

Metadata of Datasets/Registries of Ministry of Environment, Forests and Climate Change

1. Dataset: Endemic Species (Fauna)

Item No	Concept name	Endemic Species (Fauna)
1	Contact	
1.1	Contact Organisation*	Ministry of Environment, Forest and Climate Change
1.2	Compiling agency*	Zoological Survey of India
1.3	Custodian agency*	Zoological Survey of India
1.4	Contact Details*	Officer-In-Charge, Technical Section, Zoological Survey of India Email: technical@zsi.gov.in
2	Data Description and Presentation	
2.1	Data description*	Vertebrate & invertebrate species endemic to India. Data collected through primary & secondary sources.
2.2	System of Classification*	Faunal group specific globally accepted classifications have been followed.
2.3	International/ National Standards Classification/Codes, if followed*	The International Code of Zoological Nomenclature (ICZN)
2.4	Sector coverage*	Public sector
2.5	Concepts and definitions*	After years of continued effort and refinement by scientists of ZSI, the first version "The Checklist of Fauna of India" was published in July 2024. This version was hosted on the ZSI website. The complete fauna of India is listed in 121 taxon-wise checklists from Protists to Mammals covering almost all endemic species reported from India.
2.6	Unit of compilation	-
2.7	Population coverage	-
2.8	Reference Period*	Updated till 2024
2.9	Duration and period of enumeration*	Since inception
2.1	Sample size/Dataset Size*	PDF version available as 'Fauna of India Checklist' @ https://zsi.gov.in
2.11	Data Confidentiality	Data is available in the Annual Report
3	Institutional Mandate	
3.1	Legal acts and other agreements*	NA
3.2	Data sharing/Data Dissemination	NA
3.3	Release calendar*	1st July (ZSI day)
3.4	Frequency of dissemination*	Yearly
3.5	Data access*	Different stakeholders and general public
4	Quality Management	-
4.1	Documentation on methodology*	Physical & literature surveys
4.2	Quality documentation	-
4.3	Quality assurance	Assured
5	Accuracy and Reliability	-
5.1	Sampling error	-
5.2	Measures of reliability	Reliable
6	Timeliness	

6.1	Timeliness*	A complete checklist of fauna of India forms the taxonomic backbone for several biodiversity databases. Such lists also help in understanding diversity and distribution of Indian fauna, biodiversity conservation policy formulation, and legislation.
7	Coherence and Comparability	
7.1	Comparability – over time*	ZSI continued to work on the checklist to incorporate the latest changes in the global taxonomy of several taxa, new species discoveries, and new distribution records in India.
7.2	Coherence	-
8	Data Processing	
8.1	Source data type*	Primary & secondary
8.2	Frequency of data collection*	Yearly
8.3	Mode and method of data collection	-
8.4	Data validation*	By Scientists of ZSI
8.5	Data compilation	By Scientists of ZSI
8.6	Data identifier(s)*	By Scientists of ZSI & other research institutes/universities
9	Metadata Update	
9.1	Metadata last posted	December, 2024
9.2	Metadata last update	December, 2024

2. Dataset: Protected Area Network of India

Item No	Concept name	Details
1	Contact	
1.1	Contact Organisation*	Wildlife Institute of India(WII), Ministry of Environment Forest and Climate Change
1.2	Compiling agency*	WII
1.3	Custodian agency*	WII
1.4	Contact Details*	Director Wildlife Institute of India, Ph: 0135-2646101; Email: dwii@wii.gov.in
2	Data Description and Presentation	
2.1	Data description*	Dataset: Total Number and Area(Sq.Km) of National Park, Total Number and Area(Sq.Km) of Wildlife Sanctuaries, Total Number and Area(Sq.Km) of Community Reserves, Total Number and Area(Sq.Km) of Conservation Reserves. Total Number and Area(Sq.Km) of Protected Areas of India.
2.2	System of Classification*	Administrative Data and Gazette Notification
2.3	International/ National Standards Classification/Codes, if followed*	NA
2.4	Sector coverage*	Wildlife, Environment and Forest

