Workshop on Integrating Climate Action in Development Planning of Puducherry Union Territory - 05-06th May 2022

Addressing U.T. of Puducherry Capacity Building Needs and Knowledge Management

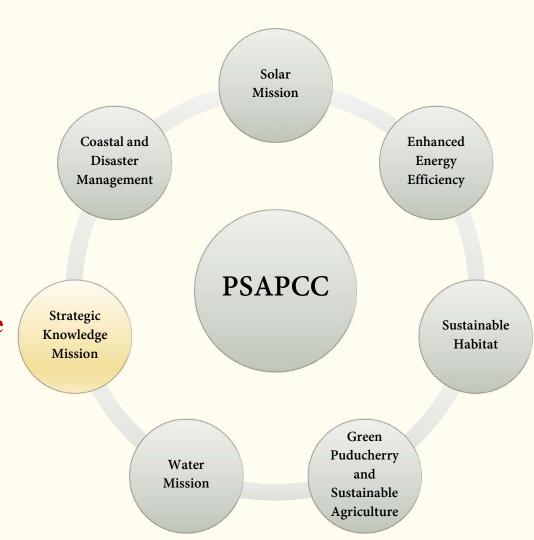


GOVERNMENT OF PUDUCHERRY DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT PUDUCHERRY CLIMATE CHANGE CELL

■ ONE OF THE EIGHT MISSIONS OF U.T OF PUDUCHERRY STATE ACTION PLAN ON CLIMATE CHANGE (PSAPCC)

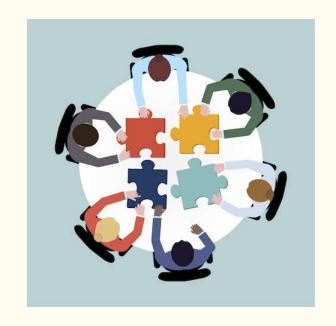
Mission on Strategic Knowledge on Climate Change

(support mission to other missions)



Strategic Knowledge Mission

- Mission recognizes that Knowledge creation, management, dissemination and exchange will be critical and central to the successful implementation of the SAPCC
- Mission seeks to build a vibrant and dynamic knowledge management system on climate change issues in the UT, that would inform, plan and support local actions for responding effectively to Climate Change Adaptation and Mitigation with involvement of expert contributions and stakeholder inputs.



Focus of the Mission

- Build the capacity of key government departments and agencies to understand climate change concerns and integrate climate change mitigation and adaptation actions in developmental planning and policies.
- Build the capacity of key government departments and agencies on accessing the various climate funds.
- Strengthening institutions for climate change capacity building and knowledge management
- Building Network of Climate Change Knowledge Institutions.
- Develop a comprehensive knowledge management portal on climate change related issues and disseminate information in systematic manner.
- Awareness Programs and Training to the Government agencies, NGOs, Students and public on Climate Change concerns and strategies.
- Establishing a Climate Change Cell in the UT to create awareness, monitor progress and coordinate among various agencies to share knowledge and implement the state action plan for combating climate change.



PUDUCHERRY CLIMATE CHANGE CELL

- In Puducherry Union Territory, various mitigations and adaptation actions and initiatives have already been undertaken by various agencies.
- Different level of knowledge exists with various institutions on climate change mitigation and adaptation on different subjects and sectors.
- There is a need to integrate this scattered knowledge for planning future actions.
- It is, therefore, important to have a center where all the available knowledge and information on climate change can be pooled together so that the users along with the government bodies can effectively make use of such climate related information and products for mainstreaming climate change in development planning and policies.
- Keeping this in view, Puducherry Climate Change Cell (PCCC) has been established as a central repository of information and knowledge products on climate change.
- PCCC also acts as support agency in formulation, implementation and monitoring of the State Action Plan on Climate Change.



