



Advancing Environment Statistics In India

National Statistics Office, Ministry of Statistics and Programme Implementation,
Government of India

Structure of Presentation



1. About NSO, India



2. Introduction



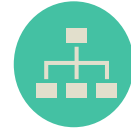
3. Compilation of Environment Statistics



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6. Distribution of Tier-wise Indicators



7. Indicators Details



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About NSO, India

- Came into existence as independent ministry in 1999.
- Two wings: One relating to Statistics and other Programme Implementation.
- One of the task: Development of Environment Statistics, development of methodology, concepts and preparation of Natural Resource Accounts for India.



Introduction

- Environment statistics are important because environmental data is often generated in a decentralized way by multiple agencies, leading to fragmentation, duplication, and gaps.
- By compiling environment statistics within a centralized and standardized framework, NSOs integrate diverse datasets into a coherent, consistent system aligned with international standards.



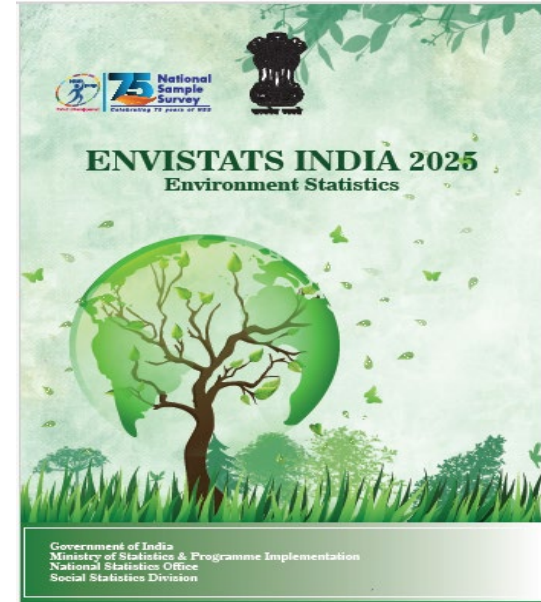
Compilation of Environment Statistics (1/2)

- India has a well-established system for collecting and disseminating environment statistics.
- Till 2016, Environment Statistics compiled as '**Compendium of Environment Statistics**', thereafter, '**EnviStats India: Environment Statistics**' since 2018 based on Framework for the Development of Environment Statistics (FDES) 2013.
- The data presented are compiled based on data, sourced from various Ministries, Departments, Divisions, and Organizations of the Central Government.



Compilation of Environment Statistics (2/2)

- Following the structure of FDES 2013, the tables in latest publication, "EnviStats India 2025: Environment Statistics" are organized into six chapters.
- Related topics under each component have been grouped together to facilitate easier understanding and use.





Involvement of Stakeholders

An expert group comprising representatives from line Ministries/Departments and domain experts in the field of environment was constituted to consult on potential improvements to the publication, including expanding its scope, identifying potential data sources, and suggesting refinements in its design and presentation.



Process of Making Publication





Distribution of Tier-wise Indicators

Level of Tiers	FDES/ Envi Stats 2025	Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Total
I	FDES 2013	32	30	19	4	12	3	100
	EnviStats 2025	25	25	10	4	11	1	76
II	FDES 2013	58	51	34	11	22	24	200
	EnviStats 2025	13	22	21	3	13	1	74
III	FDES 2013	51	43	5	16	20	23	158
	EnviStats 2025	1	5	0	0	4	2	12
Component- wise Total- FDES 2013		141	124	58	31	54	50	458
Component- wise Total- EnviStats 2025		39	52	31	7	28	4	161



Indicator Details

- Data on topics under each component of FDES 2023 have been grouped together to facilitate easier understanding and use.
- [Component-wise Information](#)



Way Forward

- **Updating:** Last revised in 2016, FDES does not reflect recent advances in environmental science, technology, and policy.
- **Indicator Overlaps:** Duplication exists (e.g., fertilizer/pesticide use in Topics 2.5.3b & 3.4.1a).
- **Operational Challenges:** Some prescribed aggregation scales (e.g., Ozone Depleting Substances consumption by ISIC activity) are difficult to apply due to unavailability of data.
- **Contextual Relevance:** Certain indicators (e.g., El Niño/La Niña) are less applicable to India's national priorities.