2.5	Concepts and definitions*	<p>National Park: A legally protected area designated for the conservation of wildlife, biodiversity, and natural ecosystems, with strict restrictions on human activities.</p> <p>Wildlife Sanctuary: A protected area primarily aimed at safeguarding specific species of wildlife, allowing limited human activities under regulation.</p> <p>Conservation Reserve: A government-declared area on private or community land for protecting flora, fauna, or their habitats, usually with community involvement.</p> <p>Community Reserve: A protected area managed and conserved by local communities to preserve wildlife or habitats, often on community or private land.</p> <p>Protected Area: Any geographically defined area legally designated to conserve biodiversity, wildlife, and natural resources, encompassing national parks, sanctuaries, reserves, and other categories.</p>
2.6	Unit of compilation	Area(Sq.Km)
2.7	Population coverage	All India, State-wise
2.8	Reference Period*	NA
2.9	Duration and period of enumeration*	NA
2.1	Sample size/Dataset Size*	Data From 16 states and 3 UTs available
2.11	Data Confidentiality	Data is shared on the EIACP website.
3	Institutional Mandate	
3.1	Legal acts and other agreements*	NA
3.2	Data sharing/Data Dissemination	Wildlife Institute of India(WII) EIACP Website
3.3	Release calendar*	NA
3.4	Frequency of dissemination*	Dependent upon information received from the concerned states and ministry
3.5	Data access*	Open Access
4	Quality Management	
4.1	Documentation on methodology*	Spreadsheet and PDF
4.2	Quality documentation	Results are published in WII EIACP website(Spreadsheet) along with the gazette notification(PDF)
4.3	Quality assurance	NA
5	Accuracy and Reliability	
5.1	Sampling error	NA
5.2	Measures of reliability	NA
6	Timeliness	
6.1	Timeliness*	Dependent upon information received from the concerned states and ministry

7	Coherence and Comparability	
7.1	Comparability – over time*	NA
7.2	Coherence	NA
8	Data Processing	
8.1	Source data type*	Data Collected from the state forest departments and Ministry of Environment Forest and Climate Change
8.2	Frequency of data collection*	NA
8.3	Mode and method of data collection	NA
8.4	Data validation*	Data was validated from the gazzete notification
8.5	Data compilation	Data compiled from the gazzete notification and official documents from the state forest departments
8.6	Data identifier(s)*	NA
9	Metadata Update	
9.1	Metadata last posted	February, 2025
9.2	Metadata last update	February, 2025

3. Families, genus and species of endemic plants

Item No.	Concept Name	
1	Contact	
1.1	Contact Organisation	Botanical Survey of India
1.2	Compiling Agency	Botanical Survey of India
1.3	Custodian Agency	Botanical Survey of India
1.4	Contact Details	Scientist In-charge, Technical Section, Botanical Survey of India, Kolkata-700064 tech@bsi.gov.in
2.	Data Description And Presentation	
2.1	Data Description	Family, Gerera, Species of Vascular endemic plants of India
2.2	System of Classification	Not Applicable
2.3	International Standards Classification Codes if Followed	International Code of Nomenclature for algae, fungi, and plants.
2.4	Sector Coverage	Plant (Vascular Plants)
2.5	Concept and Definitions	Endemism is the state of a species being found only in a single defined geographic location, such as an island, state, nation, country or other defined zone
2.6	Unit of Compilation	Plant Taxon
2.7	Population Coverage	Population within the political boundary of India
2.8	Reference Period	The species that are endemic to India for last 50 years or more
2.9	Duration and Period of Enumeration	Consolidated data up to 2025
2.10	Sample Size/ Dataset Size	4500 species
2.11	Data Confidentiality	Physical form as published book, copyright with BSI
3	Institutional Mandate	
3.1	Legal Acts and Other Agreements	Not Applicable
3.2	Data Sharing /Data Dissemination	By Pdf, by excel

