

Date, Month, Year

**Subject:** *Inputs for Urban Planning, Green Cover and Biodiversity, Indicator 2: Proportion of Green Cover (please upload documents for all required levels), – ClimateSmart Cities Assessment Framework 3.0*

*ClimateSmart Cities Assessment Framework (CSCAF) 3.0 is a flagship initiative by the Smart Cities Mission under the Ministry of Housing and Urban Affairs. The framework will support Indian cities to assess their development from a climate lens across 5 thematic areas and 28 indicators. The intent of CSCAF is to inform cities to build relevant climate actions.*

As a part of the assessment, City Nodal Officer has reached out to your department to collect the necessary data for the same. **Please fill the required data in the given format for your city. Ensure to sign and stamp the document.**

## **Urban Planning, Green Cover and Biodiversity**

### **2: Proportion of Green Cover**

**Rationale:** Sufficiently large and protected greenspaces reduce the impact of human activities on climate. The ecosystem services provided by the urban greenspaces help the city in general and its citizens to adapt to the adverse effects of climate change and disasters

**Description:** To what extent is the city developing and increasing its green cover. Green Cover, defined as natural or planted vegetation covering a certain area of terrain, functioning as protection against soil erosion, protecting the fauna, and balancing the temperature. For the purpose of this indicator, green areas are defined as man-made city level and zonal/ district level greens; and reserved/ protected areas as per MoHUA's Urban Green Guidelines, 2014 and protected areas under the Wildlife Protection Act, 1972.

**Methodology:** Data available on area of urban greens can be analysed from satellite imagery. Recent imagery can be procured from the state or National Remote Sensing Centre (NRSC). Baseline year: 2019. Comparative analysis using the formula given below on a yearly basis will help to understand the increase/decrease over time. This data is also being reported by cities for the Ease of Living Index (Indicator 3.2.1) and may be sourced from there.

**Formula:**

$$\frac{\text{Green Cover in sq. km}}{\text{Municipal area in sq. km}} \times 100$$

**Unit:** %

**Maximum Score:** Total score for the indicator is 100. Cities will be marked in 5 levels with scores ranging from 0 – 100. In this indicator, certain bonus marks will be provided for cities that are taking additional desirable measures towards protection of green cover.

1. Additional 10 marks for reporting on additional qualitative data – list of native tree species, tree density, and tree canopy density. (Applicable for levels 1 to 4)
2. Additional 10 marks for developing the strategy for increasing Green Cover in the city in line with the National Clean Air Plan (NCAP). (Applicable for levels 1 to 4)
3. Additional 5 marks for providing evidence on action initiated for points 1 and 2 above. (Applicable for levels 1 to 4)

Please use this form if you have responded YES to questions for the indicator levels:

**Green Cover**

**Response (sq. km)**

Total Master Planning Area

53.94

Municipal Area

53.94

Area of Green Cover

438 Hectare

- 1) What is the average tree density across the city? (Unit: trees per hectare)

(Note: Tree density gives us an idea of how closely trees are growing in a given area. This value can be expressed as trees per hectare. The tree density is not an exact number of all of the trees in the region, but it serves as an estimate.)

**Number:** \_\_\_\_\_ trees per hectare.

- 2) What is the average tree canopy density for tree cover/ forest cover areas, within the city, with a minimum areal extent of one hectare? (Unit: %)

(Note: Forest Canopy Density (FCD) refers to the proportion of an area in the field/ground that is covered by the crown of trees and is expressed in percentage of the total area.)

**Number:** 19 %

- 3) Reporting on additional qualitative data: list of native tree species

Please provide the following details for information about native tree species in the city:

### NATIVE TREE SPECIES IN THE CITY

Native Tree Species (Name)	Number

- 4) Evidence on action initiated for increasing green cover in the city in line with the prevailing policies like the **National Clean Air Plan (NCAP)**

Please provide the details for interventions/description of projects initiated for increasing green cover, for instance, taken under NCAP? Projects may include plantation drives in pollution hotspots, tree plantation and development of urban parks and forests etc.

### ACTIONS TO INCREASE GREEN COVER

Actions for increasing green cover	Department/ Agency	Status (Planning, implementation, completed)	Cost of Project (INR)
		<input type="checkbox"/> Planning <input type="checkbox"/> Implementation <input type="checkbox"/> Completion	
		<input type="checkbox"/> Planning <input type="checkbox"/> Implementation <input type="checkbox"/> Completion	
		<input type="checkbox"/> Planning <input type="checkbox"/> Implementation <input type="checkbox"/> Completion	

If you provide the map of tree cover, additional points will be provided.

This is to certify that the data above are for Urban Planning, Green Cover and Biodiversity– Indicator 2 (Proportion of Green Cover) in the ClimateSmart Cities Assessment Framework. This data has been received from **(please fill department/agency)** and are certified to be correct.