Thank you !

Annex 1

Statistics covered in EnviStats India 2025: Environment Statistics based on the FDES 2013	
Component 1	Environmental Conditions and Quality
Subcomponent 1.1 Physical Condition	
Topic 1.1.1	Atmosphere, Climate and Weather
Statement 1.01	Annual and Seasonal Mean Temperature
Statement 1.02	Annual and Seasonal Minimum and Maximum Temperature
Statement 1.03	Annual and Monthly Rainfall
Topic 1.1.2	Hydrographical Characteristics
Statement 1.04 (a)	State-wise wetland distribution (type-wise) in India
Statement 1.04 (b)	State-wise Number and Area of Wetlands
Statement 1.05	Water Sheds in India
Statement 1.06	Catchment Area of Major River Basins
Topic 1.1.3	Geological and geographical information
Statement 1.07	State-wise/UT-wise Length of Coastline of India
Topic 1.1.4	Soil Characteristics
Statement 1.08	Occurrence of Major Soils in India
Statement 1.09	Category-wise distribution of land degradation in different States of India
Subcomponent 1.2 Land Cover, Ecosystems and Biodiversity	
Topic 1.2.1	Land Cover
Statement 1.10(a)	Area under land use and land cover classes in India
Statement 1.10(b)	State-wise area by land cover classes
Topic 1.2.2	Ecosystems and Biodiversity
Statement 1.11	List of Ramsar Sites in India
Statement 1.12	State-wise terrestrial protected areas
Statement 1.13	Number of Protected Flora and Fauna Species under the Wild Life (Protection), Act 1972
Statement 1.14	Faunal diversity in India and the world
Statement 1.15	Category-wise status summary of plants at global level
Topic 1.2.3	Forests
Statement 1.16	State-wise Forest area
Statement 1.17	Forest cover in India under various forest classes
Statement 1.18	State-wise Forest cover
Statement 1.19	Number of forest fire alerts disseminated
Statement 1.20	State-wise carbon stock in different forest carbon pools
Statement 1.21	Forest type and density wise carbon stock in different carbon pools
Statement 1.22	State-wise Tree Cover
Subcomponent 1.3 Environmental Quality	
Topic 1.3.1	Air Quality
Statement 1.23	Ambient air quality in cities of the country under NAMP
Statement 1.24	Ambient air quality in major cities
Topic 1.3.2	Freshwater Quality
Statement 1.25	Water quality in Indian rivers

Statement 1.26	State-wise River water quality
Topic 1.3.3	Marine Water Quality
Statement 1.27	Sea Water Quality
Topic 1.3.4	Soil Pollution
Statement 1.28	Status of Critically Polluted industrial clusters
Topic 1.3.5	Noise
Statement 1.29	Status of Ambient Noise Level in Metropolitan Cities
Component 2	Environmental Resources and their Use
Subcomponent 2.1	Mineral Resources
Topic 2.1.1	Mineral Resources, production and trade of minerals
Statement 2.01	Mineral Reserves and Resources
Topic 2.1.2	Production and trade of Minerals
Statement 2.02	Production of Minerals
Statement 2.03	Import of Ores and Minerals
Statement 2.04	Export of Ores and Minerals (including re-export)
Subcomponent 2.2	Energy Resources
Topic 2.2.1	Stocks and Changes of Energy Resources
Statement 2.05	Inventory of geological reserves of coal by type
Statement 2.06	State-wise inventory of geological reserves of coal
Statement 2.07	State-wise inventory of geological reserve of lignite
Statement 2.08	Total Primary Supply of coal & lignite
Topic 2.2.2	Production Trade and Consumption of Energy
Statement 2.09	State/UT-wise Power Supply Position
Statement 2.10 (a)	Annual gross generation of power by source and by sector
Statement 2.10 (b)	Year-wise Import and Export of Electricity (GWh)
Subcomponent 2.3	Land Use
Topic 2.3.1	Land Use
Statement 2.11	State-wise Land Use Classification
Statement 2.12	Net area irrigated from different sources and gross irrigated area - All Ind
Statement 2.13	State-wise area under organic farming (Registered under accredited certification)
Topic 2.3.2	Use of Forest Land & Forest Resources
Statement 2.14 (a)	State-wise Value of Output of Forestry -Forestry (At Current Prices)
Statement 2.14 (b)	State-wise Value of Output of Forestry - Industrial Wood (At Current Prices)
Statement 2.14 (c)	State-wise value of Output - Fuelwood (At Current Prices)
Statement 2.14 (d)	Statement 2.14 (d) : State-wise value of Output - Non-Timber Forest Products (At Current Prices)
Subcomponent 2.5	Biological Resources
Topic 2.5.3	Crops
Statement 2.15 (a)	Area under major crops
Statement 2.15 (b)	Production of major crops
Statement 2.16	State-wise production of biofertilizer
Statement 2.17	Capacity and production of insecticides

