

# Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

## Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

Government of India  
Ministry of Environment, Forest & Climate Change  
(EI Division)

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### Annual Progress Report (APR)

#### Factsheet of 2022-23 (As on 31-March-2023) on Activities of IITM-EIACP PC-RP, Pune

1.	<b>Name of Host Organization:</b>	Indian Institute of Tropical Meteorology (IITM), Pune
2.	<b>Assigned Subject Area:</b>	Atmospheric Pollution and Climate Change
3.	<b>Date/Month/Year of establishment Of EIACP Centre:</b>	10 <sup>th</sup> Feb 2003
4.	<b>Name and designation of EIACP Coordinator (2021-22):</b>	Dr. B S Murthy, EIACP Coordinator & Scientist-F
5.	<b>Has the Host Organization Constituted an Advisory Committee for guiding the activities of the Centre?</b>	Yes
	<b>Composition of the Advisory Committee:</b>  (Select YES or NO: if YES kindly fill the right column space; if NO kindly leave it blank)  <input checked="" type="radio"/> YES <input type="radio"/> NO	<ul style="list-style-type: none"><li>• Dr. B S Murthy, Scientist-F , Indian Institute of Tropical Meteorology, Pune E-mail: <a href="mailto:murthy@tropmet.res.in">murthy@tropmet.res.in</a></li><li>• Dr. Chhemendra Sharma- Committee Member Sr. Principal Scientist, Radio &amp; Atmospheric Sciences Department, National Physical Laboratory(NPL), Delhi E-mail: <a href="mailto:csharma@nplindia.org">csharma@nplindia.org</a>, chhemendrasharma@gmail.com</li><li>• Dr (Mrs.) N. S. Rajurkar –Committee Member, Former Professor &amp; Head Department of Environment Sciences, Savitribai Phule Pune University, Pune E-mail: <a href="mailto:rnilima@rediffmail.com">rnilima@rediffmail.com</a></li><li>• Dr. Saroj Kumar Sahu- Committee Member Assistant Professor, Utkal University, Bhubaneswar, Odisha E-mail: <a href="mailto:saroj.bot@utkaluniversity.ac.in">sarjoj.bot@utkaluniversity.ac.in</a>, <a href="mailto:sarjoj.utkaluni@gmail.com">sarjoj.utkaluni@gmail.com</a></li></ul>

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

**Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"**

6.	Current EIACP Staff Structure:						
	Name	Position held	Qualification and Experience	Joining Date in EIACP Centre	Joining Date in Current position	Leaving Date(if applicable)	2021-22 Emoluments drawn (Rs.)
							Monthly      Annual
Dr. Priyank Nimje	Program Officer	PhD in Ecology	21/02/2022	21/02/2022	NA	46,690/-	1,59,650/-
Mr. Gaurav P. Shinde	Information Officer	MBM (CM)	27/01/2014	01/02/2019	NA	42000/-	4,92,093/-
Ms. Bhagyashri Katre	I.T. Officer	M. Sc. Environmental Sciences	08/05/2019	08/05/2019	NA	34,000/-	3,86,806/-
Ms. Sapna Taral	Data Entry Operator	MCA	21/02/2022	21/02/2022	NA	16,000/-	1,88,965/-
<b>TOTAL</b>							<b>12,27,514/-</b>

7.	Mandate of the Host Organization	Mandate of the EIACP Centre
	Basic research on Ocean-Atmosphere Climate System for improvement of Weather and Climate Forecasts including hardcore multidimensional interactive earth system modeling and observational experimental measurements; Publishes fundamental research papers.	Systematically collect, compile and disseminate data on "Atmospheric Pollution and Climate Change" which includes data on air pollution, climate change, meteorological parameters, acid rain, extreme events and emissions etc. This data will be of immense use to several research organizations and other stakeholders. To conduct two courses under 'Green Skill Development Program'. To be involved in the Mission LiFE (Lifestyle for Environment). To develop national and international collaboration for knowledge exchange and skilling and facilitating attainment of the SDGs. To facilitate transition to environmentally conscious futuristic citizens including awareness among public/communities on environment related issues

**Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"**

**8. Databases:**

**8.1. Catalogue of Non-numeric Databases compiled by the EIACP PC RP till date:**

<b>Name of Database</b>	<b>Description (in brief)</b>	<b>Data type (descriptive/ graphical/ geospatial/ etc.)</b>	<b>Status of Updation/ Periodicity/ Data Points Compiled (including date/month/year of last data point)</b>	<b>Source(s) of data</b>	<b>Online Availability (Whether uploaded on EIACP Website)</b>
<b>Air Pollution Hotspot</b>	Air pollution hotspot for Pollutants PM10, PM2.5, CO, NOx, VOC's, BC, OC, SO2 has been shown over Delhi and Ahmadabad region. It also gives contribution of different sectors in the total emission of various pollutants in Delhi, Pune & Ahmadabad.	Geospatial and graph	Last data point: Delhi & Pune-2010, Ahmadabad - 2018	Special scientific report—SAFAR-Delhi-2010A; Special scientific	Available online
<b>Air Pollution Levels in Metro Cities during Diwali</b>	This section gives the temporal information regarding the level of Air Pollutants PM10, PM2.5 in the major metro cities i.e Delhi, Mumbai, Pune, Ahmadabad during Diwali.	Graphical Information	Yearly	SAFAR Network DATA	Available Online
<b>Case Studies</b>	This section gives the latest and important case studies around the world which are related to adaptation to climate change and global warming.	Information	As Available	Various online sources	Available online
<b>Environmental Calendar/ Days</b>	It gives information about various national and international days celebrated on different environmental themes.	Descriptive	Once in Year / As available	Online sources	Available Online and in an android mobile app
<b>News letters</b>	Till date RP has Published 67 newsletters	Newsletters	Quarterly publication	EIACP-IITM Centre	Available Online
<b>Special Publication &amp; Infographics</b>	Till date RP has Published 5 Special Publications & 11 Infographics	descriptive	Monthly/As per required	Compilation from various online sources	Available Online/Offl ine
<b>Extreme Weather &amp;</b>	Compendium of Extreme Weather & Air Pollution Events	Descriptive information	Update as Per the	Scientific articles,	Available online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

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<b>Air Pollution Events</b>	observed at global As well as national scale (both human induced and natural) has been compiled and categorized under two heading “Atmospheric Pollution” and “Climate Change”. It includes name of event, year, its cause and effect.		occurrence of event Last data point: Dec 2022	Books, research paper, online sources, Media etc.	
<b>Abstract Service</b>	Compilation of abstracts of research papers published in the field of Atmospheric pollution & climate change and other related topics.	Abstracts Research Articles	Monthly update (Last data point: March 2021)	Various national and international research journal	Available online
<b>Articles in media</b>	The news & other articles publishes in offline and online media are compiled and published	News articles	Daily update (Last data point: March 2023)	News house website and other online portals	Available online
<b>Art Book</b>	This publication is launched this year to inspire young minds through drawings on climate change & Atmospheric pollution	Drawings and Climate Change facts	Yearly	Entries received in various competitions	Available online
<b>Other publications</b>	Till date RP has Published 75 extra publications	Descriptive information	Yearly publication	Online sources, research publications and articles	Available online
<b>Air quality and Health</b>	Information of impact of Various health hazardous pollutants on human health and different body parts has been collected	Graphics/ Animation	One time update. Provided new information is available	Online Sources	Available online
<b>Important</b>	Air Quality Online	Secondary link	-	SAFAR, DPCC, AQICN	Available online

**Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"**

<b>Links</b>	Links to other organizations working in the field of air pollution	Secondary link	-	National- CPCB, MPCB, NEERI, Physical research Laboratory, Ahmadabad, National Physical Laboratory, New Delhi, International- USEPA, WHO, IPCC, NCAR, WMO	Available online
<b>Basic Scientific Information- Atmospheric Pollution</b>	<p>This section has Information on Earth's atmosphere (troposphere, stratosphere, mesosphere, thermosphere, and exosphere), atmospheric composition, what is air pollution and air pollutants including Particulate Matter, Ground level Ozone(O<sub>3</sub>), Carbon Monoxide(CO), Oxides of Sulphur and Nitrogen, Volatile Organic Compounds (VOCs), Lead(Pb), Stratospheric Ozone Depleters (SOD), Green House Gases(GHG)etc..</p> <p>It also covers information On SMOG a type of air pollution which drastically affects visibility.</p>	Descriptive information with explanatory images	Basic scientific information- One time update, provided new findings are observed	Scientific Books, articles, research paper, online sources etc.	Available online
<b>Basic Scientific Information- Climate Change</b>	<p>It covers, what is Climate Change, its driving factors, current facts on Climate change, Effects of climate change, challenges on changing earth, adaptation&amp; mitigation to Climate Change, information of GLOBALWARMING (GW)</p> <ul style="list-style-type: none"> <li>- What is global warming and its causes,</li> <li>What we can do about GW ?</li> </ul>	Descriptive information with explanatory images	Basic scientific information- One time update, provided new findings are observed	Scientific Books, articles, research paper, online sources etc.	Available online

**Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"**

	What is GHE, Enhanced GHE, concept of Radiative Forcing, Global Warming Potential, Human contribution and their impacts.				
<b>Basic Scientific Information-Ozone Layer Depletion</b>	What is good ozone & Bad ozone, Natural formation & destruction of ozone Causes of depletion, Ozone depleting gases, Effects of ozone depletion, Ozone hole & observe ozone holes (Antarctica, Arctic, Tibet), Current status of Ozone layer, Highlights of UNEP/WMO Executive summary (2014), National & International efforts to protect ozone layer, Discovery of recovery of Ozone hole.	Descriptive information with explanatory images	Basic scientific information- One time update, provided new findings are observed	Scientific Books, articles, Research paper, online sources etc.	Available online
<b>Basic Scientific Information-Acid Rain</b>	It covers details such as what is Acid Rain, Acid deposition, Discovery of acid rain, Causes of Acid Rain (General/SO <sub>2</sub> / NO <sub>x</sub> ), Chemistry of acid rain, effects of Acid Rain, World affected areas, Possible solutions. Acid Rain Status: Indian Scenario	Descriptive information	Basic scientific information- One time update, provided new findings are observed	Scientific Books, articles, research paper, online sources etc.	Available online
<b>Basic Scientific Information-Geographical Scenario of Acid Rain</b>	This section of website gives basic information on Indian scenario of acid rain, acid rain studies in India, acid rain global scenario, spread of acid rain across world, population, emission and acid rain, and critical and target load.	Descriptive information Graphical representation	Basic scientific information- One time update, provided new findings are observed	Scientific Books, articles, research paper, online sources etc.	Available Online
<b>National and Intentional policies</b>	Information on National And international policies developed to tackle air pollution and climate change	Descriptive	Annual or as per availability of new information	Online sources	Available online
<b>Kids Corner</b>	Information of Clouds, Rain, Flood, Wind, Thunderstorms, Lightning, Earthquakes, Volcanoes, Climate	Descriptive information Animations, Videos	Basic scientific information- One time	Scientific Books, articles, research	Available online

