

GUNTUR

SUSTAINABILITY INDICATORS REPORT

SUSTAINABLE CITIES INTEGRATED APPROACH PILOT (SCIAP)

UN HABITAT FOR A BETTER URBAN FUTURE





Prepared By: Submitted to: Project Donors:









JUNE 2021

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This report has been prepared under the Sustainable Cities Integrated Approach Pilot (SCIAP) project funded by the Global Environment Facility (GEF-6) through UNIDO. It documents the findings from the application of the Urban Sustainability Assessment Framework (USAF), which was developed under SCIAP for five pilot cities - Bhopal, Guntur, Jaipur, Mysore and Vijayawada. The report is produced using data provided by the state and municipal authorities of the four participating states and additional geospatial data collected from the National Platform for Sustainable Cities, European Space Agency. While UN-Habitat checks data to the fullest extent possible, the responsibility for the accuracy of the data lies with the original providers of the data. Information contained in this Report is provided without warranty of any kind, either express or implied, including, without limitation, warranties of merchantability, fitness for a particular purpose and non-infringement. UN-Habitat specifically does not make any warranties or representations as to the accuracy or completeness of any such data. Under no circumstances shall UN-Habitat be liable for any loss, damage, liability or expense incurred or suffered that is claimed to have resulted from the use of this Report, including, without limitation, any fault, error, omission with respect thereto. The use of this Report is at the User's sole risk. Under no circumstances, including, but not limited to negligence, shall UN-Habitat or its affiliates be liable for any direct, indirect, incidental, special or consequential damages, even if UN-Habitat has been advised of the possibility of such damages.



List of Acronyms

GMC Guntur Municipal Corporation

CSCAF Climate Smart City Assessment Framework

EOLI Ease of Living Index

ESCI Emerging and Sustainable Cities Initiative

GDP Gross Domestic Product

GEF Global Environment Facility

GHG Green House Gas

GIS Geographical Information System

GPSC Global Platform for Sustainable Cities

MoHUA Ministry of Housing and Urban Affairs

MPI Municipal Performance Index

SCIAP Sustainable Cities Integrated Approach Pilot

SDG Sustainable Development Goals

SLB Service Level Benchmarking

SS 2020 Swachh Survekshan 2020

SWM Solid Waste Management

UNIDO United Nations Industrial Development Organisation

UN-Habitat United Nations Human Settlements Programme

URDPFI Urban and Regional Development Plans Formulation and Implementation

USAF Urban Sustainability Assessment Framework

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Key Definitions

Benchmark: Benchmarks refer to a quantitative value set for an indicator to assess the performance to reach the target. Scoring range is based on benchmarks derived from national standards and linked to global standards wherever possible. In the Urban Sustainability Assessment Framework (USAF), for quantitative indicators, indicator value over and above the set benchmark is categorised as excellent performance.

Threshold: Threshold is the minimum level of performance that can be associated with an indicator value to be considered within the sustainability range.

1. Introduction

Guntur is the third most populous city in the state of Andhra Pradesh. The city is the administrative headquarters of Guntur District. It is located 35 km south-east of the state's legislative capital Amaravati and 40 km south of Vijayawada, second largest city in the state. The area is known for its fertile farmland and the city is one of the largest trade centres for agricultural products such as chillies, tobacco, cotton in the country. It houses Asia's largest dried chilli market, and the national headquarters of Tobacco Board. Guntur is also a prominent medical and educational hub in the state.

As per the Census 2011, the population of Guntur was 7.43 lakh. Guntur Municipal Corporation (GMC) estimated the total population of the city in 2019 at 8.25 lakh. Between 2012 and 2017, the neighbouring villages were added to the city and the jurisdictional area was expanded from 45.71 sq. km to 128 sq. km. The average population density of the city is 64 persons per hectare (PPH). Between 1975 and 2018, the built-up area of the city has had increased by almost seven times (7.64 sq. km to 46.48 sq. km), while its population had grown by three times (2.99 lakh to 8.10 lakh).

The major ongoing projects in the city include construction of underground drainage system, construction of regional waste to energy plant of 15 MW capacity, providing water supply (50 MLD capacity) to peripheral areas of the city, construction of 12 Urban Primary Health Centres, redevelopment of major parks and rejuvenation of five water bodies. Major proposed projects include construction of ultra-modern 'E-Bus Bays', secondary waste collection points in six locations, redevelopment of PVK Naidu Vegetable market site, installation of 500 KW floating solar power plant and procuring 220 electric three-wheeler vehicles for collection of solid waste from households.

Guntur falls within the Amaravati Metropolitan Region Development Authority. The enforced Zonal Development Plan for Guntur was notified in 2006 for the horizon year 2021. The revised Zonal Development Plan for 2035 is under preparation.

This Urban Sustainability Indicators Report for Guntur is based on the Urban Sustainability Assessment Framework (USAF), developed under the Sustainable Cities Integrated Approach Pilot. It intends to enhance decision-making by augmenting the development potential of Guntur and strengthening day-to-day management and good governance. It can also help decision-makers prioritize projects to effectively direct resources towards targeted areas for maximum impact and benefit.

2. City Management and Planning Indicators

Urban sustainability indicators are important tools to measure and monitor city's development status and trajectory. The indicators in this report cover 12 sectors, namely, public space-safety-urban form, housing-property, water, sanitation, solid waste management, transportation, social services-facilities, environment-ecology, clean energy, disaster risk management, governance-data management and finance-economy (Figure 2.1). These sectors represent the primary urban planning and management functions of the urban local bodies. The report provides multi-sectoral outlook as well as granular sector-specific data to assess city's performance relative to national and international standards.

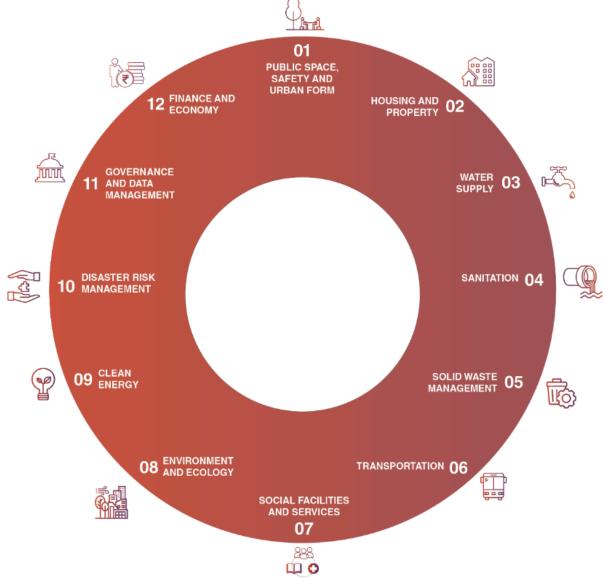


Figure 2.1: Urban Sectors

3. Indicator Categories and Scoring

There are 131 indicators in USAF which are formulated using 235 data inputs across 12 sectors. These 131 indicators have been divided into three levels: 54 are primary, 55 are secondary and 22 are tertiary. The definitions of the levels are specified in Figure 3.1.

Covers at least 1 SDG target and/or Comprehensive **Primary** indicators from 1 or more National and snapshot of city International Frameworks; and/or spatial in performance nature May cover 1 SDG target and/or indicators Deeper dive into Secondary from 1 or more National and International specific sectors Frameworks City priority specific, May cover SDG targets and/or indicators **Tertiary** more granular from National and International Frameworks assessment

Figure 3.1: Indicator Levels and their Definitions

The indicators are scored on a 7-point scale (very low to excellent performance). A score of 0 (or very low performance) is given when performance is below minimum threshold and score of 6 (or excellent performance) is given when performance meets or exceeds the benchmark set by considering national and global standards. Performance above the set threshold for an indicator procures the score of 1 (or low performance). National urban averages are used as mid-point (score 3 or medium performance) wherever either thresholds or benchmarks weren't available.

For representation, the range of performance follows a spectral colour ramp and varies from two shades of red (very low - low) to two shades of green (high - excellent) with three shades of yellow in between (lower medium - medium - upper medium) (Figure 3.2).

	Indicator Performance							
0	1	2	3	4	5	6		
Very low performance	Low performance	Lower medium performance	Medium performance	Upper medium performance	High performance	Excellent performance		

Figure 3.2: Colour gradient of indicator performance

4. Sector-wise City Performance

This section presents the indicator-wise and overall performance of each sector for primary, secondary, and tertiary indicators, based on the data collected and scored in accordance with the scoring methodology. It also includes the status of data collection for each sector.

For Guntur, 75% of all indicators (98 out of the 131 indicators), have been collected (figure 4.1). 85% of all primary indicators have been collected.

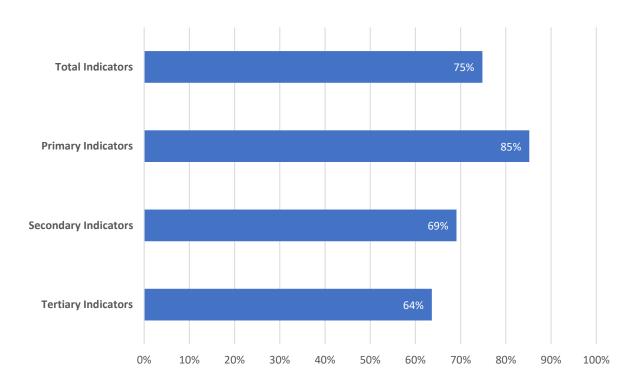


Figure 4.1: Data collection status for Guntur

In the following sections (4.1 to 4.12), performance of overall sector and each indicator in that sector is given. In the sector wise tables, '-' in the city indicator value column represents unavailable data. These indicators are not scored and represented by '-' in the indicator performance column. In the indicator performance column, 'NA' value represents that the scoring for such indicators is 'Not Applicable' (for descriptive indicators). Overall average for each sector is calculated based on the collected indicators.

All data in this report has been collected and validated by relevant local entity consulted during the preparation (Annex 6.1). A detailed list of all indicators, indicator value, scoring range, city score, indicator type and source framework for each of the 12 sectors is provided in Annexure 6.2.