3.3	Release Calendar	Annual
3.4	Frequency of Dissemination	Annual
3.5	Data Access	Data available in Hard Copies/books
4	Quality Management	
4.1	Documentation on Methodology	Compilation based on Primary and Secondary Data
4.2	Quality Documentation	Accuracy, Completeness, Clarity,
4.3	Quality Assurance	By regularly update
5	Accuracy And Reliability	
5.1	Sampling Error	Not Applicable
5.2	Measures of Reliability	Not Applicable
6	Timeliness	
6.1	Timeliness	Annual
7	Coherence And Comparability	
7.1	Comparability Overtime	Not Applicable
7.2	Coherence	Not Applicable
8	Data Processing	
8.1	Source Data Type	Based on Primary and Secondary Data
8.2	Frequency Of Data Collection	Annual
8.3	Mode And Method Of Data Collection	Based on field survey and literature survey
8.4	Data Validation	Consistency maintained across related fields.
8.5	Data Compilation	Based on Primary and Secondary Data
8.6	Data Identifier	Scientists of BSI
9	Metadata Update	
9.1	Metadata Last Posted	2024
9.2	Metadata Last Updated	2025

4. National Zoological Collections

Item No	Concept name	National Zoological Collections
1	Contact	
1.1	Contact Organisation*	Ministry of Environment, Forest and Climate Change
1.2	Compiling agency*	Zoological Survey of India
1.3	Custodian agency*	Zoological Survey of India
1.4	Contact Details*	Officer-In-Charge, Technical Section, Zoological Survey of India Email: technical@zsi.gov.in
2	Data Description and Presentation	
2.1	Data description*	The faunal collections of ZSI is termed as National Zoological Collections (NZCs). The National Zoological Collections (NZCs) of ZSI is designated repository under Section 39 of the Biological Diversity Act, 2002.
2.2	System of Classification*	Faunal group specific globally accepted classifications have been followed.
2.3	International/ National Standards Classification/Codes, if followed*	The International Code of Zoological Nomenclature (ICZN)
2.4	Sector coverage*	Public sector

2.5	Concepts and definitions*	Zoological Survey of India (ZSI), under the Ministry of Environment, Forest and Climate Change, Government of India has been documenting the faunal diversity of Indian subcontinent since 1916. The faunal collections of ZSI is termed as National Zoological Collections (NZCs) is housed at its Headquarters in Kolkata and sixteen Regional Centers covering all biogeographic regions of India. The Type and voucher specimens of fauna of India are the scientific heritage of humanity and provide an invaluable knowledge service to understand natural world. This digital archive of NZCs is created to spread the knowledge of taxonomy and to promote the conservation and sustainable use of biodiversity.
2.6	Unit of compilation	NA
2.7	Population coverage	NA
2.8	Reference Period*	Updated till July 2025
2.9	Duration and period of enumeration*	Since inception
2.1	Sample size/Dataset Size*	Available in https://zsicollections.in/
2.11	Data Confidentiality	Not confidential; Credentials may be given to ZSI or Citation may be used as ZSI.
3	Institutional Mandate	
3.1	Legal acts and other agreements*	NA
3.2	Data sharing/Data Dissemination	Open access with due credit
3.3	Release calendar*	Dynamic portal with upgraded information
3.4	Frequency of dissemination*	Dynamic
3.5	Data access*	Different stakeholders and general public
4	Quality Management	
4.1	Documentation on methodology*	The National Zoological Collections (NZCs) of ZSI is designated repository under Section 39 of the Biological Diversity Act, 2002. The Type and voucher specimens of NZCs is very valuable to address issues in taxonomy, biology, biodiversity, bio-prospecting, bio-security, to establish sovereign right over fauna of India and to counter bio-piracy. As per various Articles of CBD, data on such authenticated samples should be shared with scientific community of India and abroad, stakeholders and general public .
4.2	Quality documentation	As per the Standard of ICZN
4.3	Quality assurance	-
5	Accuracy and Reliability	
5.1	Sampling error	-
5.2	Measures of reliability	Reliable
6	Timeliness	