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	Atmosphere, Optical illusion, Ozone ,Green House Effect, Weather and season	,Games for students	update, provided new findings are observed	paper, online sources etc.	
<b>Glossary</b>	It includes alphabetic list of various terms used in the field of air pollution and climate change.	Descriptive	As per available information	Scientific Books, articles, research paper, online sources etc	Available Online
<b>Multimedia</b>	Scientific Documentary & Video on major issues of air pollution, its impact on environment and human being	Documentary & Videos	Yearly update	Various paid And unpaid data sources	Available online
<b>EIACP Library</b>	Comprises collection of more than 100 books/ magazines/ statistical/ scientific reports related to acid rain, air pollution, climate change, global warming, effect of air pollution and climate change on human health and agriculture etc. Also, a collection of newsletters published by the Centre as well as other EIACP centers during past 10 yrs.	Books, Magazines, Bulletins, Journals, Annual Reports etc.	-	-	Available On request
<b>Facebook Page</b>	Dissemination information regarding various public awareness campaigns, training events and interesting info-graphics by IITM-EIACP. As well as interesting facts and findings of current research papers about air pollution and climate change.	Descriptive and pictorial info-graphics	Based on events and availability of news information	EIACP- IITM, online media channels	Available online
<b>Instagram handle</b>	Dissemination information regarding various public awareness campaigns, training events and interesting info-graphics by IITM-EIACP.	Descriptive and pictorial info-graphics	Based on events and availability of new information	EIACP- IITM	Available online
<b>Twitter handle</b>	Dissemination information regarding various public awareness campaigns, training events and interesting info-graphics by IITM-EIACP. As well as interesting facts and	Descriptive and pictorial info-graphics	Based on events and availability of new information	EIACP- IITM, online media channels	Available online

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### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	findings of current research papers about air pollution and climate change.				
<b>YouTube channel</b>	Videos related to air pollution and climate change awareness and outreach, online activities conducted etc.	Multimedia.	Based on events and availability of new information	EIACP-IITM	Available online
<b>Animation of Climate Change and Air pollution data</b>	Global Warming from 1880 to 2022	Video format	As per availability	Berkeley Earth	Available Online
	Carbon Emissions from Fires: 2003-2018	Video format	As per availability	Berkeley Earth	Available Online
	Carbon Dioxide Emissions as Pumpkins	Video format	As per availability	Berkeley Earth	Available Online
	Methane Sources	Video format	As per availability	NASA	Available Online
	Tracking 30 Years of Sea Level Rise	Video format	As per availability	NASA	Available Online
	Rising Tides - Understanding Sea Level Rise	Video format	As per availability	NASA	Available Online
	Changes in Earth's Surface Temperature Distribution	Graphical in video format	Annual or as per availability	Berkeley Earth	Available Online
	Map of Greenhouse Gas Emissions per Person	Graphical in video format	As per availability	Robert Rohde YouTube	Available Online
	World Temperature Records 2020	Graphical in video format	As per availability	Berkeley Earth	Available Online
	Carbon Dioxide and Global Temperature Visualization	Graphical in video format	As per availability	Berkeley Earth	Available Online
	World Map Climate Stripes Animation	Video format	As per availability	Berkeley Earth	Available Online
	Global Warming by Country and Region 1850-2020 Temp. Anomalies	Video format	As per availability	Berkeley Earth	Available Online
	World's warming temperatures from 1900 - 2021	Video format	As per availability	Berkeley Earth	Available Online
	2021 Record High and Record Low Temperatures Worldwide	Video format	As per availability	Berkeley Earth	Available Online
	2021 Global Temperature Changes Since 1850	Video format	As per availability	Berkeley Earth	Available Online
	Carbon dioxide emissions in 2009 and 2019, by selected country	Graphical	As per availability	Statista	Available Online
	Carbon dioxide emissions in 2010 and 2020, by select country	Graphical	As per availability	Statista	Available Online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

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	Carbon dioxide (CO <sub>2</sub> ) emissions per capita in India from 1970 to 2020	Graphical	As per availability	Statista	Available Online
	Carbon dioxide (CO <sub>2</sub> ) emission in India (2001-2016)	Graphical	As per availability	Statista	Available Online
	The average extent of the Antarctic ozone hole during peak ozone depletion season from 1979 to 2021	Graphical	As per availability	NOAA	Available Online
	Maximum ozone hole area in the stratosphere over the Antarctic 2020	Graphical	As per availability	European Environment Agency	Available Online
	Global temperatures animation	Video format	As per availability	NASA	Available Online
	State wise Registered Motor Vehicle	Graphical	Annual or as per availability	Road Transport Year Book 2016-17	Available Online
<b>Meteorological Graphs</b>	All India Rainfall actual during selected months / season	Graphical	Daily basis	IMD-Climate Data Service Portal	Available Online
	Seasonal Temperature During different seasons	Graphical	Daily basis	IMD-Climate Data Service Portal	Available Online
	Mean Temp Change of Meteorological year of India	Graphical	Annual or as per availability / 1961-2021	FAO Temperature Change & Climatedata.ifmf.org	Available Online
<b>Extreme Events</b>	Death due to Extreme Events 2022	Data Map	As per availability/ 2022	IMD, Pune	Available Online
	Distribution of Number of Deaths and its percentage for impacted Extreme Weather Events	Graphical	As per availability/ 2022	IMD, Pune	Available Online
	Standardized Precipitation Index (SIP)	Graphical	As per availability/ Jan-Dec, 2022	IMD, Pune	Available Online
	Overview of 2021 disasters in the South-West Pacific region	Graphical	As per availability/ 2021	WMO	Available Online
<b>Air Pollution &amp; Climate Change Database</b>	Monthly Atmospheric carbon dioxide concentration year growth rate	Graphical	As per availability/ 2000-2022	NOAA/GML & Scripps Institution of	Available Online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

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				Oceanography	
	Monthly Atmospheric carbon dioxide concentration	Graphical	As per availability/ 2000-2022	NOAA/GML & Scripps Institution of Oceanography	Available Online
	Power Generation various sources	Graphical	As per availability/ 2000-2020	IRENA, IMF staff calculations	Available Online
	GHG Emissions vs Nationally Determined Contributions (NDCs) Targets	Graphical	As per availability/ 2000-2021	UNFCCC, ED GAR, FAO, IMF Staff calculations	Available Online
	Decrease of Insect populations over the past decade	Graphical	As per availability/ 2019	Sanchez- Bayo & Wyckhuys, Biological Conservation	Available Online
	Rise in global annual mean temperature compared to pre-industrial times and Change in emissions 2020 vs 1990	Graphical	As per availability/ 1990-2021	UNFCCC, World Resources Institute	Available Online
	GHG Emission and Emission Reduction Requirements for Climate Goals	Graphical	As per availability/ 1990-2020	World Resources Institute & Emission Gap Report 2022	Available Online
	Average divergence from mean temperature at the beginning of the last century in India, by decade	Graphical	As per availability/ 1911-20, 1961-70, 2011-2020	Statista	Available Online
	Average extent of the Antarctic ozone hole during peak ozone depletion season from 1979 to 2021	Graphical	As per availability/ 1979-2021	NASA	Available Online
	Global CO2 emissions from energy combustion and industrial processes	Graphical	As per availability/ 1900-2022	IEA.org	Available Online
	Annual change in global CO2 emissions from energy combustion and industrial processes	Graphical	As per availability/ 1900-2022	IEA.org	Available Online
	Change in CO2 emissions by region	Graphical	As per availability/ 2023	IEA.org	Available Online
	Change in CO2 emissions by sector	Graphical	As per availability/	IEA.org	Available Online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

			1900-2022		
<b>Air Pollution Levels in Metro Cities during Diwali</b>	Delhi Air Quality during Diwali Period 2020	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Mumbai Air Quality during Diwali Period 2020	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	PM2.5 Diwali comparison (2017-2020) in Mumbai	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Ahmedabad PM2.5 Air Quality during Diwali Period 2020	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Level of PM2.5 during Diwali for last three years (2015-2019) in Delhi	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Level of PM10 during Diwali for last five years (2015-2019) in Pune	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Level of PM2.5 during Diwali for last five years (2015-2019) in Pune	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Level of PM10 during diwali for last five years (2015-2019) in Mumbai	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Level of PM2.5 during diwali for last five years (2015-2019) in Mumbai	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Level of PM10 during diwali for last three years (2017-2019) in Ahmedabad	Graphical Information	As per availability	SAFAR Network DATA	Available Online
	Level of PM2.5 during diwali for last three years (2017-2019) in Ahmedabad	Graphical Information	As per availability	SAFAR Network DATA	Available Online
<b>Live Map</b>	Minimum Temperature Observed during past 24hrs	Real-Time Map Data	Daily basis	IMD- Climate Data Service Portal	Available Online
	Maximum Temperature Observed during past 24hrs	Real-Time Map Data	Daily basis	IMD- Climate Data Service Portal	Available Online
	Wind Observed during past 24hrs & Rainfall Observed during past 24hrs	Real-Time Map Data	Daily basis	IMD- Climate Data Service Portal	Available Online
<b>Air Quality Forecast</b>	IMD SILAM Forest for BLH	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for CO gas	Real-Time	Daily basis	Air Quality	Available

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

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		Forest Map		Forecast by IMD SILAM model	Online
	IMD SILAM Forest for NO <sub>2</sub> gas	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for O <sub>3</sub> gas	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for PM10	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for PM2.5	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for SO <sub>2</sub> gas	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	Global Air Quality Forecast	Real-Time Forest Map	Daily basis	Implemented by ECMWF as part of The Copernicus Programme	Available Online
<b>City's Climatology</b>	Various Climate parameters details of smart cities in India	Real-Time Data/Maps	Daily basis	Implemented by IMD, Pune	Available Online
<b>India's Contribution to Climate Change</b>	A Brief Summary of India's Efforts to Address Climate Change	descriptive	As per availability	Online Sources	Available Online
<b>Environmental Reports</b>	Collection of various reports related to thematic area	descriptive	As per availability	Various Online Sources	Available Online

**Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"**

**8.2. Catalogue of Numeric and Time-series Data bases compiled by the Centre till date:**

<b>Name of Database</b>	<b>Description (in brief)</b>	<b>Time Period (Starting year- Ending year) and Periodicity (annual/monthly/other)</b>	<b>Source(s) of data</b>	<b>Online Availability (Whether uploaded on EIACP Website)</b>
<b>Air Pollution Database</b>	India's database on weather disasters	Jan-2022 to Dec-2022 Monthly	Down to Earth	Available Online
	Carbon dioxide (CO2) emissions per capita in India from 1970 to 2020	1970-2020 As per available	Statista	Available Online
	Carbon dioxide emissions in 2010 and 2020, by select country	2010,2020 As per Available	Statista	Available Online
	Air Quality Index in Maharashtra	Annual -2019 &2020	MPCB	Available Online
	AQI of Major cities of Maharashtra before-During and After Diwali Festival	Annual -2020	MPCB	Available Online
	Air Quality during Deepawali Festival	Annual 2003-2020	MPCB	Available Online
	India's CO2 emissions have fallen for the First time in four decades	Annual -2019-20	Carbonbrief	Available Online
	Global Annual Total Emission	As per Available- 2000-2018	NOAA ESRL	Available Online
	Globally averaged marine surface annual mean data	Annual -2001-2019	NOAA ESRL	Available Online
	Globally averaged marine surface monthly mean monthly data	Annual -2001-2020	NOAA ESRL	Available Online
	Globally averaged marine surface annual mean growth rates	Annual -2001-2019	NOAA ESRL	Available Online
	Carbon dioxide (CO2) Territorial Emissions in 2019	Annual -1960-2010	Global Carbon	Available Online
	National Ambient Air Quality Monitoring Programme (NAMP) Manual Monitoring data	Annual -2013-2020	CPCB	Available Online
	Composition of Vehicle Population	Annual -1951-2017	Office of State Transport Commissioners/UT Administrators	Available Online
	State-wise Number of Cases and Deaths due to Acute Respiratory Infection in India	Annual -2017,2018	Ministry of Health & Family Welfare, Gov. of India	Available Online
	Production of Ozone Depleting Substances in	Annual – 1998-2017	Ministry of Statistics and Programme	Available Online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

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	India		Implementation, Govt. of India. (ON1964) & Past Issues.	
	World record of annual mean PM10 concentration by city	Annual – 2003-2010	Various scientific and peer review sources	Available Online
	Particulate Matter (PM10): annual mean concentrations in Europe-2013	Annual – 2013	Various scientific and peer review sources	Available Online
	<b>Emission Data:</b>  Emission Load of Vehicles in Delhi ,  Emission Load of Vehicles under different scenarios in Delhi,  Vehicular emission load in 1994,  GHG emissions from different sectors in India,  SO2 and NOx emissions - US Plants,  Total Absolute Emission of CO2 From Power Sector	As available	Transport fuel quality for year 2005 Central pollution Control Board, MoEF&CC, GoI, CPCB, Lok Sabha/ Rajya Sabha Unstarred Questions	Available Online
	Reduction in pollution due to change in fuel quality in India	2000-2005	Online Source	Available Online
	Total Consumption of Ozone Depleting Substances in India	2000-2017	Ministry of Statistics and Programme Implementation , GoI	Available Online
	Delhi Air Pollution Database Graphical View	2000-2006	Online Source	Available Online
<b>Major Pollution Sources in India</b>	<b>Polluting Industries</b>  State wise Distribution of 17 Categories of Industries	Annual	CPCB, MoEF&CC	Available Online
	State-wise Industries Identified as highly polluting	2002-2004	Lok Sabha Unstarred	Available Online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	under 17 categories		Question	
	No. of Industrial Units Found Violating Pollution Control Norms in India	2005-2008	Lok Sabha Unstarred Question	Available Online
	Status of Pollution Control in 17 Categories of Industries in India	2009	Lok Sabha Unstarred Question	Available Online
	<b>Transport Sector</b> State wise number of E-Vehicles Registered in India	2018	Lok Sabha Unstarred Question	Available Online
	Category wise number of E-vehicles Registered in India	2018	Lok Sabha Unstarred Question	Available Online
	State-wise Number of Electric/Battery Operated Vehicles in India	2019	Lok Sabha Unstarred Question	Available Online
	Total number of Registered Vehicles in Pune Region	2000-2019	RTO Pune	Available Online
	Total number of Registered Vehicles in PCMC Region	2001-2019	RTO PCMC	Available Online
	State wise Registered Vehicles in India	1995-2015	RTO	Available Online
	Metropolitan city wise Registered Vehicles in India	2012-2015	RTO	Available Online
	Total Number of Registered Motor Vehicles in India	1951-2017	Ministry of Shipping, Road Transport & Highways, GoI, Ministry of Road Transport & Highway, GoI	Available Online
	Composition of Vehicle Population	Annual -1951-2017	Offices of State Transport Commissioners/UT Administrations	Available Online
	<b>Fuel Consumption</b> Consumption of Selected Petroleum Products (Per	1985-2018	Census of India 2011	Available Online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	(Capita) in India			
	Largest driver of overall greenhouse gas emissions are CO2 emissions from fuel combustion in India	Annual -2018	Brown to Green: The G20 Transition Towards A Net-Zero Emissions Economy 2019 report	Available Online
	Consumption of Raw Coal by Industry in India	1970-2018	Ministry of Statistics and Programme Implementation , GoI	Available Online
	Electricity Consumption (Per Capita) in India	1950-2019	Public Electricity Supply, Central Electricity Authority, Ministry of Power	Available Online
	Production of Raw Coal (Coking and Non-Coking) in India	2014-2020	Ministry of Coal, GoI	Available Online
	Consumption of Fuel by Coal Based Thermal Power Units in India	2007-2014	Power & Energy Division, Planning Commission, GoI	Available Online
	Month wise Coal Production in India	1999-2017	Ministry of Commerce and Industry, GoI	Available Online
	State-wise Projected Coal Production in India	2011-2017	Lok Sabha Unstarred Question	Available Online
	Production, Consumption, Import & Export of Coal in India	1995-96 to 2012-13	The Fertilizer Association of India	Available Online
	Demand and supply of Coal in India	2002-2016	Statics for Iron & Steel Industry in India-2002, Authority of India Ltd., Rajya Sabha Unstarred Question, Lok Sabha Unstarred Question	Available Online
	Consumption of Coal by Different Sectors in India	1991-2012	Centre for Industrial & Economic Research (CIER)	Available Online
	Annual energy demand of oil equivalent in India	1990-2011	CPCB, Ministry of Urban Affairs & Employment, GoI	Available Online
	<b>Coal Based Thermal Power Plants</b>  Existing Coal Based TPPs in India	1996-2010	Online Source	Available Online
	Upcoming Coal based TPPs in India up to 2017	-	Online Source	Available Online
<b>Meteorological</b>	Mean Temp Change of	1961-2021	FAO Temperature	Available

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

Data	Meteorological year of India		Change & Climatedata.imf.org	Online
	Meteorological stations in India	-	IMD	Available Online
	Temperature (Min & Max	1998-2018	IMD	Available Online
	Monthly Rainfall in India	2000-2019	IMD	Available Online
	Station-wise highest 24hr rainfall(mm) in India	2008-2018	IMD	Available Online
	Distribution of area according to annual rainfall in India	-	Agriculture Research, Data Book 2002	Available Online
	Season-wise distribution of rainfall in India	1992-2017	Ministry of Agriculture & farmers Welfare, GoI	Available Online
	Monthly wind Speed	2000	IMD	Available Online
	All India Rainfall Monthly- Actual	Monthly -1901-2020	IMD-Climate Data Service Portal	Available Online
	All India Mean Seasonal Temperature During different seasons	Monthly -1901-2020	IMD-Climate Data Service Portal	Available Online
	Frequency Of Cyclonic Systems In Indian Ocean Region	Monthly -1891-2020	IMD-Climate Data Service Portal	Available Online
<b>Agriculture Database</b>	<b>Area under crops in India</b>	1995 to 2012	Ministry of Agriculture , GoI	Available Online
	State-wise Area under Crops in India			
	Area under crops in India-	1950 to 2009	Ministry of Statics and Program Implementation	Available Online
	<b>Degraded area in India</b> State-wise Area of Degraded Land and Land Affected by Natural Calamities in India	2010-2011	Lok Sabha Unstarred Question	Available Online
	<b>Total Wastelands in India</b>			
	State-wise Total Wastelands in India	2011	Lok Sabha Unstarred Question	Available Online
	State-wise Area of Total Wastelands in India	2010	Lok Sabha Unstarred Question	Available Online
	<b>Cropping Patter</b> Land Use Patterns and Selected Inputs for	1950-1951 to 2008-	Reserve bank of India	Available

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	Agricultural Production in India	2009		Online
	<b>Irrigation</b> Selected State-wise Gross Irrigated Area in India Water Requirement of Crop in India	1997-1998 to 2014-2015; 2001	Ministry of Agriculture, GoI	Available Online
	<b>Fertilizer and Pesticides</b> Month-wise Production of Fertilizers in India 2020	2011-2020	Ministry of Commerce & Industry, GoI	Available Online
	Consumption of Fertilizer Products in India	2012-2013	The Fertilizer Association of India	Available Online
	Consumption of Fertilizer Products in India	1990-1991 to 2014-2015	The Fertilizer Association of India	Available Online
	Consumption of Fertilizers in Terms of Nutrients (N, P and K) in India	1951-1952 to 2012-2013	Ministry of Agriculture, GoI	Available Online
	Consumption of Major Fertilizers in India	1999-2000 to 2016-2017	Ministry of Agriculture and Farmer Welfare, GoI	Available Online
	State-wise Consumption of Pesticides (Technical Grade) in India	2000-2001 to 2015-2016	Ministry of Statistics and Program Implementation, Govt. of India	Available Online
	State-wise Estimated Demand of Pesticides in India	2009-2010 to 2012-2013	Lok Sabha Unstarred Question	Available Online
	State-wise Demand of Pesticides in India	1998-1999 to 2007-2008	Ministry of Statistics Program, GoI	Available Online
	<b>Fodder for livestock</b> Supply and Demand of Green and Dry Fodder in India	1995-2025	State Planning Board, Govt. of Kerla	Available Online
	State-wise Dry and Green Fodder Production in India	2000-2003	Basic Animal Husbandry 2004, Department of Animal Husbandry and Dairying , Ministry of Agriculture , Govt. of India	Available Online
	Estimates of Annual Requirement of Green Fodder and Dry Fodder for Livestock in India	1996, 2001 and 2006	Forestry Statics India 2000, Indian Council of Forestry Research & Education	Available Online
<b>Acid Rain Database</b>	<i>pH and alkalinity of 187 global sites (lakes and ponds)</i>	Annual; 2001-2017	Acid Rain Monitoring Project	Availability Online