4.1. Urban Form, Public Space and Safety

There are 9 indicators in this sector, 3 of which are related to safety, 2 to urban form and rest are related to public and open spaces in the city. Data for 7 out of 9 indicators has been collected for Guntur.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
UPS	1.1	Percentage of city roads covered with street lighting (%)	Primary	85%	2
UPS	1.2	Percentage change in the built-up area per capita in the city in between year 2000 and year 2014 (%)	Primary	-32%	NA
UPS	1.3	Percentage of agriculture use area proposed for future developable uses in the Master Development Plan (%)	Primary	53%	NA
UPS	1.4	Percentage of population within 500m distance to public park/open space (%)	Primary	45%	0
UPS	1.5	Open space (includes recreational space, organised green, other common open spaces) per capita (sqm/person)	Primary	0.92	0
UPS	1.6	Percentage share of pedestrian fatalities in total fatalities (motorized/non-motorized transport) in road accident during a year (%)	Secondary	-	-
UPS	1.7	Percentage of recreational and open space (includes stadiums, theme parks, playgrounds, maidan) of total developable area (%)	Secondary	1%	0
UPS	1.8	Rating of safety standards of the city	Tertiary	-	-
UPS	1.9	Amount spent in operations and maintenance per square metre area of parks in the city by the ULB (INR per sqm)	Tertiary	22.70	NA
UPS		Overall Sector Avera	age Score		1

Table 4.1: Urban Form, Public Space and Safety



4.2. Housing and Property

There are 5 indicators in this sector measuring the status of informal settlements and slums, and housing demand in the city. Data for 4 out of 5 indicators has been collected for Guntur.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance	
НР	2.1	Percentage of urban households living in slums/squatter settlements (%)	Primary	28%	0	
НР	2.2	Percentage of city area under slums/squatter settlements (%)	Primary 5%		NA	
НР	2.3	Percentage of owner-occupied housing units to total housing units (%)	Secondary	47%	0	
НР	2.4	Percentage of households spending greater than 30 percent of their income on accommodation expenses (%)	Tertiary	Tertiary -		
НР	2.5	Percentage of households living in one room (%)	Tertiary 38%		3	
НР		Overall Sector Avera	Overall Sector Average Score			

Table 4.2: Housing and Property

4.3. Water

There are 6 indicators to gauge the water resource management including service coverage and efficiency in mapping households with piped connection, metered connections, and measuring the extent of non-revenue water in the city. Data for all 6 indicators has been collected for Guntur.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
WTR	3.1	Percentage of households with piped connection (%)	Primary	72%	4
WTR	3.2	Percentage of water samples in a year that comply with national potable water quality standards (%)	Primary	96%	4
WTR	3.3	Existence of water resources assessment and management Plan prepared in the last five years.	Primary	No water resource assessment has been carried out	0

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
WTR	3.4	Extent of Non-Revenue Water (%)	Primary	31%	3
WTR	3.5	Water supply per capita (LPCD)	Secondary	116.85	0
WTR	3.6	Extent of metering of water supply connections (%)	Secondary	24%	1
WTR		Overall Sector Average Score			2

Table 4.3: Water

4.4. Sanitation

For assessing performance of cities on coverage of sewerage network and toilet facilities and industry compliance with wastewater treatment norms and guidelines, there are 9 indicators in the sanitation sector. Data for 7 out of 9 indicators has been collected for Guntur.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
SAN	4.1	Percentage of properties in the ULB connected to sewerage network (%)	Primary	21%	0
SAN	4.2	Proportion of households having access to toilet facility (%)	Primary	100%	6
SAN	4.3	Percentage of sewage treated before discharge into surface water bodies (%)	Primary	0%	0
SAN	4.4	Percentage of wastewater samples that passed the specified secondary treatment standards from the total samples collected in a year(%)	Primary	_1	-
SAN	4.5	Percentage of wastewater received at the treatment plant that is recycled or reused after appropriate treatment for various purposes (%)	Primary	0%	0
SAN	4.6	Percentage of city sewage that is treated in a sewage treatment plant (%)	Secondary	0%	0

 $^{^{\}rm 1}$ Guntur city currently doesn't have operational STP. Hence, this indicator is not applicable.



[12]

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
SAN	4.7	Percentage of industries complying with waste water treatment as per CPCB norms (%)	Secondary	_2	-
SAN	4.8	Existence of FSSM Action plan or notified San-benchmarks, byelaws/ guidelines/ policy notes by the ULB/Development Authority	Secondary	No guidelines/policy/action plan prepared	0
SAN	4.9	Percentage of Public Toilets (PTs) mapped on Google Maps (%)	Tertiary	100%	6
SAN		Overall Sector A	2		

Table 4.4: Sanitation

4.5. Solid Waste Management

There are 12 indicators in the framework to assess the state of solid waste management which includes the extent of scientific landfill sites, provision for treating hazardous waste and remediation of legacy waste in the city. Data for 11 out of the 12 indicators has been collected for Guntur.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
SWM	5.1	Percentage of city's wet waste processed (%)	Primary	54%	3
SWM	5.2	Percentage of the city's dry waste that is separated and classified for recycling/material recovery (%)	Primary	6%	0
SWM	5.3	Percentage of the city's solid waste that is used for energy recovery (incineration) or coprocessing (%)	Primary	1%	6
SWM	5.4	Percentage of the city's municipal solid waste that is disposed off in open dumps / controlled dumps, water bodies / is burnt (%)	Primary	64%	0

² There are no industries within Guntur City limits that require installation of wastewater treatment (Source: AP Pollution Control Board, Guntur Region). This indicator is not applicable for the city.



[13]

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
SWM	5.5	Percentage of waste remediated in the city (%)	Primary	0%³	0
SWM	5.6	Percentage of wards practicing source segregation of waste which is maintained till processing/ disposal site (%)	Secondary	94%	6
SWM	5.7	ICT based Monitoring Mechanism in place for: i) Ward wise Collection and Transportation (C&T) ii) Monitoring of Garbage Vulnerable Points (GVPs) iii) Attendance of Sanitation Staff	Secondary	3	6
SWM	5.8	Percentage of informal waste pickers integrated into sustainable SWM systems (%)	Secondary	100%	6
SWM	5.9	Percentage of C&D waste collected of the total C&D waste generated (%)	Secondary	0%	0
SWM	5.10	Percentage of hazardous waste processed (%)	Secondary	_4	-
SWM	5.11	Total solid waste generation per capita per day (kg/capita/day)	Tertiary	0.51	3
SWM	5.12	Percentage Coverage of wards under Door- To-Door Collection System (%)	Tertiary	100%	6
SWM		Overall Sector Avera	age Score		3

Table 4.5: Solid Waste Management

4.6. Transportation

There are 15 indicators in the transportation sector informing about the status of public transport coverage, quality, safety features, and invest in environmentally friendly infrastructure by the ULB. Data for 6 out of 14 indicators has been collected for Guntur.

⁴ There are no industries within the city generating hazardous waste (source: AP Pollution Control Board, Guntur region)



[14]

³ Remediation of existing dumping yard through Bio-mining process was proposed in Guntur. RFP was floated in 2018 for the same. However, the project has not been initiated till date.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
TR	6.1	Percentage of population within 500m distance to public transport stops (%)	Primary	42%	0
TR	6.2	Kilometres of bicycle path per 100,000 population (km)	Primary	0.00	0
TR	6.3	Percentage of major roads covered with footpath (footpath wider than 1.2 meters) within the city (%)	Primary	13%	0
TR	6.4	Rate of increase in public transportation ridership (%)	Primary	_5	-
TR	6.5	Percentage of shared vehicles that operate on clean fuels like CNG, LPG, biofuels or are hybrid or electric vehicles (%)	Primary	-	-
TR	6.6	Road density (km/sqkm)	Primary	8.34	NA
TR	6.7	Average travel speed in major roads of the city (kmph)	Secondary	-	-
TR	6.8	Percentage share of NMT in commuting (cycling and walking) (%)	Secondary	-	-
TR	6.9	Street intersection density (intersections/sqkm)	Secondary	-	-
TR	6.10	Kilometres of road with public transit per 100,000 population (km)	Secondary	-	-
TR	6.11	Fatal and serious injuries in road accidents per lakh population (number)	Secondary	39.03	0
TR	6.12	Accessibility of differently-abled groups to Public Buses (%)	Secondary	-	-
TR	6.13	Workplace accessibility within 30 minutes of transit (%)	Tertiary	-	NA
TR	6.14	Percentage of total area of ULB allocated to streets (%)	Tertiary	9%	0

 $^{^{\}rm 5}$ Guntur city does not have a formal public transportation system.



Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
TR		Overall Average Sec	ctor Score		0

Table 4.6: Transportation

4.7. Social Facilities and Services

Out of the 11 indicators in the social facilities and services sector, 4 indicate about the demography, 5 are related to the health and 3 to the status of education in the city. Data for 6 out of 11 indicators has been collected for Guntur.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
SCL	7.1	Percentage of population within 800m distance to healthcare facilities (public/private) (%)	Primary	91%	4
SCL	7.2	Percentage of females of ages 7 and above who are literate (%)	Primary	75%	3
SCL	7.3	Percentage of population within 800m distance to primary/secondary schools (public/private) (%)	Primary	91%	4
SCL	7.4	Change in decadal population growth rate (1991-2001 and 2001-2011) (%)	Secondary	21%	NA
SCL	7.5	City Level Dependency Ratio (%)	Secondary	40%	NA
SCL	7.6	Under-five mortality rate per 1000 births (number)	Secondary	-	-
SCL	7.7	Bed density in public and private hospitals (Hospital beds per 10,000 residents) (number)	Secondary	-	-
SCL	7.8	Percentage reduction in prevalence of vector borne diseases(malaria, dengue) over the previous year (%)	Secondary	-88%	0
SCL	7.9	Percentage reduction in prevalence of waterborne diseases (Diarrhoea, typhoid) over the previous year (%)	Secondary	-	-



Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
SCL	7.1	Percentage of schools with Access to Digital Education (%)	Secondary	-	NA
SCL	7.11	Percentage of mobile network, by 3G and 4G technology subscriptions (%)	Tertiary	-	-
SCL	SCL Overall Sector Average Score		3		

Table 4.7: Social Facilities and Services

4.8. Environment and Ecology

With 18 indicators to examine whether ULBs have a clean air action plan, are equipped to measure the major pollutants, as well as disaggregate emissions data to the specific sectors, this is one of the most important sectors of USAF. Data for 14 out of 18 indicators has been collected for Guntur.

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
ENV	8.1	Clean Air Action Plan (Planning and Implementation)	Primary	Clean Air Action Plan and Pollutants Source Identification	3
ENV	8.2	Existence of a GHG emissions measurement system with a monitoring system (Y/N)	Primary; Aspirational	No	0
ENV	8.3	Total annual GHG emissions (MtCO2e)	Primary; Aspirational	1122848	NA
ENV	8.4	Proportion of Tree Cover to the total ULB area(%)	Primary	-	-
ENV	8.5	Extent to which city is acting for protection, conservation and management of urban biodiversity	Primary	No action initiated	0
ENV	8.6	Number of structural and financial incentives for green buildings implemented (number)	Primary	One or two incentives	3
ENV	8.7	Annual mean Air Quality Index(AQI) (number)	Secondary	32	6

Code	No.	Indicator	Indicator Category	City Indicator Value	Indicator Performance
ENV	8.8	Annual CO2 equivalent (GHG) emissions per capita (MtCO2e/capita)	Secondary; Aspirational	1.44	NA
ENV	8.9	Annual CO2 equivalent emissions from the transportation sector (MtCO2e)	Secondary; Aspirational	278489	NA
ENV	8.10	Biochemical Oxygen Demand 3 day, 270C (mg/l)	Secondary	-	-
ENV	8.11	Area under ULB covered by trees per inhabitant (sqm per person)	Secondary	-	-
ENV	8.12	Is there a land use plan that includes zoning with environmental protection and preservation zones? (Y/N)	Secondary	Yes	6
ENV	8.13	Annual mean levels of PM10 (μg/m3)	Tertiary	50.2	3
ENV	8.14	Annual mean levels of PM2.5 (μg/m3)	Tertiary	23.2	3
ENV	8.15	Annual concentration of NO2 (μg/m3)	Tertiary	18.5	6
ENV	8.16	Average daily concentration of SO2 (μg/m3)	Tertiary	4.6	6
ENV	8.17	Total annual methane emissions (MtCO2e)	Tertiary; Aspirational	-	NA
ENV	8.18	Existence, monitoring and enforcement of regulations on noise pollution (Y/N)	Tertiary	Yes	6
ENV		Overall Sector A	verage Score		4

Table 4.8: Environment and Ecology

4.9. Clean Energy

There are 8 indicators in to assesses the current distribution network, coverage and stability, accessibility of households to natural gas for cooking, and current per capita consumption. Data for 3 out of 8 indicators has been collected for Guntur.



Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
CE	9.1	Percentage of the city's households using LPG/PNG for cooking (%)	Primary	77%	2
CE	9.2	Percentage of total electrical energy in the city derived from renewable sources (%)	Primary	-	-
CE	9.3	Proportion of population in the city who have access to renewable energy (%)	Primary; Aspirational	-	-
CE	9.4	Percentage of energy-efficient street lighting in the city (%)	Primary	94%	5
CE	9.5	Energy use per capita (kWh)	Primary	-	NA
CE	9.6	Percentage of the city's households with an authorized connection to electrical energy (%)	Secondary	-	-
CE	9.7	Do existing building codes consider eco- friendly techniques and/or the use of local/renewable material? (Y/N)	Secondary	Yes	6
CE	9.8	System Average Interruption Frequency Index (SAIFI) (number)	Tertiary	-	-
CE		Overall Sector Ave	erage Score		4

Table 4.9: Clean Energy

4.10. Disaster Risk Management

There are 6 indicators to analyse the state of preparedness of the city in an event of natural disasters (flood, earthquakes and cyclones) and manmade disasters (incidence of fire). Data for 5 out of 6 indicators has been collected for Guntur.

Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
DRM	10.1	Presence of City Disaster Management Plan prepared / updated in last five years (Y/N)	Primary	Plan prepared after year 2016	6
DRM	10.2	Existence of hazard vulnerability maps/risk maps (at city level) prepared / updated in	Primary	Maps not prepared	0

Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
		the last five years for the main hazards threatening the city (Y/N)			
DRM	10.3	Percentage of households at risk due to placement in areas of non-mitigable risk within the ULB (%)	Primary	-	-
DRM	10.4	Percentage of buildings within 4km distance to fire service facility (%)	Primary	75%	1
DRM	10.5	Presence of hazard early warning systems linked with command control system.	Secondary	Presence of hazard early warning system but no linkage with ULB Command Control system	3
DRM	10.6	Existence of urban flood / water stagnation risk assessment and management plan	Secondary	0	0
DRM Overall Sector Average Score			1		

Table 4.10: Disaster Risk Management

4.11. Governance and Data Management

There are 14 indicators to analyse the extent to which the ULBs are effectively directing the planning and management of the City. Data for 13 out of 14 indicators has been collected for Guntur.

Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
GOV	11.1	Number of planners per capita (number)	Primary	3.33	6
GOV	11.2	Years since enforced master plan/development plan was last reviewed and updated (number of years)	Primary	14	0
GOV	11.3	Number of services being managed through command and control system in the ULB (eg: SCADA, ICCC etc) (number)	Primary	0	0

Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
GOV	11.4	Number of functions being implemented by ULB out of 18 functions stipulated in the Twelfth schedule of Indian constitution (number)	Primary	Between 15 and 17	3
GOV	11.5	Existence of Geographic information System (GIS) based Master Plan for the city	Primary	Absence of GIS base Master Plan	0
GOV	11.6	Environmental status report with action plans published by the ULB for the last three years	Secondary	No	0
GOV	11.7	Percentage of total staff trained during the year in any of the ULB functionary domains (%)	Secondary	-	-
GOV	11.8	Number of E-governance initiatives undertaken by the ULB: a. ULB website (Y/N) b. Online Public Service Delivery (Services provided online as a proportion of total Services provided) c. Online Public Service Delivery on Mobile (Services provided via mobile as a proportion of total Services provided) d. Online Grievance Redressal (number of grievances received online as a proportion of total grievances received) e. Online Grievance Redressal on Mobile (Services provided via mobile as a proportion of total Services provided)	Secondary	5	6
GOV	11.9	Local development control regulations and master plan / development plan are accessible completely through the web.	Secondary	Both available online	6
GOV	11.10	Number of stipulated committees in the ULB: 1) Municipal Committee/Council 2) Ward Committee 3) Metropolitan Planning Committee / District Planning Committee 4) Project Coordination /Monitoring Committee 5) Town Vending Committee (Street vendors) 6) Heritage Conservation Committee	Secondary	4	3

Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
GOV	11.11	ULB's citizen charter and appeal mechanisms	Secondary	Exists offline and online	6
GOV	11.12	Presence of City data officer (Y/N)	No	0	
GOV	11.13	Proportion of Women councillors in Municipal Council (%)	Tertiary	3	
GOV	11.14	Digital Governance: Presence on Open Data Portal	Tertiary	No	0
GOV		Overall Sector Avera	age Score		3

Table 4.11: Governance and Data Management

4.12. Finance and Economy

Out of the total 19 indicators in this sector, 13 indicators are related to analysing the status of municipal finance in the city and the remaining 6 indicators suggest about the performance of the economic factors. Data for 12 out of 19 indicators has been collected for Guntur.

Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
FIN	12.1	Credit rating of the ULB	Primary	-	-
FIN	12.2	Total property tax collected as a percentage of total property tax billed in the same financial year (%)	Primary	71%	3
FIN	12.3	Financial dependency: Percentage of grants received from central and state governments to total revenue (%)	Primary	20%	6
FIN	12.4	Growth rate of GDP per capita (%)	Primary	-	NA
FIN	12.5	Change in Own Source Revenue (number of years with OSR > 20%)	Secondary	5	6
FIN	12.6	Operating margin: Difference in revenue and expenditure in the financial year (INR in Lakhs)	Secondary	-4457.12	0

Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
FIN	12.7	Total cost of annual debt service as a percentage of expenditure (%)	Secondary	8%	NA
FIN	12.8	Percentage of debt/loans in overall budget allocation (%)	Secondary	10%	6
FIN	12.9	Properties covered under the tax net expressed as percentage of total properties within the municipality (%)	Secondary	85%	1
FIN	12.10	Efficiency of Capital expenditure spending: Actual capital expenditure spent expressed as a percentage of the budgeted capital expenditure in the financial year (%)	Secondary	41%	0
FIN	12.11	Cost Recovery in Water Supply: Total operating revenues expressed as a percentage of the total operating expenses incurred towards water supply services in the given financial year (%)	Secondary	59%	4
FIN	12.12	Cost Recovery in Sanitation: Total operating revenues expressed as a percentage of the total operating expenses incurred towards sanitation services in the financial year (%)	Secondary	56%	4
FIN	12.13	Cost Recovery in Solid Waste Management: Total operating revenues expressed as a percentage of the total operating expenses incurred towards solid waste management services in the financial year (%)	Secondary	6%	0
FIN	12.14	Unemployment rate of persons of age 15 years and above (%)	Secondary	-	-
FIN	12.15	Inequality Index based on Consumption Expenditure- Gini Coefficient (score)	Secondary	-	NA
FIN	12.16	Percentage of workforce employed in the service sector (%)	Secondary	-	NA
FIN	12.17	Total capital expenditure as percentage of total expenditure (%)	Tertiary	64%	6

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Code	Number	Indicator	Indicator Category	City Indicator Value	Indicator Performance
FIN	12.18	GDP density as a percentage of the built-up area of the local government (%)	Tertiary	-	NA
FIN	12.19	Informal employment as percentage of total employment (%)	Tertiary	-	NA
FIN		Overall Sector Avera	ige Score		3

Table 4.12: Finance and Economy



5. Highlights and Way Forward

The overall performance of Guntur is rated as "3 – average" based on the data collected, with Sector 8- Environment and Ecology, Sector 9- Clean Energy, Sector 12- Finance and economy, scoring highest, and Sector 2-Housing and property, and Sector 6- Transportation, scoring lowest. (Figure 5.1). The average performance of each sector is represented using the 7-point colour gradient.⁶

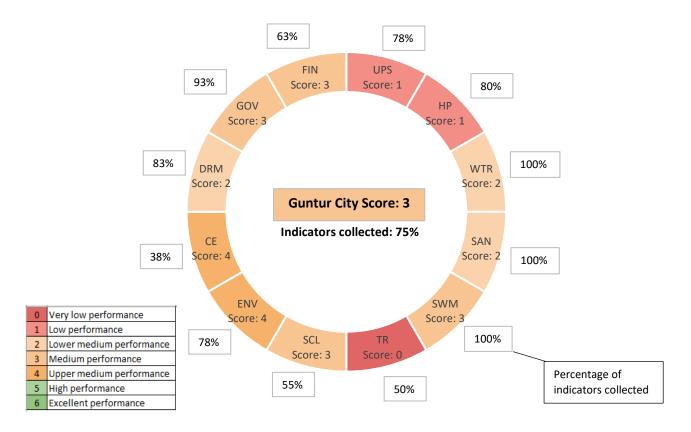


Figure 5.1: Average performance and percentage of indicators collected for all sectors

Amongst all the sectors, the highest five performing primary indicators are enlisted in Table 5.1 and the lowest five indicators in Table 5.2.⁷

⁷ The highest and lowest primary performing indicators are determined by taking the difference between the benchmark and the indicator value. Some of the lowest performing indicators may emerge from the highest average performing sectors or vice-versa.



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⁶ It should be noted here that the performance of a sector may move in either direction if data points for more indicators were available.

Code	Number	Indicators	Indicator Category	Benchmark	Indicator Value
SAN	4.2	Proportion of households having access to toilet facility (%)	Primary	100%	100%
SWM	5.3	Percentage of the city's solid waste that is used for energy recovery (incineration) or co-processing (%)	Primary	5%	1%
DRM	10.1	Presence of City Disaster Management Plan prepared / updated in last five years (Y/N)	Primary	Plan prepared after year 2016	Plan prepared after year 2016
GOV	11.1	Number of planners per capita (number)	Primary	1	3.33
FIN	12.3	Financial dependency: Percentage of grants received from central and state governments to total revenue (%)	Primary	30%	20%

Table 5.1: Highest performing primary indicators

Code	Number	Indicator	Indicator Category	Benchmark	Indicator Value
UPS	1.5	Open space (includes recreational space, organised green, other common open spaces) per capita (sqm/person)	Primary	12	0.92
SAN	4.3	Percentage of sewage treated before discharge into surface water bodies (%)	Primary	100%	0%
SWM	5.5	Percentage of waste remediated in the city (%)	Primary	95%	0%
TR	6.2	Kilometres of bicycle path per 100,000 population (km)	Primary	25	0
TR	6.3	Percentage of major roads covered with footpath (footpath wider than 1.2 meters) within the city (%)	Primary	75%	13%

Table 5.2: Lowest performing primary indicators



Guntur Urban Sustainability Indicators Report is the foundation for an in-depth city profile, diagnostics and assessment for sustainable and resilient urban planning and management. Indicators are important input into the Urban Sustainability Assessment Framework (USAF), designed as a decision support tool for municipal commissioners, chief town planners, and urban practitioners to undertake evidence-based and spatially informed policy, regulatory, and granular development decisions. USAF methodology is documented in detail in Technical Document.

Regularly updated Urban Sustainability Indicators Report is crucial for identifying gaps and opportunities across the 12 sectors, thereby providing stronger impetus for master plan revision, preparing capital investment plans and development projects. Urban Sustainability Indicators Report can also be used for monitoring impact of policies and projects on local communities.

The Urban Sustainability Indicators Report is recommended to be prepared annually. In the future, GMC may customise its reporting based on relevant priority sectors at the time. The reporting framework is adaptable to meet the context of each city. However, it is recommended that cities report on all primary indicators and select from the menu of secondary and tertiary indicators. Public disclosure of data is encouraged to enable participation of community and other stakeholders in city's vision and development.