6.1	Timeliness*	The most efficient way to share data on voucher specimens and other natural history collections is by digitally archiving them and sharing to the world through web technologies. Towards this goal, ZSI has created Virtual National Zoological Collections (VNZCs), which is a digital archive on the collection holding of Headquarters and Regional Centers. The archive will provide information on type and other specimens held in NZC to different stakeholders and general public.
7	Coherence and Comparability	
7.1	Comparability – over time*	-
7.2	Coherence	-
8	Data Processing	
8.1	Source data type*	Primary
8.2	Frequency of data collection*	Based on field surveys and depositon of specimens in the NZCs
8.3	Mode and method of data collection	
8.4	Data validation*	Validated by Scientists of ZSI
8.5	Data compilation	Compiled by Scientists of ZSI
8.6	Data identifier(s)*	Scientists of ZSI & other research institutes/universities
9	Metadata Update	
9.1	Metadata last posted	July, 2025
9.2	Metadata last update	As on July 2025

5. Dataset: Forest Cover, Tree Cover, Mangrove Cover, Growing Stock, Carbon Stock

1	Contact	
1.1	Contact Organisation	Forest Survey of India, Ministry of Environment, Forests and Climate Change
1.2	Compiling agency	FSI
1.3	Custodian agency	FSI
1.4	Contact Details	Director General, Forest Survey of India, Ph 0135-2756139, Email: dgfsi@fsi.nic.in
2	Data Description and Presentation	
2.1	Data description	Dataset: Forest Cover, Tree Cover, Mangrove Cover, Growing Stock, Carbon Stock
2.2	System of Classification	Remote sensing and Field Inventory
2.3	International/ National Standards Classification/Codes, if followed	-
2.4	Sector coverage	Environment & Forest

2.5	Concepts and definitions	<p>Forest Cover: All lands, more than or equal to one hectare in area, with a tree canopy of more than or equal to 10%, irrespective of ownership and legal status; and includes orchards, bamboo, and palm.</p> <p>Tree Cover: Tree cover comprises all tree patches outside the forest area, which are less than one hectare in extent including all the scattered trees found in the rural and urban settings, and not captured under the forest cover assessment.</p> <p>Mangrove Cover: Mangrove cover refers to the area of land occupied by mangrove forests, which are salt-tolerant plant communities found in tropical and subtropical intertidal regions.</p> <p>Growing Stock: The sum (by number or volume) of all the trees growing/living in the forest or a specified part of it.</p> <p>Carbon Stock: Carbon in all living and non-living biomass including Above Ground Biomass, Below Ground Biomass, Deadwood, Litter, and Soil carbon</p>
2.6	Unit of compilation	<p>Forest Cover (Sq. km)</p> <p>Tree Cover (Sq. km)</p> <p>Mangrove Cover (Sq. km)</p> <p>Growing Stock (m. cum)</p> <p>Carbon Stock ('000' tones)</p>
2.7	Population coverage	All India, State-wise
2.8	Reference Period	-
2.9	Duration and period of enumeration	2 years
2.10	Sample size/Dataset Size	<p>1. FCM is wall to wall mapping.</p> <p>2. Tree cover, Growing stock and carbon stock are based on NFI data for which approximate sample size at national level is 12,000 for forest inventory and 20,000 for TOF inventory.</p>
2.11	Data Confidentiality	Generally, raw data is not shared. However, results are published in ISFR.
3	Institutional Mandate	
3.1	Legal acts and other agreements	-
3.2	Data sharing/Data Dissemination	India State of Forest Report Forest Cover Maps are provided on requests.
3.3	Release calendar	Every 2 years
3.4	Frequency of dissemination	Biennial
3.5	Data access	Open access
4	Quality Management	
4.1	Documentation on methodology	PDF
		https://fsi.nic.in/forest-report-2023
4.2	Quality documentation	Results are published in ISFR. Fields methodology and steps are given in manuals of FCM and NFI.
4.3	Quality assurance	Both FCM and NFI work are supervised at different stages by senior officers.
5	Accuracy and Reliability	