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	Three Year wet Inorganic Nitrogen Deposition	Annual; GeospatialData 2012-14,2013-15	Various paid and Unpaid data sources	Available online
	Three Year Wet Sulfate Deposition	Annual; GeospatialData 2012-14,2013-15	Various paid and Unpaid data sources	Available online
	Trend analysis results for ions and color	Annual; April1983 –April 2014	Various paid and Unpaid data sources	Available online
	Comparison of percent of sites showing changes in pH and alkalinity	Annual; 2011-2014	Various paid and Unpaid data sources	Available online
	Trend analysis results For pH and alkalinity	Annual; April1983 –April 2014	Various paid and Unpaid data sources	Available online
<b>Other vital Statistics</b>	<i>Emission factors for different categories of vehicles</i>	Tabular statement 1986-90to 2006-10	ARAI, Pune reports	Available online
	Population data—district-wise, state- wise <i>total population</i>	Annual; 2011	Online source	Available online
<b>Other vital Statistics:</b>	Driving cycles and cold start for two and three wheelers except diesel vehicles— Specifications for various test cell conditions like soak temperature ,period, preparatory running before sampling, number of test cycles and break down of cycles	Tabular statement	Environmental standards for ambient air, automobile fuels, industries and noise, CPCB, MoEF&CC	Available online
	Indian states and geographical areas	Tabular statement	Online source	Available online
	Indian state and geographical area	Annual	Various paid and Unpaid data sources	Available online

**Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"**

**8.3. New Databases developed during the Financial Year (2021-22)**

**8.3.1. Non-numeric Databases:**

<b>Name of Database</b>	<b>Description (in brief)</b>	<b>Data type (descriptive/graphical/geospatial/etc.)</b>	<b>Status of Updation/Periodicity/Data Points Compiled (including date/month/year of last data point)</b>	<b>Source(s) of data</b>	<b>Online Availability (Whether uploaded on EIACP Website)</b>
<b>Extreme weather &amp; air pollution events</b>	Extreme weather & air pollution events observed at global as well as national scale (both human induced and natural) has been compiled and categorized under two heading "Climate Change" and "Air Pollution". It includes name of event, year, its cause and effect.	Descriptive information	2022-23	Scientific Books, articles, research paper, Various paid and unpaid data sources etc.	Available online
<b>Article in media</b>	News articles published During last financial year on acid rain, atmospheric pollution, climate change, green solutions etc. has been compiled	News articles /Descriptive	Daily update. 2022-23	Different environmental and news website	Available online
<b>Case Studies</b>	This section gives the latest and important case studies around the world which are related to adaptation to climate change and global warming.	Information	As Available	Various online sources	Available online
<b>Art Book</b>	This publication is designed with the beautiful and meaningful drawings we have received in online competitions we have organized in 2021.	Drawings & facts	Yearly	Online Competition Entries	Available online
<b>Animation of Climate Change and Air pollution data</b>	Global Warming from 1880 to 2022	Video format	As per availability	Berkeley Earth	Available Online
	Carbon Emissions from Fires: 2003-2018	Video format	As per availability	Berkeley Earth	Available Online
	Carbon Dioxide Emissions as Pumpkins	Video format	As per availability	Berkeley Earth	Available Online
	Methane Sources	Video	As per	NASA	Available

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

		format	availability		Online
	Tracking 30 Years of Sea Level Rise	Video format	As per availability	NASA	Available Online
	Rising Tides - Understanding Sea Level Rise	Video format	As per availability	NASA	Available Online
<b>Meteorological Graphs</b>	All India Rainfall actual during selected months / season	Graphical	Daily basis	IMD-Climate Data Service Portal	Available Online
<b>Live Map</b>	Minimum Temperature Observed during past 24 hrs	Real-Time Map Data	Daily basis	IMD-Climate Data Service Portal	Available Online
	Maximum Temperature Observed during past 24 hrs	Real-Time Map Data	Daily basis	IMD-Climate Data Service Portal	Available Online
	Wind Observed during past 24 hrs	Real-Time Map Data	Daily basis	IMD-Climate Data Service Portal	Available Online
	Rainfall Observed during past 24 hrs	Real-Time Map Data	Daily basis	IMD-Climate Data Service Portal	Available Online
<b>Air Quality Forecast</b>	IMD SILAM Forest for BLH	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for CO gas	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for NO2 gas	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for O3 gas	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for PM10	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for PM2.5	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	IMD SILAM Forest for SO2 gas	Real-Time Forest Map	Daily basis	Air Quality Forecast by IMD SILAM model	Available Online
	Global Air Quality Forecast	Real-Time Forest Map	Daily basis	Implemented by ECMWF as	Available Online

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

			part of The Copernicus Programme	
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**8.3.2. Numeric and Time-series Databases:**

Name of Database	Description (in brief)	Time Period (Starting year-Ending year) and Periodicity (annual/monthly/other)	Source(s) of data	Online Availability (Whether uploaded on EIACP Website)
<b>Air Pollution Database</b>	Globally averaged marine surface annual mean data	Annual -1984-2022	NOAA ESRL	Available Online
	Globally averaged marine surface monthly mean monthly data	Annual -1983-2022	NOAA ESRL	Available Online
	Globally averaged marine surface annual mean growth rates	Annual -1984-2022	NOAA ESRL	Available Online
	National Ambient Air Quality Monitoring Programme (NAMP) Manual Monitoring data	Annual -2020	CPCB	Available Online
	Composition of Vehicle Population	Annual -1951-2017	Office of State Transport Commissioners/U T Administrators	Available Online
<b>Meteorological Data</b>	All India Rainfall Monthly-Actual	Monthly -1901-2021	IMD-Climate Data Service Portal	Available Online
	All India Mean Seasonal Temperature During different seasons	Monthly -1901-2021	IMD-Climate Data Service Portal	Available Online
	Frequency Of Cyclonic Systems In Indian Ocean Region	Monthly -1891-2021	IMD-Climate Data Service Portal	Available Online
<b>Major Pollution Sources in India</b>	<b>Transport Sector</b> State wise number of electric vehicles currently being used on the roads of India	Annual –up to 2022	Ministry of Heavy Industries	Available Online
	clean cities energy use impact by alternative fuel vehicle type	Annual - 2004 to 2021	Clean Cities coalitions annual activity reports	Available Online
	Clean Cities Alternative Fuel Vehicle Inventory	Annual - 2004 to 2021	Clean Cities coalitions annual activity reports	Available Online
<b>Fuel Consumption</b>	Year wise Electricity Generation from Wind Energy	Annual – 2014 to 2022	Ministry of New and Renewable Energy	Available Online
	State-wise Cumulative Capacity installed under Off-grid SPV Programme	Annual – 2021 to 22	Ministry of New and Renewable Energy	Available Online
	State wise cumulative capacity installed -Solar	Annual – 2021 to 22	Ministry of New and Renewable Energy	Available Online

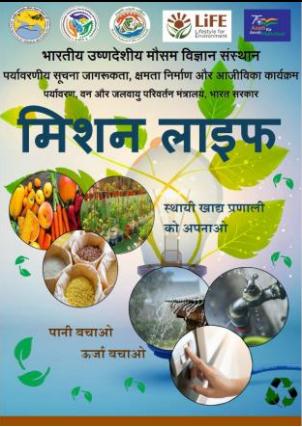
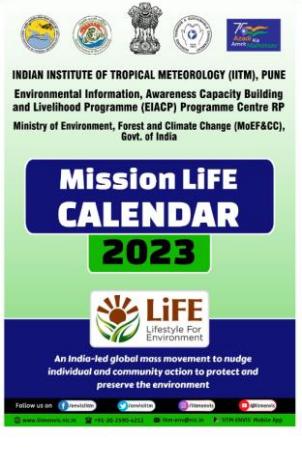
Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

## 9. Information/ Knowledge Products:

### **9.1. EIACP Newsletters published during the Financial Year (2021-22)**

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

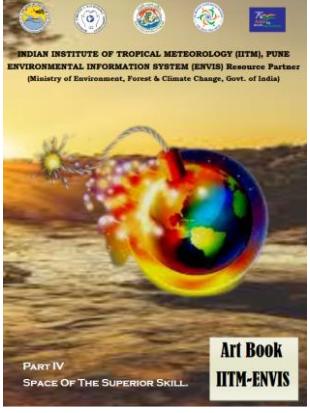
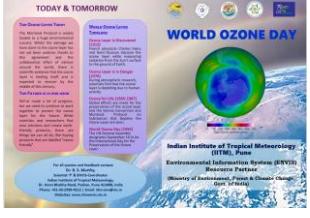
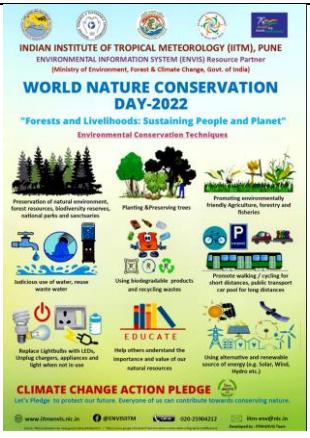
9.2. Other publications/information products prepared during the F.Y. 2021-22 :

Cover snapshot	Publication/ Product Theme(s)/ Subject Area(s)	Number of copies printed and circulated	URL of the PDF file in EIACP website
	<b>Mission LiFE Pamphlet in Hindi</b>	<b>500</b> <b>&amp;</b> <b>(Circulated among online subscribers)</b>	<a href="http://envis.tropmet.res.in/publications/Mission%20Life%20Pamphlet%20in%20Hindi.pdf">http://envis.tropmet.res.in/publications/Mission%20Life%20Pamphlet%20in%20Hindi.pdf</a>
	<b>Effect of Air Pollution on PETS (Special Publication - IV)</b>	<b>20</b> <b>&amp;</b> <b>(Circulated among online subscribers)</b>	<a href="http://envis.tropmet.res.in/publications/Special%20Publication-IV%20Pets.pdf">http://envis.tropmet.res.in/publications/Special%20Publication-IV%20Pets.pdf</a>
	<b>Mission LiFE Calendar 2023 based on Action Points</b>	<b>600</b> <b>&amp;</b> <b>(Circulated among online subscribers)</b>	<a href="http://envis.tropmet.res.in/publications/IITM-EIACP%20Calendar%202023%20on%20Mission%20LiFE.pdf">http://envis.tropmet.res.in/publications/IITM-EIACP%20Calendar%202023%20on%20Mission%20LiFE.pdf</a>

