considerations into all relevant sectors of the state's economy. This should help Tripura to achieve its climate change goals while also promoting economic growth and social development.



**Fig-Cover page of SAPCC & draft Revised SAPCC**

Tripura Climate Change Cell (TCCC) Participated in "The 33<sup>rd</sup> Tripura Industries & Commerce Fair" held at 'Hapania International Fair Ground, Agartala between 10<sup>th</sup>-25<sup>th</sup> December, 2022. The fair provided a platform for the TCCC to reach out to a wider audience and raise awareness about the importance of climate change adaptation and mitigation in the state of Tripura.



**Fig-TCCC's stall in 33<sup>rd</sup> Industries & Commerce fair, 2023.**

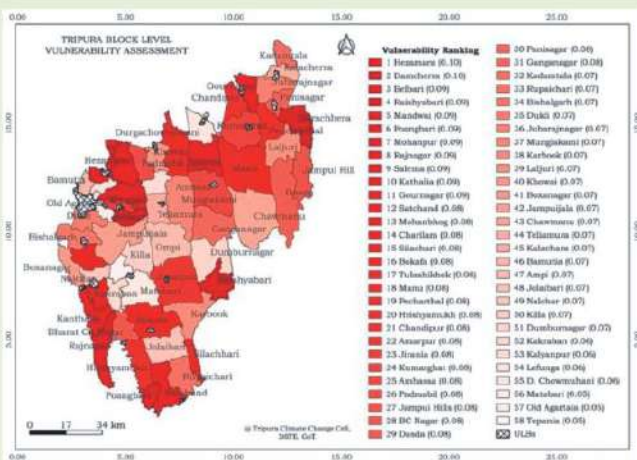
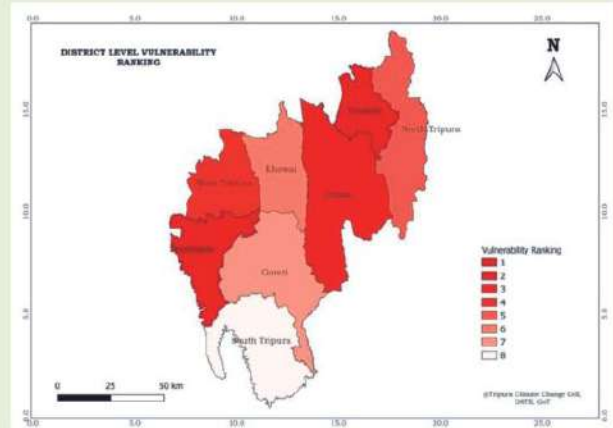
Preparation of project Concept Note is going on for National Adaptation Fund for Climate Change (NAFCC). Field visit along with personnel from NABCONS (the National Implementing Agency) for verification of sites and adjoining community which will be benefited) under the project of National Adaptation Fund for Climate Change (NAFCC).



**Fig- Site inspection in Mungiakami RD Block (one of the 12 aspirational Blocks) in Khowai District**



The IPCC-AR5 emphasizes that the initial action towards adapting to future climate change is to decrease vulnerability and exposure to current climate variability. Conducting a vulnerability assessment under current climate risks can reveal the existing weaknesses of natural or socioeconomic systems and their underlying causes. In line with this, a vulnerability assessment was carried out at the district level for eight districts of Tripura, using a common framework of ten indicators related to agriculture, biophysical factors, institutional infrastructure, health, and socio-economic livelihood practices. This assessment aimed to identify the vulnerabilities of these districts to climate change and provide information for developing appropriate adaptation measures.



As a follow-up to the district level vulnerability assessment, the Tripura Climate Change Cell (TCCC) carried out a more detailed study at the block level. This micro-level assessment involved identifying eight indicators and collecting data from 58 blocks in Tripura. Based on the collected data, a comprehensive vulnerability ranking of all 58 blocks was formulated, and a socioeconomic vulnerability map was produced as the study's output. The findings indicate that Hezamara block is the most vulnerable while Tepania RD block is the least vulnerable. This information can help policymakers and stakeholders in designing and implementing targeted adaptation measures to reduce vulnerability to climate change impacts in Tripura.



### **NEW INITIATIVES & UPCOMING EVENTS-**

1. District level Risk Assessment using **CORDEX**, **SPI** indices as per **IPCC** guidelines.
2. Hands-on training of students at University Level on Climate Change.
3. Training Programmes & Workshops for stakeholders including Govt. officials, researchers for adaptation of LiFE (Lifestyle for Environment).





### **Contact us-**

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**The Tripura Climate Change Cell has taken initiatives to celebrate environment-related days in schools, colleges, universities, and urban local bodies to create awareness among the younger generation. These initiatives involve around 200 government officials and colleges, promoting sustainable practices to reduce the state's carbon footprint and become a model for other states to follow.**