5.1	Sampling error	Sampling error of estimates of Tree Cover, Growing Stock and Carbon Stock are 5% at national level.
5.2	Measures of reliability	Acceptable sampling error and high accuracy of FCM classification.
6	Timeliness	
6.1	Timeliness	2 years
7	Coherence and Comparability	
7.1	Comparability – over time	Data sets are comparable over time.
7.2	Coherence	Data is coherent.
8	Data Processing	
8.1	Source data type	Multiple Data Sources
8.2	Frequency of data collection	2 years
8.3	Mode and method of data collection	Data collection on prescribed fields forms/ PDA for national forest inventory and wall to wall mapping of FCM.
8.4	Data validation	Validation before publication
8.5	Data compilation	Remote sensing and Field Inventory
8.6	Data identifier(s)	-
9	Metadata Update	
9.1	Metadata last posted	December 21, 2024
9.2	Metadata last update	December 21, 2024

6. Dataset: Forest Cover Map

1	Contact	
1.1	Contact Organisation	Forest Survey of India, Ministry of Environment, Forests and Climate Change
1.2	Compiling agency	FSI
1.3	Custodian agency	FSI
1.4	Contact Details	Director General, Forest Survey of India, Ph 0135-2756139, Email: dgfsi@fsi.nic.in
2	Data Description and Presentation	
2.1	Data description	Dataset: Forest Cover Map
2.2	System of Classification	Forest Cover Mapping: As per methodology given in the published ‘Manual for forest cover mapping’ by FSI
2.3	International/ National Standards Classification/Codes, if followed	-
2.4	Sector coverage	Environment & Forest

2.5	Concepts and definitions	<p>Forest Cover: All lands, more than or equal to one hectare in area, with a tree canopy of more than or equal to 10%, irrespective of ownership and legal status; and includes orchards, bamboo and palm.</p> <p>Forest Cover Mapping: FSI carries out biennial forest cover mapping by interpretation of Georeferenced satellite imageries using Remote sensing techniques. Total 16 cycles of forest cover mapping have been carried out since 1987. Minimum mappable unit (MMU) used by FSI is 1 ha.</p>
2.6	Unit of compilation	<p>Key variables of forest cover are mentioned:</p> <p>i. Very Dense Forest (VDF)- Canopy Density $\geq 70\%$ (Sq. km)</p> <p>ii. Moderate Dense Forest (MDF) - Canopy Density 40% to $< 70\%$ (sq. km)</p> <p>iii. Open Forest (OF) – Canopy Density 10% to $< 40\%$ (sq. Km)</p> <p>iv. Scrub – Canopy Density $< 10\%$ (sq. km)</p>
2.7	Population coverage	District-wise
2.8	Reference Period	-
2.9	Duration and period of enumeration	2 years
2.10	Sample size/Dataset Size	FCM is wall to wall mapping.
2.1	Data Confidentiality	Generally, raw data is not shared. However, results are published in ISFR.
3	Institutional Mandate	
3.1	Legal acts and other agreements	-
3.2	Data sharing/Data Dissemination	India State of Forest Report Forest Cover Maps are provided on requests.
3.3	Release calendar	Every 2 years
3.4	Frequency of dissemination	Biennial
3.5	Data access	Open access
4	Quality Management	
4.1	Documentation on methodology	.img and .Geotiff format https://fsi.nic.in/forest-report-2023
4.2	Quality documentation	Results are published in ISFR. Fields methodology and steps are given in manuals of FCM.
4.3	Quality assurance	For FCM, work is supervised at different stages by senior officers.
5	Accuracy and Reliability	
5.1	Sampling error	-
5.2	Measures of reliability	Acceptable sampling error and high accuracy of FCM classification.
6	Timeliness	
6.1	Timeliness	2 years
7	Coherence and Comparability	