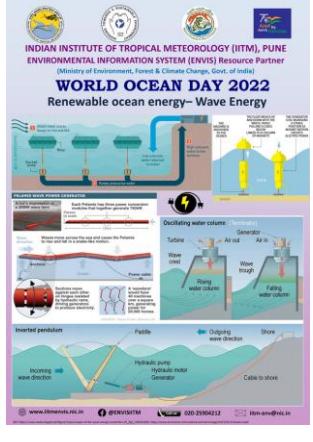
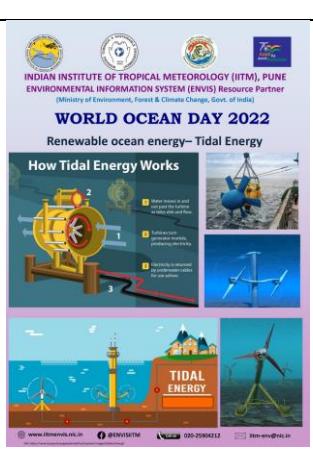
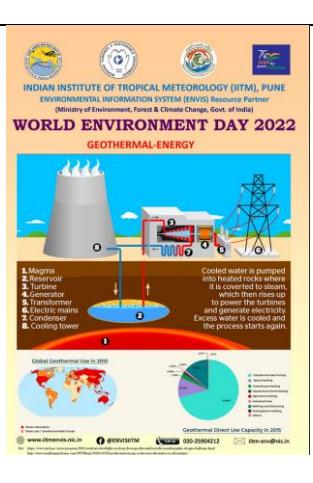
Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p><b>Effect of Air Pollution on PLANTS (Special Publication - III)</b></p>	<p><b>20</b> (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Special%20Publication%20III-2022.pdf">http://envis.tropmet.res.in/publications/Special%20Publication%20III-2022.pdf</a></p>
	<p><b>Compendium of Extreme Weather &amp; Air Pollution Events - 2022</b></p>	<p><b>2</b> (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Extreme%20Event%20-%202022.pdf">http://envis.tropmet.res.in/publications/Extreme%20Event%20-%202022.pdf</a></p>
	<p><b>Effect of Air Pollution on WILDLIFE (Special Publication - II)</b></p>	<p><b>20</b> &amp; (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Special%20Publication%20II-2022.pdf">http://envis.tropmet.res.in/publications/Special%20Publication%20II-2022.pdf</a></p>
	<p><b>Effect of Air Pollution on HUMAN HEALTH (Special Publication - I)</b></p>	<p><b>20</b> &amp; (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Special%20Publication%20I-2022.pdf">http://envis.tropmet.res.in/publications/Special%20Publication%20I-2022.pdf</a></p>

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

 <p><b>Part IV</b> <b>SPACE OF THE SUPERIOR SKILL</b> <b>Art Book</b> <b>IITM-ENVIS</b></p>	<p><b>Art Book IV</b></p>	<p><b>20</b> <b>&amp;</b> <b>(Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/ART%20Book%20IV-2022.pdf">http://envis.tropmet.res.in/publications/ART%20Book%20IV-2022.pdf</a></p>
 <p><b>NATIONAL WILD LIFE WEEK</b> <b>2022</b></p> <p><b>CLIMATE CHANGE AFFECTS INDIA'S WILDLIFE</b></p> <ul style="list-style-type: none"> <li><b>WATER SCARCITY</b>: Due to drought, many animals are forced to migrate in search of food and water.</li> <li><b>LOSS OF HABITAT</b>: Climate change is causing habitat loss, particularly for tigers and leopards.</li> <li><b>DEPLETION OF FOOD SOURCES</b>: Climate change is causing a decline in prey populations, leading to food scarcity for predators like leopards.</li> <li><b>POPULATION DECLINE</b>: Climate change is impacting the breeding period of two bird species in India.</li> </ul>	<p><b>Infographic: National Wildlife Week - 2022</b></p>	<p><b>2</b> <b>&amp;</b> <b>(Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/Infographics-National%20Wildlife%20week-2022.jpg">http://envis.tropmet.res.in/publications/Infographics/Infographics-National%20Wildlife%20week-2022.jpg</a></p>
 <p><b>WORLD OZONE DAY</b></p> <p><b>Indian Institute of Tropical Meteorology (IITM), Pune Environmental Information System (ENVIS) Resource Partner (Ministry of Environment, Forest &amp; Climate Change, Govt. of India)</b></p>	<p><b>Pamphlet: World Ozone Day 2022</b></p>	<p><b>500</b> <b>&amp;</b> <b>(Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Ozone%20Day%20Depletion1.pdf">http://envis.tropmet.res.in/publications/Ozone%20Day%20Depletion1.pdf</a></p>
 <p><b>WORLD NATURE CONSERVATION DAY-2022</b></p> <p><b>"Forests and Livelihoods: Sustaining People and Planet"</b></p> <p><b>Environmental Conservation Techniques</b></p> <ul style="list-style-type: none"> <li>Preservation of natural environments, forest resources, biodiversity reserves, national parks and sanctuaries</li> <li>Planting &amp; Raising trees</li> <li>Promoting environmentally friendly Agriculture, forestry and fisheries</li> <li>Indirect use of water, reuse waste water</li> <li>Using biodegradable products and recycling wastes</li> <li>Promote walking / cycling for short distances, use shared car pool for long distances</li> <li>Help others understand the importance and value of our natural resources</li> <li>Using alternative and renewable sources of energy like Solar, Wind, Hydro etc.</li> <li>CLIMATE CHANGE ACTION PLEDGE</li> </ul> <p>Let's Pledge to protect our future. Everyone of us can contribute towards conserving nature.</p>	<p><b>Infographic: World Nature Conservation Day 2022</b></p>	<p><b>2</b> <b>&amp;</b> <b>(Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/World%20Nature%20Conservation%20Day-2022.jpg">http://envis.tropmet.res.in/publications/Infographics/World%20Nature%20Conservation%20Day-2022.jpg</a></p>

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p><b>Infographic: World Ocean Day 2022 - 3</b></p>	<p>2 &amp; (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_WED_2022_Wave_Energy.jpg">http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_WED_2022_Wave_Energy.jpg</a></p>
	<p><b>Infographic: World Ocean Day 2022 - 2</b></p>	<p>2 &amp; (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_WED_2022_Tidal%20Energy.jpg">http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_WED_2022_Tidal%20Energy.jpg</a></p>
	<p><b>Infographic: World Ocean Day 2022 - 1</b></p>	<p>2 &amp; (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_WED_2022_OTEC.jpg">http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_WED_2022_OTEC.jpg</a></p>
	<p><b>Infographic: World Environment Day 2022 - 2</b></p>	<p>2 &amp; (Circulated among online subscribers)</p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_World_Evironment_Day_2022_2.jpg">http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_World_Evironment_Day_2022_2.jpg</a></p>

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

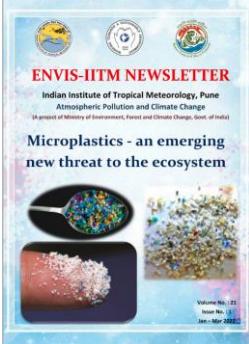
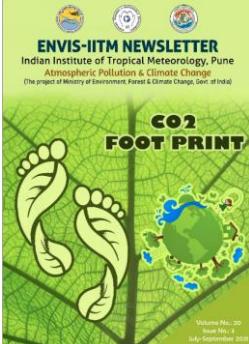
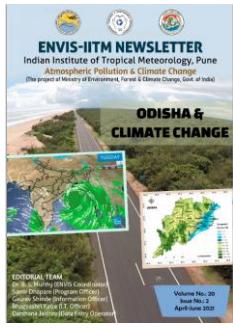
	<p><b>Infographic: World Environment Day 2022 - 1</b></p>	<p><b>2 &amp; (Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_World_Environment_Day_2022.jpg">http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_World_Environment_Day_2022.jpg</a></p>
	<p><b>Infographic: International day for Biological Diversity 2022</b></p>	<p><b>2 &amp; (Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/Biological%20Day.jpg">http://envis.tropmet.res.in/publications/Infographics/Biological%20Day.jpg</a></p>
	<p><b>Infographic: National Technology Day 2022</b></p>	<p><b>2 &amp; (Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_National_Technology_Day_2022_infographics.jpg">http://envis.tropmet.res.in/publications/Infographics/II/TM_ENVIS_National_Technology_Day_2022_infographics.jpg</a></p>
	<p><b>Infographic: World Health Day 2022</b></p>	<p><b>2 &amp; (Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/World%20Health%20Day%202022.jpg">http://envis.tropmet.res.in/publications/Infographics/World%20Health%20Day%202022.jpg</a></p>

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p><b>Infographic: World Aquatic Animal Day 2022</b></p>	<p><b>2 &amp; (Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Infographics/Aquatic%20Animal%20day%202022.jpg">http://envis.tropmet.res.in/publications/Infographics/Aquatic%20Animal%20day%202022.jpg</a></p>
	<p><b>IITM-EIACP Pamphlet – 2022</b></p>	<p><b>1000 &amp; (Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/EIACP%20Pamphlet-2022.pdf">http://envis.tropmet.res.in/publications/EIACP%20Pamphlet-2022.pdf</a></p>
	<p><b>Climate Change Action E-Pledge in Hindi</b></p>	<p><b>2000</b></p>	<p><a href="http://envis.tropmet.res.in/publications/New%20E-Pledge%202023.pdf">http://envis.tropmet.res.in/publications/New%20E-Pledge%202023.pdf</a></p>
	<p><b>QR CODE Banner for Email Subscription for Knolwdge Products</b></p>	<p><b>1000 &amp; (Circulated among online subscribers)</b></p>	<p><a href="http://envis.tropmet.res.in/publications/Email%20Subscription%20for%20Knolwdge%20Products.jpg">http://envis.tropmet.res.in/publications/Email%20Subscription%20for%20Knolwdge%20Products.jpg</a></p>

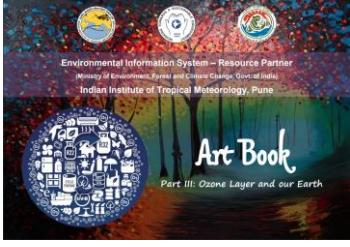
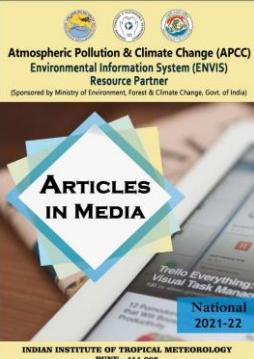
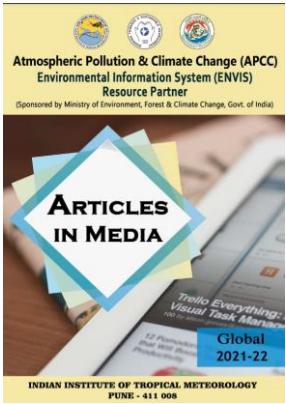
**Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"**