Statement 2.18 (a)	Consumption, Production and Import of Fertilisers
Statement 2.18 (b)	State-wise Consumption of Fertilisers in Terms of Nutrients (N, P & K)
Statement 2.19 (a)	Consumption of Chemical Pesticides in India
Statement 2.19 (b)	Consumption of Pesticides (Technical Grade Material)
Statement 2.19 (c)	Consumption of bio pesticides formulation in various States / UTs
Statement 2.20 (a)	Imports of Agricultural Products
Statement 2.20 (b)	Exports of Agricultural Products
Topic 2.5.2/4	Livestock & Aquatic Resources
Statement 2.21	Livestock population in India
Statement 2.22	Number of animals slaughtered and Quantity of Meat Production
Statement 2.23	Imports and Exports of Livestock & Marine Products
Statement 2.24 (a)	Year Wise Fish Production-India
Statement 2.24 (b)	State-wise Fish Production
Subcomponent 2.6	Water Resources and abstraction of water
Topic 2.6.1/2	Water Resources and abstraction of water
Statement 2.25 (a)	Water availability in India
Statement 2.25 (b)	Water resources -Basinwise
Statement 2.25 (c)	Projected Water Demand in India
Statement 2.26	Water flow in stream
Statement 2.27 (a)	Basin- Wise dynamic ground water resources, India 2020
Statement 2.27 (b)	State- Wise ground water resources, India 2024
Statement 2.28 (a)	Basin-wise Storage Status of Reservoirs of the Country
Statement 2.28 (b)	Storage Status of Reservoirs of the Country
Statement 2.29	River basin-wise catchment area, average water resources potential and utilizable
Statement 2.30	Water Sharing Treaties with Neighbouring Countries
Component 3	Residuals
Subcomponent 3.1	Emissions to Air
Topic 3.1.1	Emissions of green house gases
Statement 3.01	Greenhouse gas emission by source and removal by sinks in India
Topic 3.1.2	Consumption of ozone depleting substances in India
Statement 3.02	Consumption of Ozone Depleting Substances (ODSs) and Hydrofluorocarbons (HFCs) in India
Subcomponent 3.2	Generation and Management of Wastewater
Topic 3.2.1/2	Generation and pollutant content of wastewater/collection and treatment of
Statement 3.03	State-Wise Summary of Sewage Management
Statement 3.04	Status of grossly polluting industries discharging their effluents into rivers and lakes
Subcomponent 3.3	Generation and Management of Waste
Topic 3.3.1/2/3	Generation and Management of Wastewater
Statement 3.05 (a)	State- wise Municipal Solid Waste Generation in India 2020-21
Statement 3.05 (b)	State- wise Municipal Solid Waste Generation in India 2021-22
Statement 3.06	Municipal solid waste generation in metro cities / state capitals