7.1	Comparability – over time	Data sets are comparable over time.
7.2	Coherence	Data is coherent.
8	Data Processing	
8.1	Source data type	Interpretation of satellite imagery
8.2	Frequency of data collection	2 years
8.3	Mode and method of data collection	Interpretation of satellite imageries with the help of collateral information using Remote Sensing & GIS techniques
8.4	Data validation	Validation before publication
8.5	Data compilation	The output of Forest cover and Forest type Data is compiled at District, State and National level using Remote Sensing & GIS tools.
8.6	Data identifier(s)	-
9	Metadata Update	
9.1	Metadata last posted	December 21, 2024
9.2	Metadata last update	December 21, 2024

7. Dataset: Forest Type Map

1	Contact	
1.1	Contact Organisation	Forest Survey of India, Ministry of Environment, Forests and Climate Change
1.2	Compiling agency	FSI
1.3	Custodian agency	FSI
1.4	Contact Details	Director General, Forest Survey of India, Ph 0135-2756139, Email: dgfsi@fsi.nic.in
2	Data Description and Presentation	
2.1	Data description	Dataset: Forest Type map
2.2	System of Classification	Forest Type Mapping- Based on Champion & Seth 1968 classification.
2.3	International/ National Standards Classification/Codes, if followed	Both International /National Standard Classification Codes are followed in Forest Type Atlas 2020.
2.4	Sector coverage	Environment & Forest
2.5	Concepts and definitions	<p>Forest Type categories have been mapped according to the classification scheme of Champion & Seth,1968.</p> <p>Forest Type Mapping: In the first phase, FSI conducted Forest Type Mapping exercise in 2005 and published in 2011 where 178 out of 200 forest types were mapped on the basis of Champion & Seth Classification,1968 a seminal classification system. In the second phase mapping exercise 2020,188 forest types were mapped out of 200 forest types.</p>

2.6	Unit of compilation	-
2.7	Population coverage	District-wise
2.8	Reference Period	-
2.9	Duration and period of enumeration	-
2.10	Sample size/Dataset Size	-
2.11	Data Confidentiality	Published data is available on public domain.
3	Institutional Mandate	
3.1	Legal acts and other agreements	-
3.2	Data sharing/Data Dissemination	Atlas Forest Types of India 2020
3.3	Release calendar	2011 & 2020
3.4	Frequency of dissemination	-
3.5	Data access	Open access
4	Quality Management	
4.1	Documentation on methodology	.img and .Geotiff format https://fsi.nic.in/uploads/documents/atlas-forest-type-of-india-2011-cover-top-2803-2023.pdf
4.2	Quality documentation	Data is published in the form of Atlas.
4.3	Quality assurance	-
5	Accuracy and Reliability	
5.1	Sampling error	-
5.2	Measures of reliability	Maps of high accuracy are published.
6	Timeliness	
6.1	Timeliness	-
7	Coherence and Comparability	
7.1	Comparability – over time	It is not a regular publication. However, updated periodically.
7.2	Coherence	Data is coherent.
8	Data Processing	
8.1	Source data type	Interpretation of satellite imagery and other collateral data
8.2	Frequency of data collection	-
8.3	Mode and method of data collection	Interpretation of satellite imageries with the help of collateral information using Remote Sensing & GIS techniques followed by ground truthing.
8.4	Data validation	Validation before publication
8.5	Data compilation	The output of Forest cover and Forest type Data is compiled at District, State and National level using Remote Sensing & GIS tools.
8.6	Data identifier(s)	-
9	Metadata Update	