**9.3. Information Products published/ released during last 5 years**

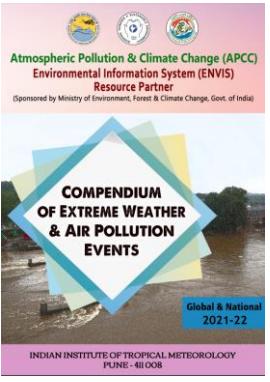
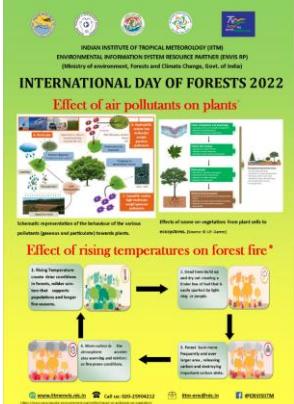
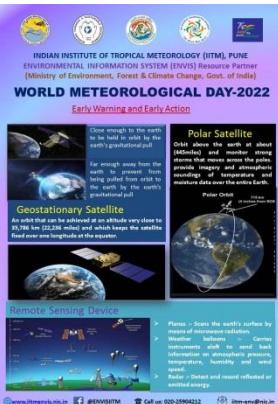
Cover snapshot	Quarter/ Volume/ Issue/Theme Main Articles	Number of copies Printed and circulated	URL of the PDF file in ENVIS website
	<b>Volume-21, Issue-1, January – March : 2022</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	<b>Volume-20, Issue-4, October – December : 2021</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	<b>Volume-20, Issue-3, July – September: 2021</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	<b>Volume-20, Issue-2, April-June: 2021</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

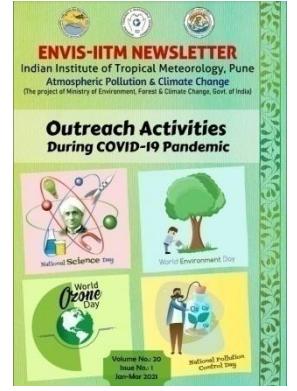
	<b>IITM-ENVIS android mobile application</b>	100+ downloads	<a href="https://play.google.com/store/apps/details?id=com.iitm.IITMENVIS">https://play.google.com/store/apps/details?id=com.iitm.IITMENVIS</a>
	<b>Ozone Day Art Book</b>	Circulated online	<a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a>
	<b>Articles in media (National)</b>	2	<a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a>
	<b>Articles in media (Global)</b>	2	<a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a>

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p><b>Extreme weather events (global and national)</b></p>	<p>2</p>	<p><a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a></p>
	<p><b>IITM-ENVIS information booklet/Pamphlet</b></p>	<p>2000</p>	<p><a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a></p>
	<p><b>International day of forests infographics</b></p>	<p>Circulated online</p>	<p><a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a></p>
	<p><b>World Meteorological Day infographics</b></p>	<p>Circulated online</p>	<p><a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a></p>

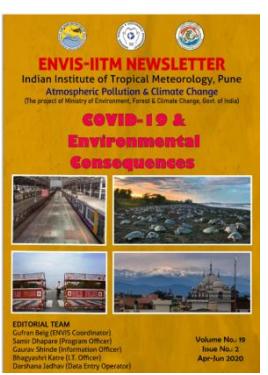
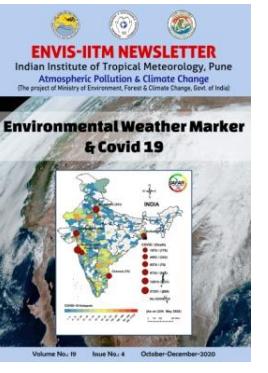
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<b>Climate Change action pledge information and link to take the pledge.</b>	1000 & Distributed in-person during various school visits and circulated to institutes	<a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a>
	<b>IITM-ENVIS android mobile app download link information.</b>	500 & Distributed in-person during various school visits and circulated to institutes	<a href="http://envis.tropmet.res.in/Extra_Publications.aspx">http://envis.tropmet.res.in/Extra_Publications.aspx</a>
	<b>Volume-20, Issue-1, January-March: 2021</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>

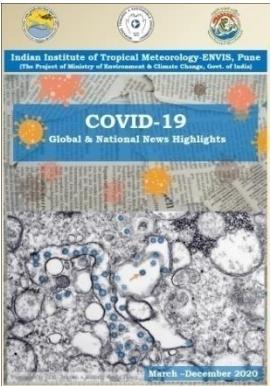
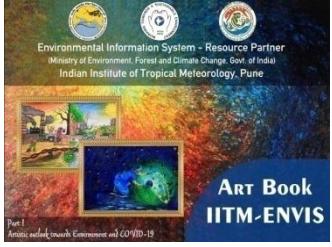
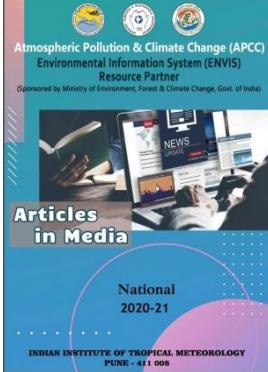
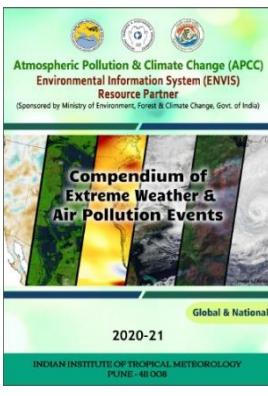
## **Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP**

Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<b>Volume-19,Issue-1, January-March-2020</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	<b>Volume-19,Issue-2, April-June- 2020</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	<b>Volume-19, Issue-3, July-September-2020</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	<b>Volume-19, Issue-4, Oct-Dec -2020</b>	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>

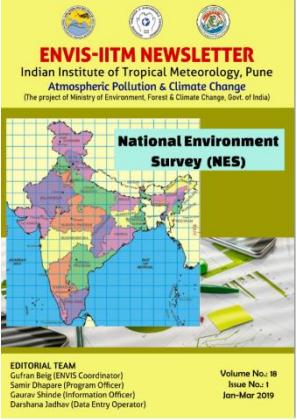
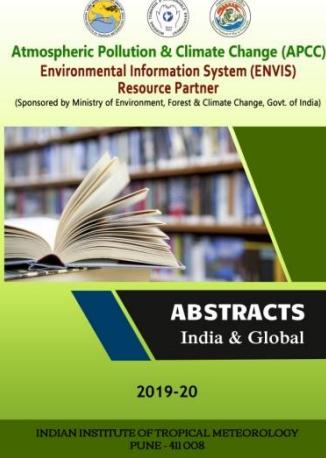
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p><b>COVID -19 Global &amp; national News Highlights</b> (March-Dec 2020)</p>	<p>2 Available on Website for Download</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p><b>COVID 19 &amp; Climate Change :</b> <b>Art Book IITM-ENVIS</b> Part I Artistic reflections on Environment and COVID-19</p>	<p>50 Available on Website for Download</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p><b>Articles in Media :National 2020</b></p>	<p>2 Available on Website for Download</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p><b>Compendium of Extreme Event</b></p>	<p>2 Available on Website for Download</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>

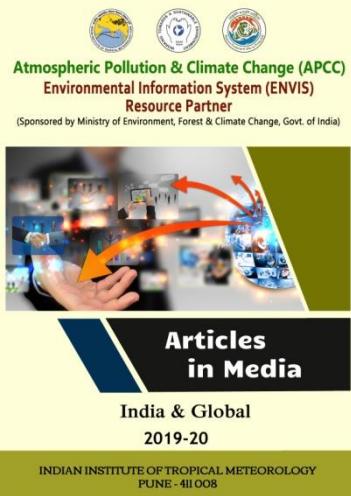
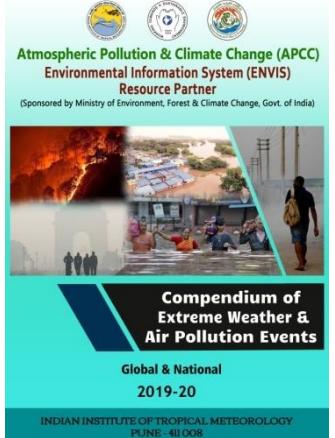
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p><b>COVID and Climate Change Awareness Calendar 2021</b></p>	<p>Available on Website for Download</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Volume-18, Issue No.1,January –March, 2019</p>	<p>100</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Compilation of abstracts of latest research published during Year 2019-20</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>

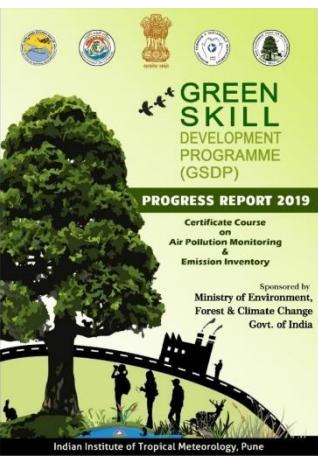
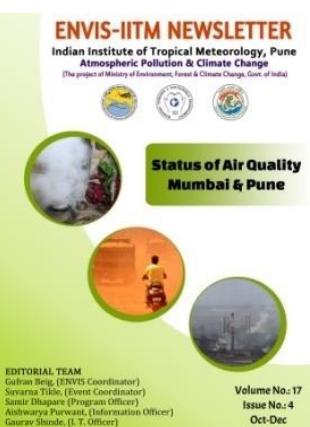
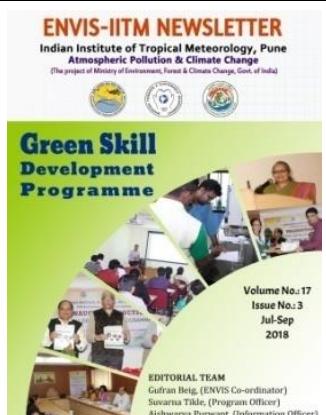
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p>Compilation of news articles Published worldwide during Year 2019-20 on Atmospheric Pollution and Climate Change</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Compilation of extreme air pollution and weather events recorded worldwide during Year 2019-20</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>IITM-GSDP 2019 Pamphlet</p>		<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>National Pollution Control day flier 2019</p>	<p>Online Available</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>