6. Annexures

6.1. List of Consultations

Means of engagement	Department	Name and Designation of official(s) attending	No. of indicators for discussion	Date	Location	Documentation
Tier 1 Stakeholders Cons	sultations					
In-Person discussion	GMC - Administration	Mr. Srinivasa Rao, Deputy Municipal Commissioner, GMC	19	12-Dec-20	GMC Office, Guntur	
In-Person discussion	GMC - Engineering	Mr. P. Ravi Krishna Raju, Superintending Engineer, GMC	41	11-Dec-20	GMC Office, Guntur	
In-Person discussion	GMC - Engineering (MSWM)	Mr. Pavan, Assistant Engineer, GMC	12	07-Jan-21	GMC Office, Guntur	
In-Person discussion	GMC - Administration	Mr. Srinivasa Rao, Deputy Municipal Commissioner, GMC	19	12-Dec-20	GMC Office, Guntur	_
In-Person discussion	GMC - Public Mr. R. Venkata Ramana, Municipal Health Officer, GMC Mr. Ravinder Naik, Environmental Engineer, GMC		14	21-Dec-20	GMC Office, Guntur	
Tele consultation			5	08-Dec-20	NA	Feedback and comments are catalogued in stakeholder
In-Person discussion	GMC - Town Planning Department	Mr. Satyanarayana, Deputy City Planner, GMC	21	16-Dec-20	GMC Office, Guntur	consultation report
In-Person discussion	GMC - Accounts Department	Mr. K. Naga Srinivas, Examiner of Accounts	13	10-Dec-20	GMC Office, Guntur	
In-Person discussion	GMC - Urban Poverty Alleviation Cell	Mr. Sivannarayana Rao, Project Officer, UPA Cell, GMC	1	16-Dec-20	GMC Office, Guntur	
Tele consultation	AMRDA	Mr. Manoj Kumar, Associate Planner - Traffic & Transport Planning wing, Amaravati Metropolitan Regional Development Authority (AMRDA)	15	08-Jan-21	NA	
In-Person discussion	AMRDA	Mr. Dhanunjay Reddy, Zonal Assistant Director, Amaravati Metropolitan Regional Development Authority (AMRDA)	13	21-Jan-21	AMRDA Office, Vijayawada	
Tier 2 Stakeholders Cons	sultations					
In-Person discussion	Directorate of Town and Country Planning (DTCP)	Mr. Deen Maqbool Ahmed, Assistant Director, DTCP	13	12-Jan-21	DTCP Office, Mangalagiri	Feedback and comments are
In-Person discussion	Andhra Pradesh Pollution Control Board	A.K. Parida I.A.S(Retd), Chairman, APPCB B. Siva Prasad, Chief Environmental Engineer, APPCB Madhusudan Rao, Joint Chief Environmental Engineer, APPCB Prasad, Junior Scientific Officer, APPCB	21	21-Jan-21	APPCB State Head Office - Vijayawada	catalogued in stakeholder consultation report

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Means of engagement	Department	Name and Designation of official(s) attending	No. of indicators for discussion	Date	Location	Documentation		
In-Person discussion	Andhra Pradesh Pollution Control Board - Guntur Region	Mr. Sainath, Environmental Engineer, APPCB, Guntur Region		22-Dec-20	APPCB Guntur Regional Office			
Video Conference	Andhra Pradesh State Disaster Management Authority	Srinivas (Project Manager) Revenue Dept - APSDMA						
Video Conference	District Fire Office, Vijayawada Srinivas Rao (DFO - Vijayawada)		6	08-Dec-20	Through video consultation			
Video Conference	UNDP	Abdul Sattar - City Project Coordinator, VMC - UNDP				Feedback and comments are		
In-Person discussion	District Disaster Cell, Guntur	Revenue Officer, Revenue & Disaster wing, Guntur District	6	18-Jan-21	Guntur District Collectorate	catalogued in stakeholder consultation report		
In-Person discussion	Directorate of Economics and Statistics	Smt. V Prathima, Director, Directorate of Economics and Statistics	10	03-Feb-21	Directorate of Economics and Statistics Office, Gollapudi, Vijayawada			
In-Person discussion	Andhra Pradesh Central Power Distribution Corporation Limited (APCPDCL)	Sanjeev Rao, Executive Engineer (Technical), APCPDCL	4	03-Feb-21	Corporate office, Vijayawada			

6.2. Indicator Sheet with City Performance

The detailed methodology of evolution of the following indicators and explanation of the entire USAF process is documented in the USAF report. Details of each indicator including its calculation, formulation and performance evaluation levels is documented in the USAF technical manual report.

<u>Data requested:</u> Data has been requested from ULB or concerned departments and is awaited; <u>Data to be verified:</u> Input data yet to be verified from concerned officials; <u>Data not available</u>: Data not available for the city

					1.	URBAN FORM	1, PUBLIC SPACE ANI	D SAFETY							
			Primary/		City	Cauras	Course of Threehold /			7 Pc	oint Scoring Ra	ange			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
UPS	1.1	Percentage of city roads covered with street lighting (%)	Primary	Non- spatial	85%	MPI (1.6.1)	The Twelfth schedule of Indian constitution; Pg.356 https://www.india.gov.in/sites/upload_files/npi/files/coi-eng-schedules_1-12.pdf	<80%	80%-83.9%	84%-87.9%	88%-91.9%	92%-95.9%	96%-99.9%	100%	2
UPS	1.2	Percentage change in the built-up area per capita in the city in between year 2000 and year 2014 (%)	Primary	Spatial	-32%	GPSC	[Descriptive Indicator]	NA ⁸	NA	NA	NA	NA	NA	NA	NA
UPS	1.3	Percentage of agriculture use area proposed for future developable uses in the Master Development Plan (%)	Primary	Non- spatial	53%	Expert recommended	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
UPS	1.4	Percentage of population within 500m distance to public park/open space (%)	Primary	Spatial	45%	NIF (11.7.1)	Source of distance of 500m: URDPFI, Vol 1, pg. 356 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%201.pdf	<50%	50%-55.9%	56%-61.9%	62%-67.9%	68%-73.9%	74%-79.9%	>=80%	0
UPS	1.5	Open space (includes recreational space, organised green, other common open spaces) per capita (sqm/person)	Primary	Non- spatial	0.92	CPI(4.1)	URDPFI, Vol 1, pg. 362 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%201.pdf	<10sqm	10-10.3 sqm	10.4-10.7 sqm	10.8-11.1 sqm	11.2-11.5 sqm	11.6-11.9 sqm	>=12sqm	0
UPS	1.6	Percentage share of pedestrian fatalities in total fatalities (motorized/non-motorized transport) in road accident during a year (%)	Secondary	Non- spatial	Data to be collected	Expert recommended	SLBs for Urban Transport, Gol; Pg.35 http://mohua.gov.in/upl oad/uploadfiles/files/Ser vice level.pdf Accidental deaths & suicides in India - 2019 (Statistics) - Table 1A.3; National Crime Records Bureau https://ncrb.gov.in/sites/ default/files/adsi report s previous year/Table- 1A.3 2019.pdf	>19.25%	19.25%- 15.3%	15.4%- 11.45%	11.55%- 7.6%	7.7%-3.75%	3.85% 0.1%	0%	-

⁸ NA in the 7-point scoring range and city score columns refers to 'Not Applicable' as descriptive indicators in USAF are not scored.



					1.	URBAN FORM	I, PUBLIC SPACE ANI	D SAFETY							
			Primary/		City	Source Reference Framework	Source of Threshold / National Average / Benchmark	7 Point Scoring Range							
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value			(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
UPS	1.7	Percentage of recreational and open space (includes stadiums, theme parks, playgrounds, maidan) of total developable area (%)	Secondary	Non- spatial	1%	Expert recommended	URDPFI, Vol 1, Pg 143 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%20I.pdf	<25%	25%-26.9%	27%-28.9%	29%-30.9%	31%-32.9%	33%-34.9%	>=35%	0
UPS	1.8	Rating of safety standards of the city	Tertiary; Aspirational	Non- spatial	Data not available	EOLI (Perception Survey: 1.6)	Ease of living- Perception survey) (Pg. 34) https://smartnet.niua.org/eol19/pdf/EOL-2019-Completed-Version.pdf	Poor	NA	NA	Fair	NA	NA	Good	-
UPS	1.9	Amount spent in operations and maintenance per square metre area of parks in the city by the ULB (INR per sqm)	Tertiary	Non- spatial	22.70	Expert recommended	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA

						2. HOUS	SING AND PROPERTY	Y							
			Primary/		City	Source	Source of Threshold /	7 Point Scoring Range							
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	e National Average /	(Very low performance)	1 (Low performance)	(Lower medium performance)	3 (Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
НР	2.1	Percentage of urban households living in slums/squatter settlements (%)	Primary	Non- spatial	28%	EOLI (1.3.4)	Handbook of urban statistics 2019, Pg. no: 24 http://mohua.gov.in/pdf /5c80e2225a124Handbook%20of%20Urban%20Statistics%202019.pdf	>27.5%	27.5%- 23.9%	24%-20.4%	20.5%- 16.9%	17%-13.4%	13.5%-9.9%	<=10%	0
НР	2.2	Percentage of city area under slums/squatter settlements (%)	Primary	Non- spatial	5%	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
НР	2.3	Percentage of owner-occupied housing units to total housing units (%)	Secondary	Non- spatial	47% ⁹	MDPI (3.6)	NA	<52.5%	52.5%- 57.9%	58%-63.4%	63.5%- 68.9%	69%-74.4%	74.5%- 79.9%	>=80%	0
НР	2.4	Percentage of households spending greater than 30 percent of their income on accommodation expenses (%)	Tertiary	Non- spatial	Data not Available	GPSC	Handbook of urban statistics 2019 pg. no: 170 http://mohua.gov.in/pdf /5c80e2225a124Handbook%20of%20Urban%20Statistics%202019.pdf	NA	NA	NA	NA	NA	NA	NA	-
НР	2.5	Percentage of households living in one room (%)	Tertiary	Non- spatial	38%10	CPI (1.5)	Handbook of urban statistics 2019 pg. no: 159	>80%	80%-64.9%	65%-49.9%	50%-34.9%	35%-19.9%	20%-4.9%	<=5%	3

 $^{^{\}rm 9}$ Value is from Census of India 2011 for former GMC jurisdiction

 $^{^{10}}$ Value is from Census of India 2011 for former GMC jurisdiction



						2. HOUS	SING AND PROPERTY	′							
			Primary/		City	Source	Source of Threshold /			7 Pc	oint Scoring Ra	nge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							http://mohua.gov.in/pdf /5c80e2225a124Handbo ok%20of%20Urban%20St atistics%202019.pdf								

	3. WATER Primary/ 7 Point Scoring Range														
			Primary/		City	Source	Source of Threshold /			7 P	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
WTR	3.1	Percentage of households with piped connection (%)	Primary	Non- spatial	72%	MPI (1.3.1)	Handbook of Service Level Benchmarking - CPHEEO; Pg. 23 http://cpheeo.gov.in/upload/u ploadfiles/files/Handbook.pdf C-WAS (Centre for Water and Sanitation) - Interactive Dash Borad for Water Supply (2018) https://www.pas.org.in/web/c eptpas/interactivedashboard? p p id=InteractiveDashboard WAR Portal&p p lifecycle=1& p p state=normal&p p mode =view&p p col id=column- 1&p p col count=1&actionVal =Retrieve&SkipAccessChecking =false	<20%	20%-35.9%	36%-51.9%	52%-67.9%	68%-83.9%	84%-99.9%	100%	4
WTR	3.2	Percentage of water samples in a year that comply with national potable water quality standards (%)	Primary	Non- spatial	96%	GPSC	Handbook of Service Level Benchmarking - CPHEEO; Pg. 33 http://cpheeo.gov.in/upload/uploadfiles/files/Ha http://cpheeo.gov.in/upload/uploadfiles/files/Ha http://cpheeo.gov.in/uploadfiles/files/Ha http://cpheeo.gov.in/uploadfiles/files/Ha http://cpheeo.gov.in/uploadfiles/Ha http://cpheeo.gov.in/uploadfiles/Ha http://cpheeo.gov.in/uploadfiles/Ha								