9.1	Metadata last posted	2020
9.2	Metadata last update	2020

8. Registry: Inventory on Biomedical Waste Management

Item No.	Concept Name	Details
1	Contact	
1.1	Contact Organisation*	Central Pollution Control Board, Delhi
1.2	Compiling agency*	Waste Management-I Division (WM-I Division)
1.3	Custodian agency*	Waste Management-I Division (WM-I Division)
1.4	Contact Details*	Sh. Vijay Prakash Yadav, DH, WM-I Division, vpyadav.cpcb@nic.in, CPCB, Delhi
2	Data Description and Presentation	
2.1	Data description*	Bio-Medical Waste Management
2.2	System of Classification*	Manual
2.3	International/National Standards Classification/Codes, if followed*	NA
2.4	Sector coverage*	Bio-Medical Waste
2.5	Concepts and definitions*	Bio-Medical Waste Management in Health Care Facilities (HCFs) (bedded/non- bedded)
2.6	Unit of compilation	Metric Ton per Annum
2.7	Population coverage*	All over India (28 States, 8 UTs)
2.8	Reference Period*	Calendar year
2.9	Duration and period of enumeration*	12 Months (January to December)
2.1	Sample size/Dataset Size*	yearly
2.11	Data Confidentiality*	Available in public domain
3	Institutional Mandate	
3.1	Legal acts and other agreements*	Bio-medical Waste Management Rules, 2016 notified under HOWM Rules, 2016
3.2	Data sharing/Data Dissemination	Through CPCB website, www.cpcb.nic.in
3.3	Release calendar*	Yearly
3.4	Frequency of dissemination*	Yearly
3.5	Data access*	Available to public (CPCB website)
4	Quality Management	
4.1	Documentation on methodology*	Guidelines under Bio-medical Waste Management Rules, 2016
4.2	Quality documentation	Annual Report submitted by SPCBs/PCCs
4.3	Quality assurance	Cross verification
5	Accuracy and Reliability	
5.1	Sampling error*	NA
5.2	Measures of reliability	NA
6	Timeliness	
6.1	Timeliness*	Yearly
7	Coherence and Comparability	
7.1	Comparability – over time*	Available from 2008 onwards

7.2	Coherence	NA
8	Data Processing	
8.1	Source data type*	Excel/Pdfs
8.2	Frequency of data collection*	Yearly
8.3	Mode and method of data collection	Manual
8.4	Data validation*	Manual
8.5	Data compilation	manual
8.6	Data identifier (s)*	Quantum of Bio-medical Waste generated and managed
9	Metadata Update	
9.1	Metadata last posted	NA
9.2	Metadata last update	NA

9. Registry: National Inventory on Generation and Management of Hazardous and Other Wastes

Item No.	Concept Name	Details
1	Contact	
1.1	Contact Organisation*	Central Pollution Control Board
1.2	Compiling agency*	WM-II Division, CPCB and SPCB
1.3	Custodian agency*	WM-II Division, CPCB
1.4	Contact Details*	Ms. Deepti Kapil, DH- WM II Division, deepti.cpcb@nic.in
2	Data Description and Presentation	
2.1	Data description*	National Inventory on Generation and Management of Hazardous and Other Wastes
2.2	System of Classification*	Manual
2.3	International/National Standards Classification/Codes, if followed*	Basel Convention & Hazardous and Other Wastes (Management and Transboundary Movement Rules), 2016 (HOWM Rules, 2016)
2.4	Sector coverage*	Hazardous and Other Wastes as listed in HOWM Rules, 2016
2.5	Concepts and definitions*	As per HOWM Rules, 2016
2.6	Unit of compilation	Metric Ton per Annum
2.7	Population coverage*	Not Applicable
2.8	Reference Period*	Financial year
2.9	Duration and period of enumeration*	12 months (April to March)
2.10	Sample size/Dataset Size*	Yearly
2.11	Data Confidentiality*	Available in public domain

