

EVALUATION SCORECARD

Scoring lens: "Can an unknown person in a city read this and act on it?" 1 = Specific, contextual & actionable for / 0.5 = Generic, informational, copying of national guidance, or vague directive | 0= absolutely absent or no acknowledgement

Q#	Question	Parameter	example: Gorakhpur's Evaluation	Section
SECTION 1 – Heat Taxonomy & Physical Context				
1	What is the definition of a heat wave or extreme heat in the context of the geographical location?	Definition	Generic IMD/WMO national thresholds only ($\geq 40^{\circ}\text{C}$ plains, 5°C departure). No Gorakhpur baseline temperature, no city-specific absolute threshold stated. Figure 1 AWS graph is a rationale section, not a definition. A Gorakhpur resident cannot determine 'is it a heat wave in my city today' from this.	Section 1 – Heat Taxonomy
2	Does the plan include a historical trend analysis of heat risk?	Historical climatic Analysis	Gorakhpur-specific: AWS-recorded min temperature variation for Sadar sub-division vs rest of district (Figure 1, March 2019). Past Gorakhpur events cited (Cyclone Hudhud 2014, floods 2017). National death data (Figure 2) is broader context but local AWS data anchors this to Gorakhpur.	Section 1 – Heat Taxonomy
3	Does the plan provide projections of future heat risk?	Projection_ future risk	No Gorakhpur-specific projections. Generic Paris Agreement 1.5°C reference only. No district-level climate model output, no seasonal trend forecast for Gorakhpur.	Section 1 – Heat Taxonomy
4	Does the plan quantify physiological heat stress using indices such as WBGT, HI, UTCI, etc.?	Quantification adhering to Index	Heat Index concept named and physiology explained (dry bulb + relative humidity) but this is textbook content – no Gorakhpur HI values given, no table mapping HI levels to Gorakhpur's typical summer conditions. Phase III of strengthening plan proposes to develop thermo-hygrometric thresholds in the future but they don't exist yet in this document. Informational, not an actionable Gorakhpur tool.	Section 1 – Heat Taxonomy
5	Does the plan assess compound heat hazards (e.g., heat combined with humidity, air pollution, or drought)?	Compounding Impacts	Genuinely Gorakhpur-specific: $\text{PM}_{2.5} = 225 \mu\text{g}/\text{m}^3$ ($>4\times$ permissible) cited with local source. Sadar sub-division identified as more polluted via AWS. Humidity's compounding role explained. This names Gorakhpur's specific pollution problem as a compound hazard – not generic.	Section 1 – Heat Taxonomy
6	Does the plan include LCZ/UHI assessment or an equivalent urban heat typology analysis?	Urban Heat Island effect assessment	UHI is named but the analysis is generic – 'unplanned urban growth exacerbates heat' applies to any Indian city. Sadar AWS differential is noted but not mapped spatially, not classified by built-form or land cover. No neighbourhood-level differentiation. A Gorakhpur resident cannot identify whether their area is a heat island.	Section 1 – Heat Taxonomy
SECTION 2 – Population & Vulnerability				
7	Does the plan assess the impacts of heat risk on populations, including morbidity and mortality?	Physiological and psychological impacts of heat	Table 2 provides clinically specific, actionable guidance on heat rash, cramps, exhaustion, stroke with precise first aid. Though not Gorakhpur-unique data, it is directly usable by any Gorakhpur resident. Physiology of humidity reducing perspiration is explained. Retained as 1 – clinical guidance is universally actionable.	Section 2 – Vulnerability