							3. WATER								
			Primary/		City	Source	Source of Threshold /			7 P	oint Scoring Ra	nge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							oad/uploadfiles/files/Ha ndbook.pdf								
WTR	3.6	Extent of metering of water supply connections (%)	Secondary	Non- spatial	24%	MPI (1.3.3)	Handbook of Service Level Benchmarking - CPHEEO; Pg. 27 http://cpheeo.gov.in/upl oad/uploadfiles/files/Ha ndbook.pdf	<20%	20%-35.9%	36%-51.9%	52%-67.9%	68%-83.9%	84%-99.9%	100%	1

						4	. SANITATION								
			Primary/		C'h.	6	Course of Three should /			7 P	oint Scoring Ra	ange			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
SAN	4.1	Percentage of properties in the ULB connected to sewerage network (%)	Primary	Non- spatial	21%	MPI (1.4.6)	Handbook of Service Level Benchmarking - CPHEEO; Pg. 42 http://cpheeo.gov.in/upl oad/uploadfiles/files/Ha ndbook.pdf C-WAS (Centre for Water and Sanitation) - Interactive Dashboard for Sanitation (2018) https://www.pas.org.in/ web/ceptpas/interactive dashboards?p_p_id=InteractiveDashboard WAR Portal&p_p lifecycle=1&p_p_state=normal&p_p mode=view&p_p_col_id=column- 1&p_p_col_count=1&act_ionVal=Retrieve&SkipAcc_essChecking=false	<80%	80%-83.9%	84%-87.9%	88%-91.9%	92%-95.9%	96%-99.9%	100%	0
SAN	4.2	Proportion of households having access to toilet facility (%)	Primary	Non- spatial	100%	NIF (6.2.1)	Handbook of Service Level Benchmarking - CPHEEO; Pg. 40 http://cpheeo.gov.in/upl oad/uploadfiles/files/Ha ndbook.pdf Swachh Bharat Mission - Urban ODF https://swachhodfurban. org/	<90%	90%-91.9%	92%-93.9%	94%-95.9%	96%-97.9%	98%-99.9%	100%	6

	4. SANITATION Primary/ 7 Point Scoring Range														
			Primary/		C'h.	6	Course of Thursday I			7 Pc	oint Scoring Ra	ange			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
SAN	4.3	Percentage of sewage treated before discharge into surface water bodies (%)	Primary	Non- spatial	0%	NIF (6.3.1)	Handbook of Service Level Benchmarking - CPHEEO; Pg. 46 http://cpheeo.gov.in/upl oad/uploadfiles/files/Ha ndbook.pdf	<20%	20%-35.9%	36%-51.9%	52%-67.9%	68%-83.9%	84%-99.9%	100%	0
SAN	4.4	Percentage of wastewater samples that passed the specified secondary treatment standards from the total samples collected in a year(%)	Primary	Non- spatial	_11	Expert recommended	Handbook of Service Level Benchmarking - CPHEEO; Pg. 49 http://cpheeo.gov.in/upl oad/uploadfiles/files/Ha ndbook.pdf	<70%	70%-75.9%	76%-81.9%	82%-87.9%	88%-93.9%	94%-99.9%	100%	NA
SAN	4.5	Percentage of wastewater received at the treatment plant that is recycled or reused after appropriate treatment for various purposes (%)	Primary	Non- spatial	0%	CSCAF (4.4: Indicator 3)	Handbook of Service Level Benchmarking - CPHEEO; Pg. 51 http://cpheeo.gov.in/upl oad/upload files/files/Handbook.pdf C-WAS (Centre for Water and Sanitation) - Interactive Dashboard for Sanitation (2018) https://www.pas.org.in/ web/ceptpas/interactive dashboards?p_p_id=Inte ractiveDashboard WAR Portal&p_p_lifecycle=1& p_p state=normal&p_p mode=view&p_p col_id =column- 1&p_p_col_count=1&act ionVal=Retrieve&SkipAcc essChecking=false Climate Smart City Assessment Framework Pg. 47	<10%	10%-11.9%	12%-13.9%	14%-15.9%	16%-17.9%	18%-19.9%	>=20%	0
SAN	4.6	Percentage of city sewage that is treated in a sewage treatment plant (%)	Secondary	Non- spatial	0%	MPI (1.4.5)	Municipal Performance Index Pg. 38 https://smartnet.niua.or g/eol19/pdf/MPI Metho dology.pdf Table: State-wise details of sewage generation in urban areas and	<20%	20%-35.9%	36%-51.9%	52%-67.9%	68%-83.9%	84%-99.9%	100%	0

 $^{^{\}rm 11}$ Guntur city currently doesn't have operational STP. Hence, this indicator is not applicable.

	4. SANITATION 7 Point Scoring Pange														
			Primary/		City	Source	Source of Threshold /			7 Pc	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	3 (Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							treatment capacity available; National status of wastewater generation & treatment http://www.sulabhenvis.nic.in/Database/STST wastewater_2090.aspx								
SAN	4.7	Percentage of industries complying with waste water treatment as per CPCB norms (%)	Secondary	Non- spatial	_12	Expert recommended	NA	<80%	80%-83.9%	84%-87.9%	88%-91.9%	92%-95.9%	96%-99.9%	100%	NA
SAN	4.8	Existence of FSSM Action plan or notified San-benchmarks, byelaws/ guidelines/ policy notes by the ULB/Development Authority	Secondary	Non- spatial	No guidelines/ policy/acti on plan prepared	SS 2020 (3.1)	NA	No guidelines/ policy/actio n plan prepared	NA	NA	Work under progress	NA	NA	Guidelines/ policy/actio n plan prepared	0
SAN	4.9	Percentage of Public Toilets (PTs) mapped on Google Maps (%)	Tertiary	Non- spatial	100%	SS 2020 (3.8)	Swachh Bhasrat Mission Urban http://sbmtoilet.org/backend/web/index.php?r=s ite%2Flogin	<80%	80%-83.9%	84%-87.9%	88%-91.9%	92%-95.9%	96%-99.9%	100%	6

	5. SOLID WASTE MANAGEMENT														
			Primary/		City	Saurea	Course of Threehold /			7 Pc	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
SWM	5.1	Percentage of city's wet waste processed (%)	Primary	Non- spatial	54%	CSCAF (4.5: Indicator 4)	PIB - Swacch Survekshan 2020 https://pib.gov.in/PressR eleasePage.aspx?PRID=1 598072	<40%	40%-45.9%	46%-51.9%	52%-57.9%	58%-63.9%	64%-69.9%	>=70%	3
SWM	5.2	Percentage of the city's dry waste that is separated and classified for recycling/material recovery (%)	Primary	Non- spatial	6%	SS 2020 (2.3)	PIB - Swacch Survekshan 2020 https://pib.gov.in/PressR eleasePage.aspx?PRID=1 598072	<40%	40%-43.9%	44%-47.9%	48%-51.9%	52%-55.9%	56%-59.9%	>=60%	0
SWM	5.3	Percentage of the city's solid waste that is used for energy recovery (incineration) or co-processing (%)	Primary	Non- spatial	1%	Expert Recommended	https://datatopics.world bank.org/what-a- waste/trends in solid w aste management.html	>10%	10%-8.9%	9%-7.9%	8%-6.9%	7%-5.9%	6%-4.9%	<=5%	6
SWM	5.4	Percentage of the city's municipal solid waste that is disposed off in open dumps / controlled dumps, water bodies / is burnt (%)	Primary	Non- spatial	64%	Expert Recommended	Annual report 2017-18 on solid waste management; Available at https://cpcb.nic.in/uploads/msw/msw AnnualReport	>50%	50%-43.9%	44%-37.9%	38%-31.9%	32%-25.9%	26%-19.9%	<=20%	0

¹² There are no industries within Guntur City limits that require installation of wastewater treatment (Source: AP Pollution Control Board, Guntur Region). This indicator is not applicable for the city.

						5. SOLID	WASTE MANAGEME	NT							
			Primary/							7 P	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							2017-18.pdf Global waste disposal in open dumpsites https://datatopics.worldbank.org/what-a-waste/trends_in_solid_waste_management.html								
SWM	5.5	Percentage of waste remediated in the city (%)	Primary	Non- spatial	0%13	SS 2020 (2.7)	NA	<40%	40%-50.9%	51%-61.9%	62%-72.9%	73%-83.9%	84%-94.9%	>=95%	0
SWM	5.6	Percentage of wards practicing source segregation of waste which is maintained till processing/ disposal site (%)	Secondary	Non- spatial	94%	SS 2020 (1.2)	(SS 2020 results, Pg. 15) https://www.swachhsurvek shan2020.org/ImpDocs/SS2 020fullreport.pdf	<20%	20%-25.9%	26%-31.9%	32%-37.9%	38%-43.9%	44%-49.9%	>=50%	6
SWM	5.7	ICT based Monitoring Mechanism in place for: i) Ward wise Collection and Transportation (C&T) ii) Monitoring of Garbage Vulnerable Points (GVPs) iii) Attendance of Sanitation Staff	Secondary	Non- spatial	3	SS 2020 (1.3)	NA	If 0 ICT Based Monitoring mechanism s	NA	NA	If 1 or 2 ICT Based Monitoring mechanism s	NA	NA	If all 3 ICT Based Monitoring mechanism s	6
SWM	5.8	Percentage of informal waste pickers integrated into sustainable SWM systems (%)	Secondary	Non- spatial	100%	SS 2020 (1.4)	NA	<60%	60%-63.9%	64%-67.9%	68%-71.9%	72%-75.9%	76%-79.9%	>=80%	6
SWM	5.9	Percentage of C&D waste collected of the total C&D waste generated (%)	Secondary	Non- spatial	0%	SS 2020 (2.6)	NA	<60%	60%-66.9%	67%-73.9%	74%-80.9%	81%-87.9%	88%-94.9%	>=95%	0
SWM	5.10	Percentage of hazardous waste processed (%)	Secondary	Non- spatial	_14	SS 2020 (2.5)	CPCB Annual Report 2018-19; https://cpcb.nic.in/open pdffile.php?id=UmVwb3J ORmlsZXMvMTExOV8xNT k3MDM3NTM0X21IZGlhc GhvdG8xOTY1Ni5wZGY=	<50%	50%-53.9%	54%-57.9%	58%-61.9%	62%-65.9%	66%-69.9%	>=70%	NA
SWM	5.11	Total solid waste generation per capita per day (kg/capita/day)	Tertiary	Non- spatial	0.51	SS 2020 (2.1)	Swacch Bharta Mission, Part II Manual (2016) Pg 83; World Bank https://datatopics.world bank.org/what-a- waste/trends in solid w aste management.html http://mohua.gov.in/upl oad/uploadfiles/files/Par t2.pdf	>1.1	1.1-0.89	0.9-0.69	0.7-0.49	0.5-0.29	0.3-0.01	<=0.11	3
SWM	5.12	Percentage Coverage of wards under Door-To-Door Collection System (%)	Tertiary	Non- spatial	100%	MPI (1.4.1)	PIB - Swacch Survekshan 2020 https://pib.gov.in/PressR	<60%	60%-67.1%	67.2%- 74.3%	74.4%- 81.5%	81.6%- 88.7%	88.8%- 95.9%	>=96%	6

¹³ Remediation of existing dumping yard through Bio-mining process was proposed in Guntur. RFP was floated in 2018 for the same. However, the project has not been initiated till date.