PUDUCHERRY CLIMATE CHANGE CELL

PCCC is established in the Department of Science, Technology and Environment, Puducherry with the support of DST, GoI under National Mission on Strategic Knowledge for Climate Change (NMSKCC)

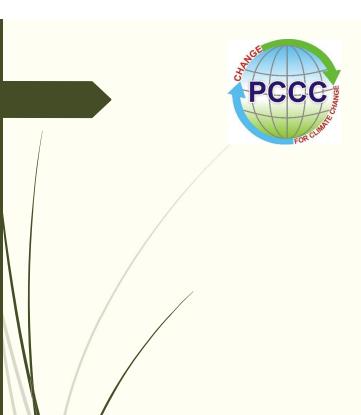




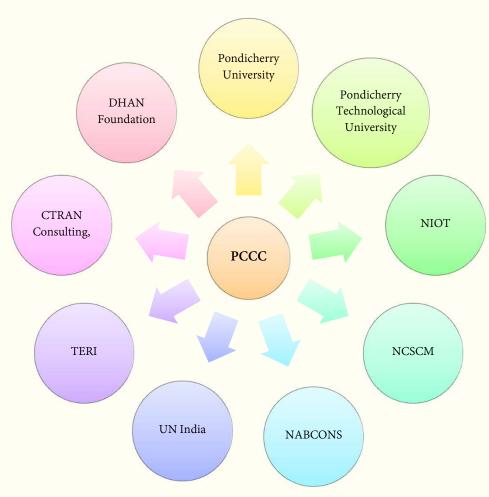
CORE FUNCTIONS OF PUDUCHERRY CLIMATE CHANGE CELL

Knowledge Management

Awareness and Training Supporting
Climate
Actions



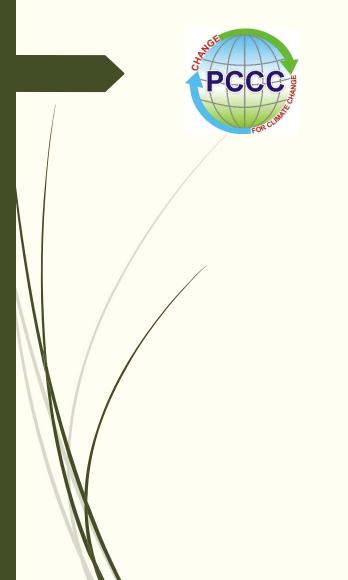
OUR KNOWLEDGE PARTNERS



CLIMATE CHANGE KNOWLEDGE MANAGEMENT

Climate Change Knowledge Management

- Address the issues pertaining to the assimilation and access of relevant up-to-date data on climate and climate change
- Create Knowledge Repository and Enhancing Knowledge Environment there by Bridging the Gap
- Improving Knowledge Access &Transfer; Managing Knowledge as an Asset
- Strengthening the R&D Capacity in Climate Change field
- Mainstreaming Climate Change concerns in the policies and programmes



KNOWLEDGE MANAGEMENT ACTIVITIES

Knowledge Creation Knowledge Knowledge Collection Dissemination

Knowledge Creation – Research Papers

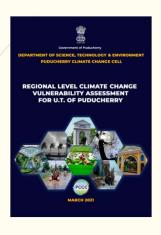
Three Research Papers has been published

- Case study of GHG reduction and sustainable solutions in a Chemical Industry with reference to the climate change action plan of the Puducherry region, India, Dwarakanath Madahva Rao, et al., Journal of Applied Science and Engineering Methodology, 2016.
- Sector-wise GHG Inventorization for Union Territory of Puducherry with Special Reference to Agriculture Phase I, Rao D.M, et al., International Journal of Tropical Agriculture, 2016.
- A Review on Studies performed to Assess the Impact of Climate Change and Anthropogenic Activities on the Coastal Ecosystem at Puducherry, India, Smitha. R, et al., International Knowledge Press, 2019.