8	Does the plan identify vulnerable population groups, including intersectional vulnerabilities?	Marginalised sections (socio-economic)	Lists the standard national groups (children, elderly, pregnant women, slum communities, outdoor workers) – identical to the NDMA guidelines cited as [21]. No Gorakhpur-specific data: how many such people, which wards/blocks they concentrate in, local social survey findings. A Gorakhpur officer cannot use this to locate or prioritise vulnerable populations.	Section 2 – Vulnerability
9	Does the plan specifically address outdoor and informal sector workers with dedicated protocols?	Livelihood – Marginalised sections	Labor dept. (p.24) and GIDA sections are Gorakhpur-specific: MGNREGA workers, construction workers, GIDA factory workers addressed with rescheduled hours, mandatory ice packs, AC relief chambers in industries, named officer obligations. Actionable in Gorakhpur context.	Section 2 – Vulnerability
10	Does the plan assess non-human exposures such as livestock, ecosystems, and urban green infrastructure?	Non-Human impact	Animal Husbandry section names Chief Veterinary Officer Gorakhpur as responsible. Sub-division coverage (all 7 sub-divisions) specified. Kharif/rice crop context relevant to Gorakhpur agriculture. Forest fire monitoring in Gorakhpur forests named. Locally grounded.	Section 2 – Vulnerability
11	Does the plan assess exposure of anthropogenic assets such as critical infrastructure, amenities, and financial capital?	Physical and Virtual Infrastructure	Electricity dept. mentions 'continuous power supply to hospitals, jails, schools' but names none of them specifically. No list of Gorakhpur hospitals, schools, jails that are priority assets. A Gorakhpur resident cannot verify their local hospital is protected. Generic directive without asset inventory.	Section 2 – Vulnerability
SECTION 3 – Risk Assessment & Mapping				
12	Does the plan utilize a risk assessment framework (e.g., IPCC, UNDRR, or $H \times E \times V$), and is it relevant?	Risk Assessment framework	Lack of any risk calculation framework, No acknowledgement to the requirement of risk calculation and thus no risk maps or assessments.	Section 3 – Risk Mapping
13	Does the plan map risk components (hazard, exposure, vulnerability) spatially?	Risk Assessment and Maps	DDMA mandates risk mapping of all Gorakhpur sub-divisions (pre-season task 1). Labor dept. and GIDA mandate high-risk maps of outdoor worker areas. Health dept. maps health centers in heat-affected zones. Annexure 1 lists all 27 blocks. Maps are mandated as Gorakhpur-specific deliverables even if not reproduced in the document.	Section 3 – Risk Mapping
14	Does the plan include dynamic risk maps and acknowledge limitations or updating mechanisms?	Updates in Risk Assessment and Maps	Absent. Annual HAP review is mentioned but no specific commitment to refresh maps on a defined trigger (demographic change, land-use update, new climate data). Maps are one-time pre-season preparation tasks.	Section 3 – Risk Mapping
SECTION 4 – Solutions, EWS & Response				
15	Does the plan propose short-term solutions at individual and community levels (e.g., cooling measures)?	Short term solutions	Specific Gorakhpur locations named for water kiosks: Golghar SADAR, Bank Road SADAR, Campierganj, Paidleganj, near Khajni police station, Kauriram chauraha Bansgaon, Shajanwa station road. Opening of public parks, cooling centres, public address system activation all tied to specific Gorakhpur alert levels. DIY measures are generic but the deployment infrastructure is local.	Section 4 – Solutions & EWS