¹⁴ There are no industries within the city generating hazardous waste (source: AP Pollution Control Board, Guntur region)

						5. SOLID	WASTE MANAGEME	NT						
			Primary/		City	Source	Source of Threshold /			7 Pc	oint Scoring Ra	nge		
Code	Number	Indicator	Indicator Indicator Secondary/ Secondary/ Type of Indicator Source Source of Threshold / National Average / National Average /										City Score	
							eleasePage.aspx?PRID=1 598071							

						6. T	RANSPORTATION								
			Primary/		City	Source	Source of Threshold /			7 Pc	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
TR	6.1	Proportion of population with access to public transport with in 500m (%)	Primary	Spatial	42%	GPSC	SLB in Urban Transport, pg no: 12 http://mohua.gov.in/upl oad/uploadfiles/files/Vo ulmel Methodologyrepo rt final03.pdf	<60%	60%-63.9%	64%-67.9%	68%-71.9%	72%-75.9%	76%-79.9%	>=80%	0
TR	6.2	Kilometres of bicycle path per 100,000 population (km)	Primary	Non- spatial	0	GPSC	Green cities programme methodology, pg no: 80 https://www.ebrd.com/documents/technical-cooporation/green-city-action-plan-in-tirana.pdf	<15 km	15-16.9 km	17-18.9 km	19-20.9 km	21-22.9 km	23-24.9 km	>=25 km	0
TR	6.3	Percentage of major roads covered with footpath (footpath wider than 1.2 meters) within the city (%)	Primary	Non- spatial	13%	GPSC	Urban transportation SLB 2B, pg no: 68 https://smartnet.niua.or g/sites/default/files/reso urces/SLB%202B.pdf	<50%	50%-54.9%	55%-59.9%	60%-64.9%	65%-69.9%	70%-74.9%	>=75%	0
TR	6.4	Rate of increase in public transportation ridership (%)	Primary	Non- spatial	_15	Expert recommended	NA	Negative year on year ridership change	NA	NA	No change in ridership	NA	NA	Positive year on year ridership change	NA
TR	6.5	Percentage of shared vehicles that operate on clean fuels like CNG, LPG, biofuels or are hybrid or electric vehicles (%)	Primary	Non- spatial	Data to be collected	CSCAF (4.3: Indicator 1)	Climate Smart Cities Assessment Framework 2.0, Pg. 36 https://www.niua.org/csc/assets/pdf/CSCAF-2-B								

 $^{^{\}rm 15}$ Guntur city does not have a formal public transportation system.



						6. T	RANSPORTATION								
			Primary/		City	Course	Source of Threshold /			7 Pc	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
TR	6.8	Percentage share of NMT in commuting (cycling and walking) (%)	Secondary	Non- spatial	Data not available	Expert recommended	UNCRD Mobility and NMT in Sustainable Urban Transport Development, Pg. 23 https://www.uncrd.or.jp/content/documents/69 88Background%20Paper%20for%20EST%20Plenary%20Session%205-11th%20Regiona%20EST%20Forum.pdf	<15%	15%-18.5%	18.6%- 22.1%	22.2%- 25.7%	25.8%- 29.3%	29.4%- 32.9%	>=33%	-
TR	6.9	Street intersection density (intersections/sqkm)	Secondary	Non- spatial	Data not available	CPI (5.1)	Economic Foundations for Sustainable Urbanization, UN- Habitat, Pg 37 https://unhabitat.org/sit es/default/files/downloa d-manager- files/3PA_Second%20Edi tion_ForWeb.pdf	Less than 75 intersectio ns	NA	NA	Between 75 and 100 intersectio ns	NA	NA	Greater than 100 intersectio ns	-
TR	6.10	Kilometres of road with public transit per 100,000 population (km)	Secondary	Non- spatial	Data to be collected	GPSC	Green cities programme methodology, pg no: 80 https://www.ebrd.com/documents/technical-cooporation/green-city-action-plan-in-tirana.pdf	Less than 10 km	NA	NA	Between 10km and 40 km	NA	NA	Greater than 40 km	-
TR	6.11	Fatal and serious injuries in road accidents per lakh population (number)	Secondary	Non- spatial	39	GPSC	SLB in Urban Transport, pg: 32 (http://mohua.gov.in/upl oad/uploadfiles/files/Vo ulmel Methodologyrepo rt final03.pdf)	>6	6-4.7	4.8-3.5	3.6-2.3	2.4-1.1	1.20.1	0	0
TR	6.12	Accessibility of differently abled groups to Public Buses (%)	Secondary	Non- spatial	Data to be collected	Expert recommended	SLB in Urban Transport, pg: 26 (http://mohua.gov.in/upl oad/uploadfiles/files/Vo ulmel Methodologyrepo rt final03.pdf)	<25%	25%-34.9%	35%-44.9%	45%-54.9%	55%-64.9%	65%-74.9%	>=75%	-
TR	6.13	Workplace accessibility within 30 minutes of transit (%)	Tertiary; Aspirational	Spatial	Data not available	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	-
TR	6.14	Percentage of total area of ULB allocated to streets (%)	Tertiary	Non- spatial	9%	CPI (5.3)	Economic Foundations for Sustainable Urbanization, UN- Habitat, Pg 74 https://unhabitat.org/sit es/default/files/downloa d-manager- files/3PA Second%20Edi tion ForWeb.pdf	<15%	15%-17.9%	18%-20.9%	21%-23.9%	24%-26.9%	27%-29.9%	>=30%	0

						7. SOCIAL F	ACILITIES AND SERV	ICES							
			Primary/							7 P	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
SCL	7.1	Percentage of population within 800m distance to healthcare facilities (public/private) (%)	Primary	Spatial	91%	GPSC	URDPFI, Vol 1, Pg. 356 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%20I.pdf	<80%	80%-82.9%	83%-85.9%	86%-88.9%	89%-91.9%	92%-94.9%	>=95%	4
SCL	7.2	Percentage of females of ages 7 and above who are literate (%)	Primary	Non- spatial	75%	GPSC	NSS 75th round social consumption on education report Year: 2017-18 Page 52 of 1504 http://mospi.nic.in/sites/default/files/publication reports/Report 585 75th round Education final 1507 0.pdf	<55%	55%-63.9%	64%-72.9%	73%-81.9%	82%-90.9%	91%-99.9%	100%	3
SCL	7.3	Percentage of population within 800m distance to primary/secondary schools (public/private) (%)	Primary	Spatial	91%	MDPI (2.4)	URDPFI, Vol I, pg. 357 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%20I.pdf	<80%	80%-82.9%	83%-85.9%	86%-88.9%	89%-91.9%	92%-94.9%	>=95%	4
SCL	7.4	Change in decadal population growth rate (1991-2001 and 2001-2011) (%)	Secondary	Non- spatial	21%	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
SCL	7.5	City Level Dependency Ratio (%)	Secondary	Non- spatial	40%16	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
SCL	7.6	Under-five mortality rate per 1000 births (number)	Secondary	Non- spatial	Data to be collected	GPSC	THE 2030 AGENDA SDG Goal 3.3, Pg. 20 (https://sustainabledevel opment.un.org/content/ documents/21252030%2 0Agenda%20for%20Sust ainable%20Development %20web.pdf) (https://www.niti.gov.in/ niti/content/under-5- mortality-rate-u-5mr- 1000-live-births) World Bank database (https://data.worldbank. org/indicator/SH.DYN.M ORT?locations=IN)	>47.5	47.5-42.9	43-38.4	38.5-33.9	34-29.4	29.5-24.9	<=25	-
SCL	7.7	Bed density in public and private hospitals (Hospital beds per 10,000 residents) (number)	Secondary	Non- spatial	Data requested	ESCI (Q.2)	EoL, Section 1.2.4, Pg. 45 https://smartnet.niua.or	<15	15-16.9	17-18.9	19-20.9	21-22.9	23-24.9	>=25	-

 $^{^{\}rm 16}$ Value is from Census of India 2011 for former GMC jurisdiction

						7. SOCIAL F	ACILITIES AND SERV	ICES							
			Primary/		C'h.	6	Course of Thursday I			7 P	oint Scoring Ra	ange			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							g/eol19/pdf/EOL-2019- Completed-Version.pdf								
SCL	7.8	Percentage reduction in prevalence of vector borne diseases(malaria, dengue) over the previous year (%)	Secondary	Non- spatial	-88%	Expert recommended	https://www.who.int/do cs/default- source/searo/india/healt h-topic-pdf/vbd-fact- sheets.pdf?sfvrsn=c1908 b04 2#:~:text=Important %20vector%2Dborne%20 disease%20for,Family%2 0Welfare%2C%20Govern ment%20of%2OIndia https://www.intechopen .com/books/public- health-in-developing- countries-challenges- and- opportunities/innovation s-in-vector-borne- disease-control-in-india https://nvbdcp.gov.in/in dex1.php?lang=1&level= 1&sublinkid=5776&lid=3 690 https://main.mohfw.gov. in/sites/default/files/520 1617.pdf	<25%	25%-29.9%	30%-34.9%	35%-39.9%	40%-44.9%	45%-49.9%	>=50%	0
SCL	7.9	Percentage reduction in prevalence of waterborne diseases (Diarrhoea, typhoid) over the previous year (%)	Secondary	Non- spatial	Data requested	Expert recommended	https://www.who.int/ch olera/publications/global -roadmap.pdf	<5%	5%-7.9%	8%-10.9%	11%-13.9%	14%-16.9%	17%-19.9%	>=20%	-
SCL	7.10	Percentage of schools with Access to Digital Education (%)	Secondary; Aspirational	Non- spatial	Data to be collected	EOLI (1.1.7)	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
SCL	7.11	Percentage of mobile network, by 3G and 4G technology subscriptions (%)	Tertiary	Non- spatial	Data not Available	GPSC	NA	<80%	80%-82.9%	83%-85.9%	86%-88.9%	89%-91.9%	92%-94.9%	>=95%	-

						8. ENVIRO	NMENT AND ECOLO	GY							
			Primary/		City	Source	Source of Threshold /			7 Pc	oint Scoring Ra	nge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
ENV	8.1	Clean Air Action Plan (Planning and Implementation)	Primary	Non- Spatial	Clean Air Action Plan and Pollutants Source	CSCAF (4.3: Indicator 5)	Climate Smart City Assessment Framework, Pg. 41-42 https://csc.urban- industrial.in/hrdpmp/ige	No Air Pollutant Monitoring Clean Air Action	NA	NA	Clean Air Action Plan and Pollutants Source	NA	NA	Assessing impacts of Clean Air Action Plan	3