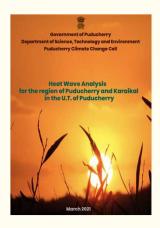
Two Research Papers under review

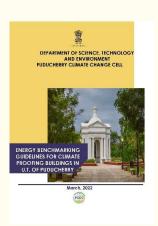
- Trend Analysis of Air Quality in Puducherry Region in the South Eastern Coast of India
- ► Heat Wave analysis for the region of Puducherry and Karaikal in the U.T. of Puducherry

Knowledge Creation – Reports / Monographs

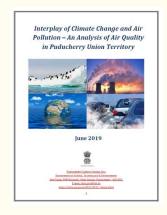




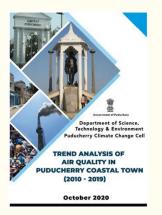




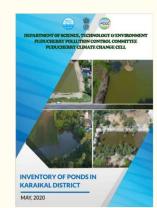












Knowledge Creation – Reports / Monographs

- Climate Profile of U.T. of Puducherry
 - **District wise observed climate change** (temperature, rainfall and its extremities) during the past decades 1976 -2020 using IMD data
 - District wise future climate scenarios Downscaling and modelling high resolution future plausible climate change for Puducherry the latest Representative Concentration Pathways under AR5 Scenario (TERI)
- Climate Change Vulnerability Assessment
 - District wise climate change vulnerability assessment using the common framework developed by DST, GoI and Swiss Agency of Development and Cooperation (SDC) Project
 - Sectoral climate change **vulnerability assessment** viz., agriculture, forestry and biodiversity, coastal, energy, suitable habitat and water sectors (TERI)
- Long term trend analysis of Air Quality in Puducherry (2010 2020)
- ► Heat Wave Analysis for region of Puducherry and Karaikal in the U.T. of Puducherry (2000 2020),

Knowledge Collection

- Data Bank and a knowledge repository for storing and retrieving climate change information at the UT level to be useful to all stakeholders
 - Collection of knowledge resources
 - Case studies on climate change mitigation and adaptation best practices
 - Weather Monitoring Station established with support of DST, GoI and data is uploaded in PCCC website
 - Meteorological data from 1976 obtained from IMD
 - Inventory of all the tanks and ponds completed.
- Establishing Networks and strategic partnerships with institutions and agencies

Knowledge Dissemination

Climate Change Knowledge Portal launched on October 31, 2018 with various data sets like

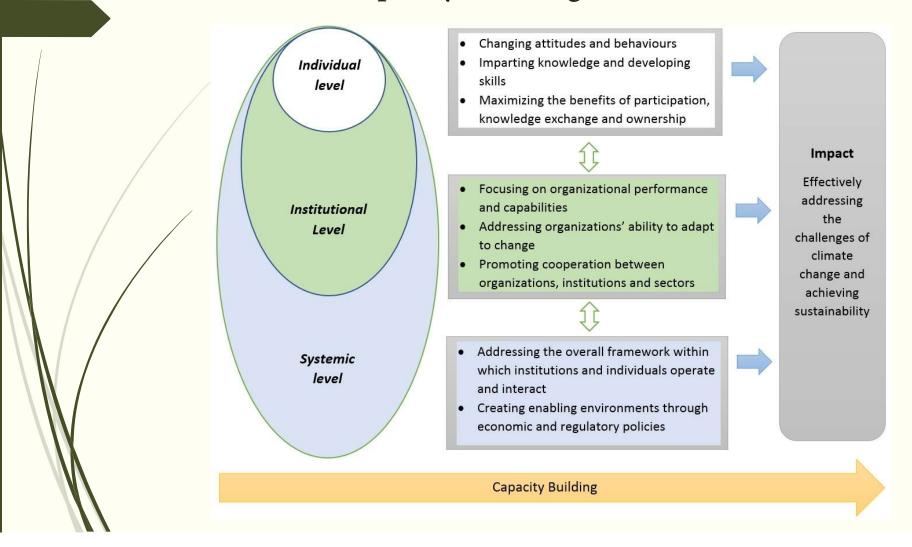
- Important environmental statistics of the region,
- Climate trend analytics
- Vulnerability analysis
- GHG Inventory
- SAPCC related information
- Weather monitoring desk
- Climate change projects and programs undertaken
- Reports and research papers published at regional, national and international level
- Current news and articles
- Policy matters



https://dste.py.gov.in/PCCC/

CAPACITY BUILDING

Level of capacity-building activities



Individual level

- Climate Change education for School students
- Climate Change awareness program for General Public
- Training Program on Waste Management, Water Conservation
- Climate resilient Agriculture practices, Solar energy to concerned stakeholders
- Awareness through mass media, pamphlets, etc.