Statement 3.07 (a)	State-wise amount of waste generated by waste category - Hazardous Waste
Statement 3.07 (b)	State-wise amount of waste generated by waste category - Bio-medical Waste
Statement 3.07 (c)	State-wise amount of waste generated by waste category - Plastic Waste
Statement 3.08	State-wise details on Hazardous Waste generation
Statement 3.09	State-Wise status of Bio-medical Waste Generation and its Management
Statement 3.10	State-wise status on Imports & Exports of Hazardous Waste
Statement 3.11	State-wise status of Industrial Waste Water Treatment Plants
Component 4	Extreme Events & Disasters
Subcomponent 4.1	Natural Extreme Events and Disasters
Topic 4.1.1	Natural Extreme Events and Disasters
Statement 4.01	Average Number of Heat Wave days reported
Statement 4.02	Average Number of Cold Wave days reported
Statement 4.03	Number of cyclonic storms formed over the North Indian Ocean
Statement 4.04	Major natural disasters in India
Statement 4.05	Major earthquakes in India
Topic 4.1.2	Impact of Natural Extreme Events and Disasters
Statement 4.06	Year-wise damage due to natural extreme events in India
Statement 4.07	State-wise damage due to natural extreme events
Statement 4.08	Number of deaths due to forces of nature
Statement 4.09	Government Expenditure on account of Natural Calamities
Component 5	Human Settlements and Environmental Health
Subcomponent 5.1	Human Settlements
Topic 5.1.1	Urban and rural population
Statement 5.01	Houses, Households and Population in India
Statement 5.02	Coastal fishing population in India
Topic 5.1.2	Population and Access to Basic Services
Statement 5.03	Distribution of households by major source of drinking water
Statement 5.04 (a)	Percentage of households getting safe and adequate drinking water within premises through Pipe Water Supply (PWS) (Rural)
Statement 5.04 (b)	Percentage of households getting safe and adequate drinking water within premises through Pipe Water Supply (PWS) (Urban)
Statement 5.05 (a)	Distribution of Households with Access to Sanitation
Statement 5.05 (b)	Percentage distribution of Households by sanitation facilities
Topic 5.1.3	Housing Conditions
Statement 5.06	State-Wise Number of Towns/ Cities Reporting Slums and Percentage of Slum Population
Statement 5.07	Percentage of Districts achieving Open Defecation Free (ODF) target
Statement 5.08	Proportion of households having access to toilet facility (Urban & Rural)
Statement 5.09	Population Connected to Wastewater Collecting System
Statement 5.10	State-wise slum households by source and location of drinking water
Statement 5.11	Population with Access to Electricity

Statement 5.12	All India weighted average Rate of sale of power (WARSP) from conventional power generating stations
Topic 5.1.5	Environmental concern specific to urban settlement
Statement 5.13	Statistics related to Road Transport
Statement 5.14	Status of registered motor vehicles -state-wise and category-wise
Statement 5.15	Number of Passengers carried by State Road Transport Undertakings
Subcomponent 5.2	Environment Health
Topic 5.2.1/2	Air & Water-related Diseases
Statement 5.16	State-wise cases and deaths - Cholera
Statement 5.17	State-wise cases and deaths - Acute Diarrhoeal Disease
Statement 5.18	State-wise cases and deaths - Enteric Fever (Typhoid)
Statement 5.19	State-wise cases and deaths - Viral Hepatitis
Statement 5.20	State-wise cases and deaths - Acute Respiratory Infection
Topic 5.2.3	Vector-borne diseases
Statement 5.21	State-wise cases and deaths - Malaria
Statement 5.22	State-wise cases and deaths - Dengue
Statement 5.23	State-wise cases - Chikungunya fever
Statement 5.24	State-wise cases and deaths - Acute Encephalitis Syndrome/Japanese Encephalitis
Component 6	Environmental Protection, Management & Engagement
Subcomponent 6.1	Environmental Protection and Resource Management Expenditure
Topic 6.1.1	Environmental Protection and Resource Management Expenditure
Statement 6.01	Centrally Sponsored Schemes for Protection of Environment
Statement 6.02	Annual government expenditure on environment protection
Topic 6.1.2	Corporate, non-profit institution and household Environmental Protection and Resource Management Expenditure
Statement 6.03 (a)	Annual Corporate Expenditure on Environment Protection - Agro Forestry Sector
Statement 6.03 (b)	Annual Corporate Expenditure on Environment Protection - Conservation of Natural Resources Sector
Statement 6.03 (c)	Annual Corporate Expenditure on Environment Protection - Environmental Sustainability Sector
Statement 6.03 (d)	Annual Corporate Expenditure on Environment Protection - Across 3 Sectors
Subcomponent 6.2	Environmental Protection and Resource Management Expenditure Environmental Governance and Regulation
Topic 6.2.2/3	Environmental regulation and instruments & participation in MEAs and Environment Conventions
Statement 6.04	Environment-related Subsidies under Indian Budget
Statement 6.05	Number of Students pursuing environment-related higher education