*Alok*  
**नगर निवेशक**  
**नगर निगम, हजारीबाग**

Authorized Signatory (municipal commissioner, city engineer, smart city CEO or responsible authority):

**Signature**

**Designation:**

**Date:**

**Stamp of the Department**

To be printed on the ULB letterhead

**Sector: Planning, Regulation and Preparedness**

**Data Point 17:**Total number of crematoriums operated by ULB. 03

**Description:**Data refers to number of crematoriums operated and maintained by the municipal corporation.

S. No.	Name of the Crematorium	Address of the Crematorium	Name of Person in Charge at Crematorium	Contact no. of the Crematorium
1	Khirgaon Shamshan Ghat	Khirgaon		
2	Khirgaon Qubristan	Khirgaon		
3	Hurhuru Cemenry	Hurhuru		

I hereby declare that the details mentioned on the letterhead are true and correct to the best of my knowledge and belief. I have fully understood that any misrepresentation of any information may invalidate the data.

निवेशक  
नगर निगम, हजारीबाग

  
Nodal Officer  
Municipal Corporation  
  
नगर निवेशक  
नगर निगम, हजारीबाग

To be printed on the ULB letterhead

**Sector: Planning, regulation & preparedness**

**Data Point 13:** Have response teams (e.g. fire stations, police, ambulances) been identified and prepared for disasters?


**Description:** This data point focuses on preparedness of ULB for any emergency situation and alignment of its response teams.

S. No.	Name of the Employee (Identified/Prepared)	Designation	Department	Contact No. of the Employee	Topic of Training	Date of the Training
1	Pradip Kumar	Haranganj	Fire Department	7979820152		
2	Uttam Tiwari	Main Road	Police Station			
3	Upendra Kumar	Main Road	Sadar Hospital			

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Nodal Officer

Municipal Corporation

  
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नगर निगम, हजारीबाग



Date, Month, Year

**Subject:** *Inputs for Urban Planning, Green Cover and Biodiversity, Indicator 1: Rejuvenation and Conservation of Water Bodies and Open Areas, Level 3/4 (please upload documents for all required levels), – ClimateSmart Cities Assessment Framework 3.0*

*ClimateSmart Cities Assessment Framework (CSCAF) 3.0 is a flagship initiative by the Smart Cities Mission under the Ministry of Housing and Urban Affairs. The framework will support Indian cities to assess their development from a climate lens across 5 thematic areas and 28 indicators. The intent of CSCAF is to inform cities to build relevant climate actions.*

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### Urban Planning, Green Cover and Biodiversity



#### Indicator 1: *Rejuvenation and Conservation of Water Bodies and Open Areas*

**MaximumScore:** Total score for the indicator is 100. Cities are marked in 5 levels with scores ranging from 0-100. In this indicator the level 3 and 4 have been merged taking into consideration the initiation of rejuvenation work and allocation of budget that goes hand in hand. Out of the total 50 marks allocated, cities will receive incremental scores ranging from 1-25 based on the evidence(s) provided for actions initiated. Similarly, for evidence(s) provided on fund allocation and expenditure for the actions, cities will receive another 1-25 marks. Finally, cities scoring a total of >25 and >50 marks will be considered in level 3 and level 4 respectively.

biodiversity. Having local sources of fresh water decreases the dependence on energy for pumping purposes. Open spaces, namely recreational spaces, planned greens and green buffer zones (as per URDPFI Guidelines 2014) in any city play a critical role in terms of climate mitigation and adaptation aspects by decreasing local temperature and help recharge groundwater. Increase in build-up areas and decrease of water bodies and open spaces lead to an increase in the local temperature within a city.

Open areas can be mapped using data sources from concerned department/ agencies. The area within the municipal boundary has to be considered. This figure has to be compared with the existing masterplan (percentage and area).

Developing an urban heat island map along with the informed actions taken by the ULBs/Planning authorities for combating urban heat island, and for increasing rejuvenated and conserved water bodies and open areas, will be useful in assessing the implementation status of such projects and its effectiveness.

Has city allocated any financial resources for rejuvenation and conservation of urban water bodies and open areas?

YES  NO

Please provide the following evidences if you have responded YES to the question above.

- 1) Informed actions for rejuvenation and conservation of water bodies and open spaces have been initiated (with supporting documents: photographs, proof of contracts, etc.) based on mapping and assessments conducted at level 2.

Please provide the details for interventions/description of projects initiated for conservation or rejuvenation of water bodies and/or open spaces:

Conservation and/or rejuvenation actions	Department/ Agency	Status (Planning, implementation, completed)	Cost of Project (INR)
Dhobia Talab	Nagar Nigam, Hazaribag	<input checked="" type="checkbox"/> Planning <input type="checkbox"/> Implementation <input type="checkbox"/> Completion	3.51 Crore
Khajanchi Talab	Nagar Nigam, Hazaribag	<input checked="" type="checkbox"/> Planning <input type="checkbox"/> Implementation <input type="checkbox"/> Completion	1.62 Crore
Renovation of Various Talab (1.Belahi Pond, 2.Hurhuru Pond, 3. Jabra Pond, 4. Kalondri Pond, 5. Het Tota Pond)	Nagar Nigam, Hazaribag	<input type="checkbox"/> Planning <input checked="" type="checkbox"/> Implementation <input type="checkbox"/> Completion	1 Crore
Charwa Dam	Nagar Nigam, Hazaribag	<input type="checkbox"/> Planning <input checked="" type="checkbox"/> Implementation <input type="checkbox"/> Completion	1 Crore
	Nagar Nigam, Hazaribag	<input type="checkbox"/> Planning <input type="checkbox"/> Implementation <input type="checkbox"/> Completion	

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Authorized Signatory (municipal commissioner, city engineer, smart city CEO or responsible authority):

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