Institutional level

- Training / Workshops / Webinars on main streaming Climate Change, Project formulation, Funding Mechanisms, etc. for Government Departments and Agencies
- Strengthening capacity of PPCC for collecting baseline data on Air and Water Quality & Weather conditions
- Network of Knowledge Institutions and Developing Knowledge Products
- Web based Knowledge Portal

Systemic level

- Preparation of Revised SAPCC
- Monitoring and Evaluation framework for SAPCC implementation
- Other Policy interventions and revisions
- Formulation and Implementation of Climate Change Mitigation and Adaptation projects

Climate Change Awareness Programme for School Students



Puducherry Climate Change Cell is conducting Climate Change Awareness Programmes for the school students from 9th to 12th standard. About 12 schools are covered every month.

Climate Change Awareness Programme for School Students

Objectives:

- To create awareness on Climate Change causes, impacts, mitigation & adaptation actions
- Encourage changes in their attitudes and behavior to enable them to act in bringing up a Climate sustainable environment.
- To introduce them with the idea of "green good deeds" to be practiced by individuals and "Green Protocol" to be followed by schools.
- > 128 programs have been conducted so far reaching out to a total of 10455 students in Puducherry.





Capacity Building Programme for tank users and farmers

Programme was conducted under the NAFCC project "Integrated Surface water management through Rejuvenation of 25 tanks and 32 village ponds for Climate Change Adaptation in Puducherry".



Workshop on "Climate Change Strategies and Finance Mechanisms"

- Conducted at Karaikal for Government officials, academicians and NGO's.
- Designed to share information about best practices and climate change funds and help government agencies build capacity to access the existing pool of climate change finance from various sources.
- Brain storming session conducted at the end of the training to identify suitable project proposals for Karaikal region for funding under NAFCC / GCF schemes.





Climate Change Webinar Series

13 Webinars were organised as a part of the **Climate Change Webinar Series** for various key stakeholders viz. Government officials, Academicians, Students, NGOs and General Public:

- Mainstreaming Climate Change into Development Policies and Strategies
- > Implementation of INDCs: Advancing Mitigation and Adaptation Actions for Climate Change
- Climate Change: Net Zero Emission Pathways
- Water Mission: System to Monitor and Evaluate Performance and Socio-Economic Impacts of Water Resource Management Projects
- Climate Modelling and Climate Change Projection for the U.T. of Puducherry
- Climate Change Vulnerability Assessment for the U.T. of Puducherry
- Climate Change and Biodiversity
- CO₂ Sequestration and Climate Mitigation An Industrial Orientation
- Community Based Adaptation to Climate Change through Nature based Solution for Coastal Zones in India
- > Earth Day: Restore our Earth
- Climate Change Finance Mechanism
- Carbon Credit Mechanism

Training Programs

■ 108 Training Programmes have been conducted in association with various agencies on climate change related topics with 5331 participants.

Rejuvenation of Tanks and Ponds in the region of Puducherry under NAFCC

- PCCC is the PMU for implementing the "Integrated Surface Water Management through rejuvenation of Tanks and Ponds for Climate Change Adaptation in U.T. of Puducherry" implemented under NAFCC funding.
- 49 Irrigation Tanks and 186 Village Ponds are being rejuvenated and one mini lake is newly formed under the project for climate proofing of water sector.



SAPCC

- PCCC is presently preparing the revised SAPCC for U.T. of Puducherry in synergy with the goals of India's Nationally Determined Contributions (NDC) submitted under Paris Agreement and other recent scientific assessments and projections on global warming; vulnerability; and impacts
- PCCC works in association with 18 Government Departments and Agencies for the revision of SAPCC.
- The draft SAPCC 2.0 is expected to be ready by June, 2022.