						8. ENVIRO	NMENT AND ECOLO	GY							
			Primary/		City	Source	Source of Threshold /			7 P	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
					Identificati on		p- uid/content/e5170/e625 8/e10222/e10224/CSCAF 2 Booklet.pdf	Plan in the city			Identificati on			implement ation	
ENV	8.2	Existence of a GHG emissions measurement system with a monitoring system (Y/N)	Primary; Aspirational	Non- Spatial	No	GPSC	NA	No	NA	NA	NA	NA	NA	Yes	0
ENV	8.3	Total annual GHG emissions (MtCO2e)	Primary; Aspirational	Non- Spatial	1122848	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
ENV	8.4	Proportion of Tree Cover to the total ULB area(%)	Primary	Spatial	Data not available	EOLI (3.1.2)	National Institute of Environmental Studies (NIES) http://cdn.narendramodi _in/ebooks/other- ebooks1/tree cover in urban_area/files/assets/ basic- html/index.html#22	<5%	5%-5.9%	6%-6.9%	7%-7.9%	8%-8.9%	9%-9.9%	>=10%	-
ENV	8.5	Extent to which city is acting for protection, conservation and management of urban biodiversity	Primary	Non- Spatial	No action initiated	CSCAF (4.2: Indicator 3)	Climate Smart City Assessment Framework, pg. 30-31 https://csc.urban- industrial.in/hrdpmp/ige p- uid/content/e5170/e625 8/e10222/e10224/CSCAF 2 Booklet.pdf	No action initiated	NA	NA	NA	NA	NA	Implement ation of actions	0
ENV	8.6	Number of structural and financial incentives for green buildings implemented (number)	Primary	Non- Spatial	One or two incentives	EOLI (3.2.2)	Government Incentives to IGBC-rated Green Building Projects https://igbc.in/igbc/redir ectHtml.htm?redVal=sho wGovtIncentivesnosign#: ~:text=Some%20of%20th e%20Central%20and,to% 20IGBCs'%20Green%20R ating%20Systems.&text= The%20Ministry%20of% 20Environment%2C%20F orest,Precertified%2F%2 0Provisionally%20Certifie d%20by%20IGBC	No incentives	NA	NA	One or two incentives	NA	NA	All three incentives	3
ENV	8.7	Annual mean Air Quality Index(AQI) (number)	Secondary	Non- Spatial	32	EOLI (3.1.5)	NA	Greater than 300	NA	NA	Between 101 and 300	NA	NA	Less than 100	6
ENV	8.8	Annual CO2 equivalent (GHG) emissions per capita (MtCO2e/capita)	Secondary; Aspirational	Non- Spatial	1.44	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA

						8. ENVIRO	NMENT AND ECOLO	GY							
			Primary/		City	Saures	Course of Threshold /			7 Pc	oint Scoring Ra	nge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
ENV	8.9	Annual CO2 equivalent emissions from the transportation sector (MtCO2e)	Secondary; Aspirational	Non- Spatial	278489	Expert Recommended	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
ENV	8.10	Biochemical Oxygen Demand 3 day, 270C (mg/l)	Secondary	Non- Spatial	Data to be collected	Expert Recommended	https://pib.gov.in/PressR eleasePage.aspx?PRID=1 602631	Greater than 6 mg/l	NA	NA	Between 3 and 6 mg/l	NA	NA	Less than 3 mg/l	-
ENV	8.11	Area under ULB covered by trees per inhabitant (sqm per person)	Secondary	Non- Spatial	Data not available	Expert Recommended	National Institute of Environmental Studies (NIES) https://cdn.narendramo di.in/ebooks/other- ebooks1/tree cover in urban_area/files/assets/ basic-html/page22.html	Less than 10 sqm	NA	NA	Between 10 sqm and 15 sqm	NA	NA	Greater than 15 sqm	-
ENV	8.12	Is there a land use plan that includes zoning with environmental protection and preservation zones? (Y/N)	Secondary	Non- spatial	Yes	GPSC	NA	No	NA	NA	NA	NA	NA	Yes	6
ENV	8.13	Annual mean levels of PM10 (μg/m3)	Tertiary	Non- spatial	50.2	NIF (11.6.2)	Revised National Ambient Air Quality Standards, Pg 1-2 https://cpcb.nic.in/displa ypdf.php?id=aG9tZS9haX ltcG9sbHV0aW9uL1JIY3ZI ZC10YXRpb25hbC5wZGY = WHO: https://www.who.int/ne ws-room/fact- sheets/detail/ambient- (outdoor)-air-quality- and-health	Greater than 60 μg/m3	NA	NA	Between 60 μg/m3 and 20 μg/m3	NA	NA	Less than 20 μg/m3	3
ENV	8.14	Annual mean levels of PM2.5 (μg/m3)	Tertiary	Non- spatial	23.2	NIF (11.6.2)	Revised National Ambient Air Quality Standards, Pg 1-2 https://cpcb.nic.in/displa ypdf.php?id=aG9tZS9haX ltcG9sbHV0aW9uL1JIY3Zl ZC10YXRpb25hbC5wZGY = WHO: https://www.who.int/ne ws-room/fact- sheets/detail/ambient- (outdoor)-air-quality- and-health	Greater than 40 μg/m3	NA	NA	Between 40 μg/m3 and 10 μg/m3	NA	NA	Less than 10 μg/m3	3
ENV	8.15	Annual concentration of NO2 (µg/m3)	Tertiary	Non- spatial	18.5	GPSC	Revised National Ambient Air Quality Standards, pg. 1	Greater than 80 μg/m3	NA	NA	Between 80 μg/m3	NA	NA	Less than 40 μg/m3	6

						8. ENVIRO	NMENT AND ECOLO	GY							
			Primary/		City	Cauras	Source of Threshold /			7 P	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							https://cpcb.nic.in/displa ypdf.php?id=aG9tZS9haX ltcG9sbHV0aW9uL1JlY3Zl ZC1OYXRpb25hbC5wZGY = WHO: https://www.who.int/ne ws-room/fact- sheets/detail/ambient- (outdoor)-air-quality-				and 40 μg/m3				
ENV	8.16	Average daily concentration of SO2 (μg/m3)	Tertiary	Non- spatial	4.6	GPSC	and-health Revised National Ambient Air Quality Standards, pg. 1 https://cpcb.nic.in/displa ypdf.php?id=aG9tZS9haX ItcG9sbHV0aW9uL1JIY3ZI ZC10YXRpb25hbC5wZGY WHO: https://www.who.int/ne ws-room/fact- sheets/detail/ambient- (outdoor)-air-quality- and-health	Greater than 80 μg/m3	NA	NA	Between 80 μg/m3 and 20 μg/m3	NA	NA	Less than 20 μg/m3	6
ENV	8.17	Total annual methane emissions (MtCO2e)	Tertiary; Aspirational	Non- spatial	Data not available	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
ENV	8.18	Existence, monitoring and enforcement of regulations on noise pollution (Y/N)	Tertiary	Non- spatial	Yes	ESCI (G.1)	NA	No	NA	NA	NA	NA	NA	Yes	6

						9.	CLEAN ENERGY								
			Primary/		City	Source	Source of Threshold /			7 Pc	oint Scoring Ra	nge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
CE	9.1	Percentage of the city's households using LPG/PNG for cooking (%)s	Primary	Non- spatial	77% ¹⁷	EOLI (3.1.3)	Drinking water, Sanitation, Hygiene & Housing Conditions in India, Pg 195 http://mospi.nic.in/sites/default/files/NSS7612dws/Report_584_final.pdf	<67%	67%-73.5%	73.6%- 80.1%	80.2%- 86.7%	86.8%- 93.3%	93.4%- 99.9%	100%	2

¹⁷ Value is from Census of India 2011 for former GMC jurisdiction

						9.	CLEAN ENERGY								
			Primary/		City	Source	Source of Threshold /			7 P	oint Scoring Ra	ange			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
CE	9.2	Percentage of total electrical energy in the city derived from renewable sources (%)	Primary	Non- spatial	Data to be collected	CSCAF (4.1: Indicator 2)	Renewable energy consumption - The World Bank (% of total final energy consumption) https://data.worldbank.org/indicator/EG.FEC.RNEW.ZS	<5%	5%-6.9%	7%-8.9%	9%-10.9%	11%-12.9%	13%-14.9%	>=15%	-
CE	9.3	Proportion of population in the city who have access to renewable energy (%)s	Primary; Aspirational	Non- spatial	Data not available	GPSC	Population with primary reliance on clean fuels and technologies Data by country - World Health Organisation https://apps.who.int/gho/data/view.main.SDGFUE LS712v	<10%	10%-22.9%	23%-35.9%	36%-48.9%	49%-61.9%	62%-74.9%	>=75%	-
CE	9.4	Percentage of energy-efficient street lighting in the city (%)	Primary	Non- spatial	94%	CSCAF (4.1: Indicator 1)	Street Light National Programme (SLNP), Gol https://slnp.eeslindia.org / https://vikaspedia.in/ene rgy/policy- support/energy- efficiency/street-light- national- programme#:~:text=Stre et%20Light%20National %20Programme%20is,en ergy%20efficiency%20in %20the%20country.&text t=The%20National%20Pr ogramme%20has%20bee n,with%20energy%20effi cient%20LED%20lights	<25%	25%-39.9%	40%-54.9%	55%-69.9%	70%-84.9%	85%-99.9%	100%	5
CE	9.5	Energy use per capita (kWh)	Primary	Non- spatial	Data to be collected	Expert Recommended	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	-
CE	9.6	Percentage of the city's households with an authorized connection to electrical energy (%)	Secondary	Non- spatial	Data to be collected	EOLI (1.3.1)	Access to Electricity - Urban, The World Bank https://data.worldbank.o rg/indicator/EG.ELC.ACC S.UR.ZS	<99.25%	99.25%- 99.3%	99.4%- 99.45%	99.55%- 99.6%	99.7%- 99.75%	99.85%- 99.9%	100%	-
CE	9.7	Do existing building codes consider eco-friendly techniques and/or the use of local/renewable material? (Y/N)	Secondary	Non- spatial	Yes	CityRAP	NA	No	NA	NA	NA	NA	NA	Yes	6
CE	9.8	System Average Interruption Frequency Index (SAIFI) (number)s	Tertiary	Non- spatial	Data to be collected	Expert Recommended	NA	>73.5	73.5-58.9	59-44.4	44.5-29.9	30-15.4	15.5-0.9	<=1	-

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						10.DISAST	ER RISK MANAGEME	NT							
			Primary/		City	Caumaa	Source of Threshold /			7 Pc	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
DRM	10.1	Presence of City Disaster Management Plan prepared / updated in last five years (Y/N)	Primary	Non- spatial	Plan prepared after year 2016	GPSC	NA	No Plan	NA	NA	Plan prepared before year 2016	NA	NA	Plan prepared after year 2016	6
DRM	10.2	Existence of hazard vulnerability maps/risk maps (at city level) prepared / updated in the last five years for the main hazards threatening the city (Y/N)	Primary	Non- spatial	Maps not prepared	GPSC	NA	Maps not prepared	NA	NA	Maps prepared / updated prior to year 2016	NA	NA	Maps prepared / updated in or after year 2016	0
DRM	10.3	Percentage of households at risk due to placement in areas of non- mitigable risk within the ULB (%)	Primary	Non- spatial	Data not available	ESCI (H.2)	NA	>20%	20%-17.9%	18%-15.9%	16%-13.9%	14%-11.9%	12%-9.9%	<=10%	-
DRM	10.4	Percentage of buildings within 4km distance to fire service facility (%)	Primary	Spatial	75%	Expert recommended	URDPFI, Vol 1, Pg 366 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%20I.pdf	<70%	70%-75.9%	76%-81.9%	82%-87.9%	88%-93.9%	94%-99.9%	100%	1
DRM	10.5	Presence of hazard early warning systems linked with command control system	Secondary	Non- Spatial	Presence of hazard early warning system but no linkage with ULB Command Control system	Expert recommended	NA	Absence of hazard early warning system	NA	NA	Presence of hazard early warning system but no linkage with ULB Command Control system	NA	NA	Presence of hazard early warning system linked to ULB command control system	3
DRM	10.6	Existence of urban flood / water stagnation risk assessment and management plan	Secondary	Non- spatial	City has not conducted urban flood / water stagnation risk assessment	CSCAF (4.4: Indicator 4)	NA	City has not conducted urban flood / water stagnation risk assessment	NA	NA	City has conducted rapid / detailed flood risk assessment older than five years.	NA	NA	City has conducted rapid / detailed flood risk assessment in the last five years	0