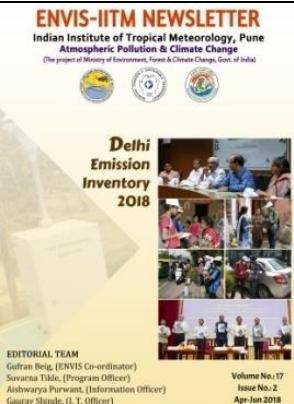
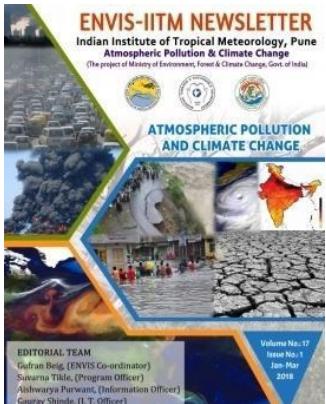
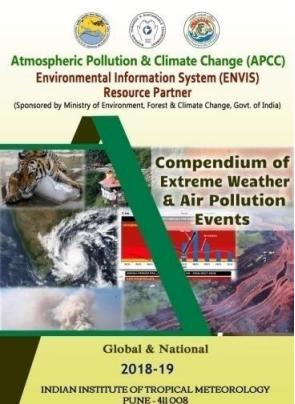
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p>National Pollution Control day flier 2019</p>		<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>IITM- Green Skill Development Program 2019 progress Report</p>	<p>40</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Volume-17, Issue-4, October-December - 2018</p>	<p>100</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Volume-17, Issue-3 , July-September-2018</p>	<p>100</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>

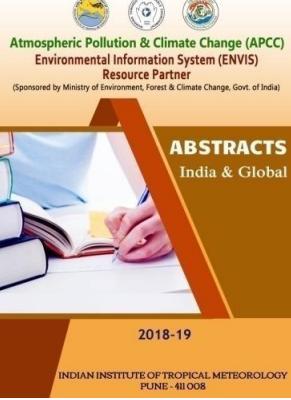
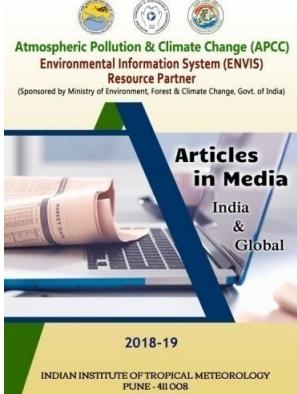
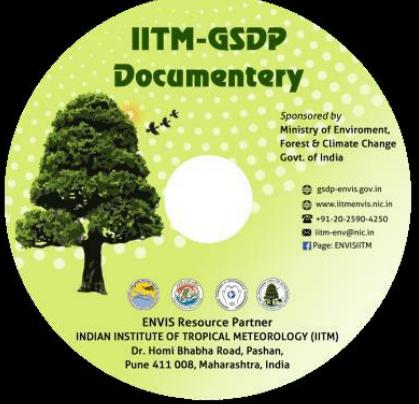
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	Volume-17,Issue-2, April-June -2018	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	Volume-17, Issue-1, January-March -2018	100	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>
	Compilation of extreme air pollution and weather events recorded worldwide during Year 2018	5 + 100 Copies of CDs	<a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a>

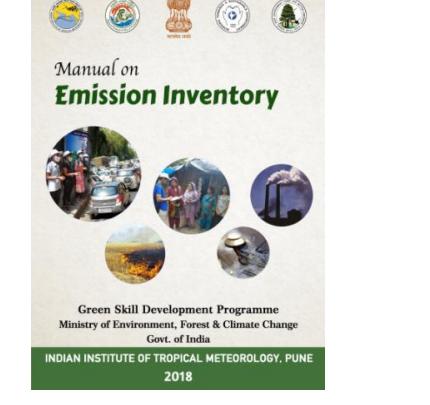
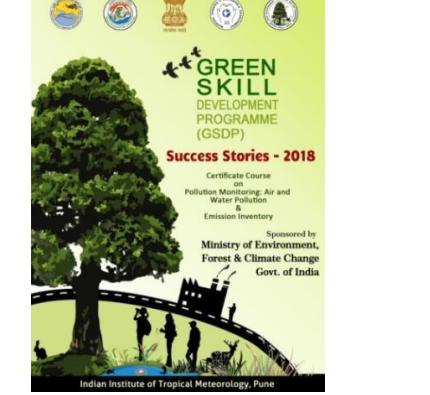
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p>Compilation of abstracts of latest research published during Year 2018</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Compilation of news articles published worldwide during Year 2018 on Atmospheric Pollution and Climate Change</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>IITM-GSDP Documentary video</p>	<p>100</p>	<p>-</p>
	<p>World Environment Day 2018 Pamphlet on Beat Plastic Pollution</p>	<p>1000</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>

# Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

## Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p><b>IITM-GSDP 2018 Pamphlet</b></p>	<p>1000</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p><b>IITM-GSDP 2018 Pamphlet in Regional Language (Marathi)</b></p>	<p>1000</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p><b>GSDP Course "Emission Inventory" manual 2018</b></p>	<p>50</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p><b>IITM-GSDP certification courses Success Stories -2018</b></p>	<p>50</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>

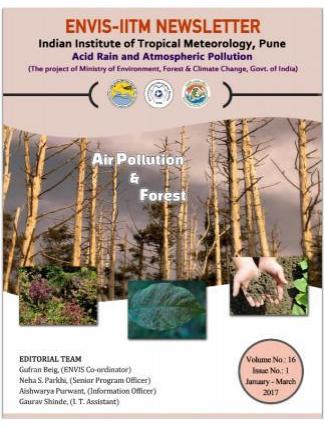
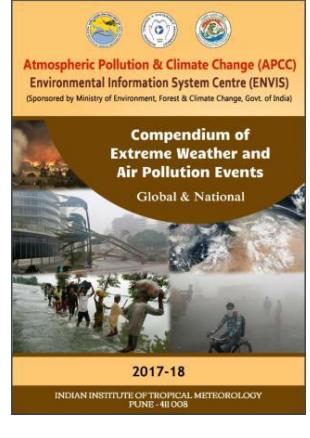
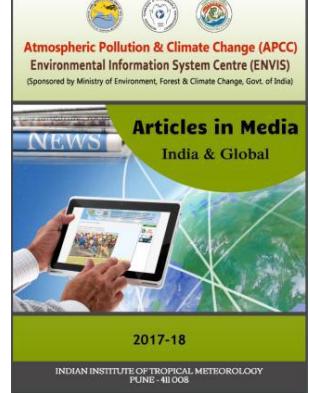
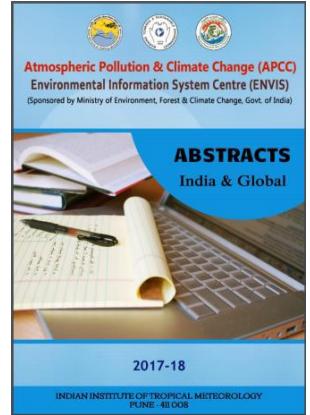
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p>Volume-16, Issue-4, October-December - 2017</p>	<p>100</p>	<p><a href="http://iitmenvis.nic.i&lt;br/&gt;n">http://iitmenvis.nic.i n</a></p>
	<p>Volume-16, Issue-3, July-September -2017</p>	<p>100</p>	<p><a href="http://iitmenvis.nic.i&lt;br/&gt;n/">http://iitmenvis.nic.i n/</a></p>
	<p>Volume-16, Issue-2, April-June -2017</p>	<p>100</p>	<p><a href="http://iitmenvis.nic.i&lt;br/&gt;n/">http://iitmenvis.nic.i n/</a></p>

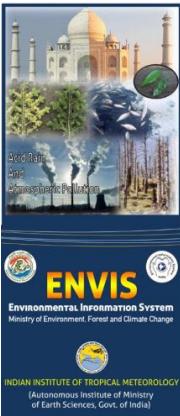
## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	<p>Volume-11, Issue-1, January-March -2017</p>	<p>100</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Compilation of extreme air pollution and weather events recorded worldwide during Year 2017</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Compilation of news articles published worldwide during year 2017 on acid rain, atmospheric pollution and climate change</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>
	<p>Compilation of abstracts of latest research published during year 2017</p>	<p>2</p>	<p><a href="http://iitmenvis.nic.in/">http://iitmenvis.nic.in/</a></p>

## Factsheet of 2022-23 (As on 31 March-2023) on Activities of EIACP Program Centre RP

### Indian Institute of Tropical Meteorology (IITM), Pune on theme "Atmospheric Pollution and Climate Change"

	ENVIS-IITM Pamphlet	1000	<a href="http://envis.tropmet.res.in/publications/ENVIS%20Pamphlet2017.pdf">http://envis.tropmet.res.in/publications/ENVIS%20Pamphlet2017.pdf</a>
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**Factsheet of 2022-23 (As on 01 Apr-2023) on Activities of ENVIS Resource Partner  
"Indian Institute of Tropical Meteorology (IITM),Pune" on "Atmospheric Pollution and Climate Change"**

**10. EIACP Website (EIACP Centres whose Website has been restructured may provide the Performance Report/Graphs generated therein wherever possible):**

**10.1. URL:** <http://iitmenvis.nic.in/> and <http://envis.tropmet.res.in/>

**10.2. Status of restructuring of Website:** Not restructured

**10.3. Frequency of updating Website 2021-22** (as on Apr-2022): Daily, Monthly, Yearly based on requirement

**10.4. Subject-specific database updating (numeric/ others):** Daily, Monthly, Yearly based on database type

**10.5. Publication uploaded/ updated on Website:** for current year 27 out of total 145

**11. User Engagement and Interaction**

<i>User engagement and interaction</i>	<i>FY 2019-20</i>	<i>FY 2020-21</i>	<i>FY 2021-22</i>	<i>FY 2021-22 (As on 01- Apr-2022)</i>
i. Total number of visits	204850	218471	288188	307990
ii. Number of unique visits	278	410	573	770
iii. Reports Downloaded/Read	-	-	-	-
iv. Total Number of Queries received	635	904	1347	2000+
v. Number of Queries responded	635	904	2250	2000+
vi. Grade received				

**11.1 Total number of visits on Website (2022-23):** 63,637

**11.2 Number of unique visits on Website (2022-23):** 573

**11.3 Number of reports downloaded/read by stakeholders:-**

**11.4 Query-Answer Statistics 2022-23: As on Apr-2023**

Mode of Query Receipt	Number of Queries Received	Number of Queries Responded	Reasons for shortfalls, if any, and action taken to rectify
<b>Online (CMS based website)</b>	-	-	-
<b>Email(official NIC server)</b>	300+	300+	-
<b>Postal/Telephonic (incl. hand post)</b>	1000	1000+	-
<b>Physical</b>	700+	700+	-

**12. Implementation of Annual Plan of Activities of the Financial Year (2021-22):**

Activity/Target	Achievements	Shortfalls ,if any, and reasons therefore
<b>Centre's proposed activities 2022-23</b>		
1. Implementation of GSDP Master trainer courses ( Basic & Advance) for two subject areas- 1. 'Air Pollution (Monitoring & Forecasting)' 2. 'Emission inventory'	-	Lack of funds
2. Keep updating IITM-GSDP portal with new information showcasing detailed information and success of GSDP courses.	The web portal with details information about IITM-GSDP courses is available online.	
3. To conduct environment awareness events by arranging webinars, live talks and online as well as offline competitions.	IITM-EIACP has conducted various online activities, webinars, competitions and conducted various major outreach activities in F.Y. 2022-23.	
4. To conduct hands-on activity training workshops to encourage students to take meteorology, Climate Change and Atmospheric Pollution subjects as a career.	Successfully taken a hands-on activity training workshop for school children and informed them to take air pollution and climate change subjects as career option.	
5. Making Website more user friendly, interactive & with more useful content.	Website is redesigned and made more user-friendly, attractive and have added more useful content.	
6. Upgrading IITM-EIACP android mobile application.	Android app "IITM-EIACP" is available on google play store.	
7. Quarterly publication of newsletters related to thematic area for public engagement	We have published newsletters on various topics quarterly basis.	
8. A Newsletter as well as other publications will be published in Marathi language as well to promote regional language knowledge.	We have published newsletter on "Indian Air Quality" in Marathi language as well as other publication have also published in Marathi and Hindi language.	
9. Collection of the data for NES districts.	In Process	-
10. Increase the public outreach through social media platforms and field activities.	IITM-EIACP have various social media platform such as Facebook, Twitter, Instagram etc.	
11. Publication of infographics on important topics related to atmospheric pollution and climate change.	We have published infographics on various occasions and topics.	
12. Regular web based data collection related to thematic area, publication based on regular as well as new concepts.	We have updated all available data up to date.	