3	Institutional Mandate	
3.1	Legal acts and other agreements*	HOWM Rules, 2016
3.2	Data sharing/Data Dissemination	Via CPCB Website
3.3	Release calendar*	Yearly
3.4	Frequency of dissemination*	Yearly
3.5	Data access*	Available in public domain through CPCB Website
4	Quality Management	
4.1	Documentation on methodology*	Guidelines for Preparation of Inventories on Hazardous and Other Waste Generation and their Management
4.2	Quality documentation	Annual Returns submitted by industries and Annual Inventory Report by SPCBs
4.3	Quality assurance	Cross verification
5	Accuracy and Reliability	
5.1	Sampling error*	Not applicable
5.2	Measures of reliability	-
6	Timeliness	
6.1	Timeliness*	Yearly
7	Coherence and Comparability	
7.1	Comparability – over time*	Available from 2015-16 onwards
7.2	Coherence	-
8	Data Processing	
8.1	Source data type*	Excel/Pdfs
8.2	Frequency of data collection*	Yearly
8.3	Mode and method of data collection	Manual
8.4	Data validation*	Manual
8.5	Data compilation	Manual
8.6	Data identifier (s)*	Quantum of HW generated and Managed
9	Metadata Update	
9.1	Metadata last posted	-
9.2	Metadata last update	-

10. Registry: Air Quality Monitoring Systems

Item No	Concept name	Details
---------	--------------	---------

1	Contact	
1.1	Contact Organisation	Central Pollution Control Board Delhi
1.2	Compiling agency	IT Division and AQMN Division
1.3	Custodian agency	IT Division and AQMN Division
1.4	Contact Details	Sh. P Jagan, DH-IT Division, Sh Aditya Sharma, AQMN Division, jagan191.cpcb@gov.in, aditya.cpcb@nic.in
2	Data Description and Presentation	
2.1	Data description	ambient air quality data
2.2	System of Classification	manual and continuous data
2.3	International/ National Standards Classification/Codes, if followed	NAAQS-2009
2.4	Sector coverage	Air Quality
2.5	Concepts and definitions	Ambient air quality data monitored through Continuous Ambient air quality monitoring stations (CAAQMS) and Manual ambient air quality monitoring stations operated under NAMP (National Ambient air quality Monitoring Program).
2.6	Unit of compilation	µg/m ³ , mg/m ³ , ng/m ³
2.7	Population coverage	More than 1.0 Lakh population cities
2.8	Reference Period	calender year
2.9	Duration and period of enumeration	12 months (January to December)
2.1	Sample size/Dataset Size	Continuous - every 15 minutes and Manual - every 4,8,24 hrly, 104 days a year
2.11	Data Confidentiality	Continuous data directly availabl in public domain and Manual data compiled on yearly basis
3	Institutional Mandate	
3.1	Legal acts and other agreements	EP Act 1986
3.2	Data sharing/Data Dissemination	Through CPCB website www.cpcb.nic.in
3.3	Release calendar	Yearly basis
3.4	Frequency of dissemination	Yearly basis
3.5	Data access	Available to public
4	Quality Management	
4.1	Documentation on methodology	As per NAAQS-2009 published methodology
4.2	Quality documentation	calibrations performed
4.3	Quality assurance	validation checks performed on yearly data before publishing
5	Accuracy and Reliability	
5.1	Sampling error	as per minimum detectable limits prescribed for each parameter published through website
5.2	Measures of reliability	calibrations performed
6	Timeliness	

6.1	Timeliness	continuous data immediately made available to public
7	Coherence and Comparability	
7.1	Comparability – over time	daily report prepared and placed in public domain for NCR
7.2	Coherence	-
8	Data Processing	
8.1	Source data type	csv format automatically transferred through machines without human intervention and without time delay
8.2	Frequency of data collection	15 minutes
8.3	Mode and method of data collection	automated computers and server management through NIC servers
8.4	Data validation	auto validation + manual validation
8.5	Data compilation	through systems only
8.6	Data identifier(s)	-
9	Metadata Update	
9.1	Metadata last posted	-
9.2	Metadata last update	-