					11.	.GOVERNANC	E AND DATA MANA	GEMENT							
		Indicator	Primary/ Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	7 Point Scoring Range							
Code	Number							(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
GOV	11.1	Number of planners per capita (number)	Primary	Non- spatial	3.33	GPSC	URDPFI, Vol I, pg. 105 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%20I.pdf URDPFI, Vol I, pg. 315 http://mohua.gov.in/upl oad/uploadfiles/files/UR	<0.5	0.5-0.59	0.6-0.69	0.7-0.79	0.8-0.89	0.9-0.99	>=1	6

	11.GOVERNANCE AND DATA MANAGEMENT														
			Primary/		City	C	Course of Thursday /			7 Pc	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							DPFI%20Guidelines%20V ol%20I.pdf								
GOV	11.2	Years since enforced master plan/development plan was last reviewed and updated (number of years)	Primary	Non- spatial	14	GPSC	URDPFI, Vol I, pg. 06 http://mohua.gov.in/upl oad/uploadfiles/files/UR DPFI%20Guidelines%20V ol%20I.pdf	>10 years	10-8.9 years	9-7.9 years	8-6.9 years	7-5.9 years	6-4.9 years	<=5 years	0
GOV	11.3	Number of services being managed through command and control system in the ULB (number)	Primary	Non- spatial	0	MPI (3.1.2)	NA	<5	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	>=10	0
GOV	11.4	Number of functions being implemented by ULB out of 18 functions stipulated in the Twelfth schedule of Indian constitution (number)	Primary	Non- spatial	Between 15 and 17	Expert recommended	Twelfth Schedule (Article 243W) - 74 CAA; Pg. 10& 11 https://www.mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/74amend.pdf	Less than 15	NA	NA	Between 15 and 17	NA	NA	All 18	3
GOV	11.5	Existence of Geographic information System (GIS) based Master Plan for the city	Primary	Non- spatial	Absence of GIS base Master Plan	MPI (4.1.2)	AMRUT Reform Agenda - Formulation of GIS Based Master Plan for AMRUT Cities - http://amrut.gov.in/uplo ad/uploadfiles/files/AMR UT- SubScheme Guideline(4) .pdf	Absence of GIS base Master Plan	NA	NA	Presence of GIS base Master Plan prepared / updated before 2015	NA	NA	Presence of GIS base Master Plan prepared / updated after 2015	0
GOV	11.6	Environmental status report with action plans published by the ULB for the last three years	Secondary	Non- spatial	No	MPI (5.1.4)	NA	No	NA	NA	NA	NA	NA	Yes	0
GOV	11.7	Percentage of total staff trained during the year in any of the ULB functionary domains (%)	Secondary	Non- spatial	Data not available	MPI (5.4.3)	NA	<50%	50%-54.9%	55%-59.9%	60%-64.9%	65%-69.9%	70%-74.9%	>=75%	-
GOV	11.8	E-governance initiatives by the ULB: a. ULB website (Y/N) b. Online Public Service Delivery (Services provided online as a proportion of total Services provided) c. Online Public Service Delivery on Mobile (Services provided via mobile as a proportion of total Services provided) d. Online Grievance Redressal (number of grievances received online as a proportion of total grievances received) e. Online Grievance Redressal on Mobile (Services provided via mobile as a proportion of total Services provided)	Secondary	Non- spatial	5	MPI (3.1.1)	NA	Less than 2	NA	NA	Between 2 and 4	NA	NA	All 5	6

	11.GOVERNANCE AND DATA MANAGEMENT														
			Primary/		City	Source	Source of Threshold /			7 Pc	oint Scoring Ra	nge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	Indicator Value	Reference Framework	National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
GOV	11.9	Local development control regulations and master plan / development plan are accessible completely through the web	Secondary	Non- spatial	Both available online	Expert recommended	NA	Both not available	NA	NA	One available online	NA	NA	Both available online	6
GOV	11.10	Existence of following stipulated committees in the ULB: 1) Municipal Committee/Council 2) Ward Committee 3) Metropolitan Planning Committee / District Planning Committee 4) Project Coordination / Monitoring Committee 5) Town Vending Committee (Street vendors)	Secondary	Non- spatial	4	Expert recommended	NA	Less than or equal to 3	NA	NA	Between 4 and 5	NA	NA	6	3
GOV	11.11	6) Heritage Conservation Committee ULB's citizen charter and appeal mechanisms	Secondary	Non- spatial	Exists offline and online	MPI (5.4.1)	NA	Doesn't exist	NA	NA	Exist only offline	NA	NA	Exists offline and online	6
GOV	11.12	Presence of City data officer (Y/N)	Secondary	Non- spatial	No	MPI (3.1.6)	NA	No	NA	NA	NA	NA	NA	Yes	0
GOV	11.13	Proportion of Women councillors in Municipal Council (%)	Tertiary	Non- spatial	44%	MPI (5.2.2)	74th Constitutional Amendment Act of India https://www.mhrd.gov.i n/sites/upload_files/mhr d/files/upload_documen t/74amend.pdf	<33%	33%-36.3%	36.4%- 39.7%	39.8%- 43.1%	43.2%- 46.5%	46.6%- 49.9%	>=50%	4
GOV	11.14	Digital Governance: Presence on Open Data Portal	Tertiary	Non- spatial	No	MPI (3.1.8)	NA	No	NA	NA	NA	NA	NA	Yes	0

	12.FINANCE AND ECONOMY														
			Primary/		6''	C	Course of Threehold /			7 Pc	oint Scoring Ra	nge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	1 (Low performance)	(Lower medium performance)	(Medium performance)	4 (Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
FIN	12.1	Credit rating of the ULB	Primary	Non- spatial	_18	MPI (2.4.3)	GPSC, Pg 132 http://documents1.worl dbank.org/curated/en/3 39851517836894370/pdf /123149-Urban-	Lesser or equal to BBB	NA	NA	Between BBB and A	NA	NA	Greater or equal to AA	NA

¹⁸ GMC has not opted for a credit rating

						12.FINA	NCE AND ECONOMY	1							
			Primary/		City.	Sauras	Carrier of Thread ald /			7 Pc	oint Scoring Ra	inge			
Code	Number	Indicator	Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	(Low performance)	(Lower medium performance)	(Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
							Sustainability- Framework.pdf								
FIN	12.2	Total property tax collected as a percentage of total property tax billed in the same financial year (%)	Primary	Non- spatial	71%	MPI (2.1.5)	NA	<60%	60%-63.9%	64%-67.9%	68%-71.9%	72%-75.9%	76%-79.9%	>=80%	3
FIN	12.3	Financial dependency: Percentage of grants received from central and state governments to total revenue (%)	Primary	Non- spatial	20%	Expert Recommended	NA	>60%	60%-53.9%	54%-47.9%	48%-41.9%	42%-35.9%	36%-29.9%	<=30%	6
FIN	12.4	Growth rate of GDP per capita (%)	Primary; Aspirational	Non- spatial	Data not available	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	-
FIN	12.5	Change in Own Source Revenue (number of years with OSR > 20%)	Secondary	Non- spatial	5	Expert Recommended	http://documents1.worldbank.org/curated/en/339851517836894370/pdf/123149-Urban-Sustainability-Framework.pdf	Greater than 20% in one year	NA	NA	Greater than 20% for more than 1 Year	NA	NA	Greater than 20% for more 3 years	6
FIN	12.6	Operating margin: Difference in revenue and expenditure in the financial year (INR in Lakhs)	Secondary	Non- spatial	-4457.12	GPSC	http://documents1.worldbank.org/curated/en/3 39851517836894370/pdf /123149-Urban- Sustainability- Framework.pdf	Deficit	NA	NA	NA	NA	NA	Surplus	0
FIN	12.7	Total cost of annual debt service as a percentage of expenditure (%)	Secondary	Non- spatial	8%	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
FIN	12.8	Percentage of debt/loans in overall budget allocation (%)	Secondary	Non- spatial	10%	Expert Recommended	NA	>70%	70%-61.9%	62%-53.9%	54%-45.9%	46%-37.9%	38%-29.9%	<=30%	6
FIN	12.9	Properties covered under the tax net expressed as percentage of total properties within the municipality (%)	Secondary	Non- spatial	85%	MPI (2.1.3)	NA	<85%	85%-87.7%	87.8%- 90.5%	90.6%- 93.3%	93.4%- 96.1%	96.2%- 98.9%	>=99%	1
FIN	12.10	Efficiency of Capital expenditure spending: Actual capital expenditure spent expressed as a percentage of the budgeted capital expenditure in the financial year (%)	Secondary	Non- spatial	41%	Expert Recommended	NA	<60%	60%-63.9%	64%-67.9%	68%-71.9%	72%-75.9%	76%-79.9%	>=80%	0
FIN	12.11	Cost Recovery in Water Supply: Total operating revenues expressed as a percentage of the total operating expenses incurred towards water supply services in the given financial year (%)	Secondary	Non- spatial	59%	Expert Recommended	NA	<30%	30%-37.9%	38%-45.9%	46%-53.9%	54%-61.9%	62%-69.9%	>=70%	4
FIN	12.12	Cost Recovery in Sanitation: Total operating revenues expressed as a percentage of the total operating	Secondary	Non- spatial	56%	Expert Recommended	NA	<30%	30%-37.9%	38%-45.9%	46%-53.9%	54%-61.9%	62%-69.9%	>=70%	4

						12.FINA	NCE AND ECONOMY	1							
Code	Number	Indicator	Primary/ Secondary/ Tertiary; Aspirational	Type of Indicator	City Indicator Value	Source Reference Framework	Source of Threshold / National Average / Benchmark	(Very low performance)	1 (Low performance)	2 (Lower medium performance)	3 (Medium performance)	(Upper medium performance)	5 (High performance)	6 (Excellent performance)	City Score
		expenses incurred towards sanitation services in the financial year (%)								perrormance		periormance			
FIN	12.13	Cost Recovery in Solid Waste Management: Total operating revenues expressed as a percentage of the total operating expenses incurred towards solid waste management services in the financial year (%)	Secondary	Non- spatial	6%	Expert Recommended	NA	<30%	30%-37.9%	38%-45.9%	46%-53.9%	54%-61.9%	62%-69.9%	>=70%	0
FIN	12.14	Unemployment rate of persons of age 15 years and above (%)	Secondary	Non- spatial	Data not available	NIF (8.5.1)	Periodic Labour Force Survey (2017-18) Page 211 of 643 and Page 500 of 643 http://mospi.nic.in/sites/ default/files/publication reports/Annual%20Repo rt%2C%20PLFS%202017- 18 31052019.pdf?downl oad=1	>14%	14%-11.9%	12%-9.9%	10%-7.9%	8%-5.9%	6%-3.9%	<=4%	-
FIN	12.15	Inequality Index based on Consumption Expenditure- Gini Coefficient (score)	Secondary	Non- spatial	Data not available	EOLI (2.3.1)	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
FIN	12.16	Percentage of workforce employed in the service sector (%)	Secondary; Aspirational	Non-satial	Data not available	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
FIN	12.17	Total capital expenditure as percentage of total expenditure (%)	Tertiary	Non- spatial	64%	MPI (2.2.3)	NA	<10%	10%-15.9%	16%-21.9%	22%-27.9%	28%-33.9%	34%-39.9%	>=40%	6
FIN	12.18	GDP density as a percentage of the built-up area of the local government (%)	Tertiary; Aspirational	Non- spatial	Data not available	GPSC	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA
FIN	12.19	Informal employment as percentage of total employment (%)	Tertiary; Aspirational	Non- spatial	Data not available	CPI (3.3)	[Descriptive Indicator]	NA	NA	NA	NA	NA	NA	NA	NA