**Factsheet of 2022-23 (As on 01 Apr-2023) on Activities of ENVIS Resource Partner  
"Indian Institute of Tropical Meteorology (IITM),Pune" on "Atmospheric Pollution and Climate Change"**

13. To increase student engagement by creating a platform for students where they can publish their environmental activity based reports.	IITM-EIACP has conducted various activities to engage students in their environment educational reports.	
14. Publication of student reports on specialized section on IITM-EIACP website.	We are in the process to develop special section for the student engagement.	
15. Publication of environmental awareness knowledge product.	We have published and circulated Calendar 2023 based on Mission LiFE Action points and also published special publications 'Air Pollution effects on various parameters.	

<b>A. Regular Activities :Web-based Environmental Information</b>		
<b>Collection and Compilation of Information and Data</b>		
<b>Activity/Target</b>	<b>Achievements</b>	<b>Shortfalls ,if any, and reasons therefore</b>
1. Development and regular updation of <i>databases</i> (descriptive, numeric, pictorial, geospatial, etc.) on the assigned subject area and regular uploading of the same in the <i>Subject Area</i> section of the EIACP Website, after due verification/ authentication, with suitable referencing of data sources.	Done	NIL
2. Compilation of <i>Abstracts, News articles, Events, etc.</i> on the subject area and uploading the same in the relevant section of EIACP Website.	Done	NIL
3. Identification of data gaps and Formulation of implementation of action plan to fill them.	Data collected on the Live Air quality status, Climate change and other meteorological parameters. The compilation and regular update of the data is ongoing process.	-
<b>Maintenance of EIACP Website and User Engagement through it</b>		
4.Maintaining the EIACP Website up-to-date and user-engaging, and as an inventory of authentic and reliable information in the subject area	Done	NIL
5.Query-Response/Referral service to stakeholders.	Service is already in place at EIACP-IITM RP.	NIL
6.Developing and upgrading a Kids' Corner.	It is already developed by EIACP-IITM.	NIL
7. Maintaining a disaggregated record of visitors ,including unique visitors ,to the Website.	In process	NIL

**Factsheet of 2022-23 (As on 01 Apr-2023) on Activities of ENVIS Resource Partner  
"Indian Institute of Tropical Meteorology (IITM),Pune" on "Atmospheric Pollution and Climate Change"**

<b>Publications and Value-Addition</b>		
8.Publishing 4 <i>Newsletters</i> and uploading the same in the relevant section of EIACP Website	Done	NIL
9.Processing/analyzing data collected and bring in value-added information Products	Centre is involved in data analysis and has come up with various thematic maps and open data sources	Limited man power
10. Preparation of infographics that conveys complex technical and scientific information in easy to understand manner for general public.	Done	NIL
<b>Reaching-out/Networking Activities</b>		
<b>Activity/Target</b>	<b>Achievements</b>	<b>Short falls, if any, and reasons therefore</b>
11. Liaison and coordination with other Relevant EIACP Centres, both State Centres and Thematic Centres, for providing data/information links in the relevant part of the EIACP Website (to avoid duplication and conflicts in uploaded information).	Centre is in process to Identify potential research areas which can be done in collaborative mode and Will come up with proposal for join activities for the same.	-
12. Build linkages with Other information Sources in the country and abroad. Providing hyperlinks to the information Sources in the relevant part of the EIACP Website.	Done	NIL
13. Maintaining a list of Experts in the Subject area and uploading the same, along with updated C.V. in the relevant section of EIACP Website.	Done	-
14. Coordination with the Ministry for Timely dissemination of relevant and adequate information to stakeholders.	Centre is coordinating with ministry and submits information to the ministry regularly.	-
15. Formulate strategic plans to generate sources of funds from corporate sector and/or through subscriptions of Newsletters/other publications	NA(Being Government Organization)	-
<b>B. SPECIAL ACTIVITIES</b>		

**Factsheet of 2022-23 (As on 01 Apr-2023) on Activities of ENVIS Resource Partner**

**"Indian Institute of Tropical Meteorology (IITM),Pune" on "Atmospheric Pollution and Climate Change"**

16.Focus on database development (numeric and descriptive), with due authentication in consultation with Line Departments/research institutes, etc.	Centre is involved in database development and has robust up-to date data set for air pollution and climate change related information.	Information for acid rain episodes in India is scarce however centre is Compiling and developing data base for the same.
17.Network and undertake outreach Activities with Universities/ Research bodies/researchers in the State, similar to Those of Odisha EIACP, so that the EIACP collections/ repositories can be enriched, including with the in contact details/CVs, etc.	Centre is conducting outreach activities with various local schools and colleges. Also have organized online and offline environmental awareness event in association with various organization to enhance awareness about the centers activities.	NIL

**Factsheet of 2022-23 (As on 01 Apr-2023) on Activities of ENVIS Resource Partner  
"Indian Institute of Tropical Meteorology (IITM),Pune" on "Atmospheric Pollution and Climate Change"**

<b>Activity/Target</b>	<b>Achievements</b>	<b>Short falls, if any, and reasons</b>
18. Circulate Newsletters and knowledge Products to as many stakeholders as possible in the State, especially policy makers/planners.	Centre is distributing newsletters to relevant stakeholders including universities, schools, and Colleges. Centre is also distributing newsletter to local Municipal Corporation i.e. PMC and PCMC.	-
19. Linking website to other government websites; develop the vernacular web site; and undertake other awareness enhancing activities within the State.	Centre's web site is linked with the official website of IITM, Ministry of Earth Sciences. And time to time conduct various awareness activities in the city.	-
20. Maintain a Register for keeping track of queries received and transferred/ answered.	Most of the queries received Are from physical interaction with the visitors and on telephone and has been answered time to time.	-
21. Build institutional repositories of various types of media related to environmental issues.	Done	-
22. Prepare a brochure on environmental issues to spread awareness about World Environment Day, focusing on forestry / mining / climate change / disasters etc.	Centre is publishing brochure to create awareness about major environmental days.	-
23. Outreach activities like rally, skit, song etc.	IITM-EIACP has conducted many online outreach activities which got overwhelming response from the students and people from various parts of the country.	-
24. Other Activities	IITM-EIACP has initiated Climate Change Awareness Campaign under which people are encourage to adapt to sustainable life style. Also, centre has conducted various activities towards 'Mission LiFE' movement.	-

**13. New initiatives taken during the Financial Year (2022-23):**

- We reached almost 260+ schools & colleges (approx. 2,50,000+ students) for Mission LiFE activities.
- Natural Sources based Energy working models demonstrated to 1000+ students
- 4000+ pledgee has taken Climate Change Action Pledge started by IITM-EIACP which is available offline as well as online.
- Launch of Climate Change Action Pledge in Hindi language
- Conducted 15 events on the occasion of various environmental days
- Hands on activity of DIY Weather satellite model making in which 980+ students participated
- Reintroduction to Cheetah event for selected 100+ students from 5 schools and 500+ staff of host institute
- Designed Mission LiFE Calendar 2023 based on Mission LiFE Actions points & distributed among various schools and organizations.
- Started Special Publication knowledge product series on “Implications of Air pollution on environment (biosphere, hydrosphere, marine life) of earth climate system” & distributed to 1800+ students and common public
- Conducted various online/offline competitions in which approx. 1400+ students and common public had participated.

**14. Date of most recent physical verification by the Ministry: 02/04/2015**

Recently on 24/09/2019, Dr. Yashveer Singh, Senior Economic Advisor & Mr. Rahul Bhatiya, -EIACP had visited IITM, Pune. They were satisfied with the facilities present at IITM, Pune for execution of EIACP activities.

**15. Status of existing hardware:**

	Hardware item	Specification	Sanction Order with Date	Date of procurement
Procured from EIACP Grant (2014-15)	Printer	Office Laser Multifunction printer-Print, copy, scan, fax	No.11/27/2004-EI Dated 30 <sup>th</sup> June, 2014	10/02/2015
	Laptop	IntelCorei5-HDTouch screen-4GBRAM-1TBHDD-15.6InchesScreen-Windows 8.1-2GBGraphics	No.11/27/2004-EI Dated 30 <sup>th</sup> June, 2014	10/02/2015

**16. Status of utilization of grant during the financial year 2022-23 as on 31-March-2023 and reasons for short falls, if any:**

**Factsheet of 2022-23 (As on 01 Apr-2023) on Activities of ENVIS Resource Partner  
"Indian Institute of Tropical Meteorology (IITM),Pune" on "Atmospheric Pollution and Climate Change"**

	<b>Head of Expenditure</b>	<b>Sanctioned amount (Rs.)</b>	<b>Received Amount (Rs.)</b>	<b>Actual Expenditure(Rs.)</b>	<b>Reasons for Shortfall/ Excess (if any)</b>
Recurring Annual	Manpower	16,69,145.00	16,69,145.00	12,27,514.00	Nil
	Others,	5,00,000.00	5,00,000.00	5,36,9070.00	Nil
	Travel& Training	2,00,000.00	2,00,000.00	30,795.00	Nil
Non-Recurring	-	-	-	-	Nil

**17. Issues/ hurdles faced in undertaking EIACP activities:**

As programs under EIACP are getting expanded, there is need of scientific staff positions to promote research & to transform research into knowledge, so that general public can be benefited.

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