16	Does the plan include long- and medium-term solutions such as retrofitting, NbS, and development strategies?	Long Term Solutions	All generic: 'promote green infrastructure', 'energy efficient buildings', 'albedo paint', 'rainwater harvesting'. No specific Gorakhpur projects, no named sites, no allocated budgets, no timelines, no responsible agency with a deliverable. These are aspirational statements indistinguishable from national-level boilerplate. Not actionable for Gorakhpur.	Section 4 – Solutions & EWS
17	Does the plan define heat alert thresholds and trigger levels for tiered response activation?	Thresholds for heat stress	Table 1 defines four tiers (Green/Yellow/Orange/Red) with conditions tied to Gorakhpur's IMD alert system. Departmental SOPs throughout explicitly reference these alert colours as activation triggers. Actionable and locally operationalised.	Section 4 – Solutions & EWS
18	Does the plan include tools or systems for weather data recording?	Tools and recording stations	AWS at Tehsil-SADAR photographed and documented (Figure 3). Climate Cell of DDMA Gorakhpur operates it. IMD URLs for Gorakhpur data provided. Specific and verifiable.	Section 4 – Solutions & EWS
19	Does the plan establish Early Warning System (EWS) infrastructure linked to meteorological authorities (e.g., IMD)?	EWS	Full Gorakhpur EWS chain mapped: IMD Gorakhpur → NIC → DDMA (email: ddmagorakhpur@gmail.com) → named cascade to Gram Pradhan. 5-day IMD forecast and 21-day CFS maps referenced with specific URLs. WhatsApp sub-chains per department named. A Gorakhpur official can identify exactly who to contact.	Section 4 – Solutions & EWS
20	Does the EWS integrate health outcome data such as morbidity and mortality feedback?	EWS – linked to social data	Absent. EWS is entirely meteorological. Morbidity/mortality data is collected post-season via Annexure 2 but never fed back into alert threshold calibration. No loop between observed health outcomes and EWS sensitivity.	Section 4 – Solutions & EWS
21	Does the plan specify cooling centres/emergency resources, including locations, capacity, and activation protocols?	Heat-Action – protocol	Named locations: Golghar, Bank Road, Campierganj, Paidleganj, Khajni, Kauriram chauraha, Shajanwa station road, temples, mosques. Annexure 1 lists all 27 blocks with cooling centre count. Daily photo-reporting to DDMA email mandated. Activation tied to alert levels. A Gorakhpur resident can navigate to named locations.	Section 4 – Solutions & EWS
SECTION 5 – Governance, Coordination & Funding				
22	Does the plan include a maintenance scheme with timelines for municipal interventions?	Maintenance of solutions and protocols	Three-phase seasonal cycle exists for departmental tasks but no maintenance protocol for deployed physical assets (water kiosks, cooling centres, AWS station, shade nets). No inspection schedule, no named maintenance officer per asset, no condition reporting mechanism. 'Post-season HAP review' ≠ maintenance scheme.	Section 5 – Governance
23	Does the plan define a government coordination framework, including roles, contacts, and stakeholders?	Government flow of responsibility	Figure 4 operability chart maps the full Gorakhpur hierarchy. ADM F/R named as nodal authority. Daily conference calls mandated during heat alert. Named cascade: DM → Municipal Commissioner → CMO → CVO → CEO GIDA → Gram Pradhan. DDMA email provided. Gorakhpur-specific and fully navigable.	Section 5 – Governance
24	Does the plan address funding and financial mechanisms?	Funding	Although ex-gratia ₹4 lakh per heat-wave death mentioned. Otherwise municipal Corp and GIDA mention 'provision of funds in budget' without amounts. No HAP budget, no financing strategy, no cost estimates for cooling centres or IEC. An officer cannot plan or procure from this.	Section 5 – Governance

25	Does the plan integrate with other government plans (e.g., DRR, climate adaptation, urban planning)?	Integration of Policies	National schemes are cited (NDMA guidelines, PMFBY, MGNREGA, ECBC, SDMP) but no description of HOW the Gorakhpur HAP links to the UP State DMP, UP climate action plan, or Gorakhpur master plan. A Gorakhpur officer cannot determine from this how this HAP relates to other plans they must follow. Citation ≠ integration.	Section 5 — Governance
SECTION 6 — Stakeholder Engagement				
26	Does the plan include surveys, stakeholder engagement, and insights?	Social Survey	Absent. No community heat risk perception survey, no structured consultation process, no local stakeholder needs assessment described.	Section 6 — Stakeholder Engagement
27	Does the plan define roles for private sector and NGO/CBO partnerships?	Private Responsibility	UNICEF UP credited, NGOs mentioned as targets to 'encourage', SHGs/SEWA listed as dissemination targets — but no specific NGO named, no contact details, no defined responsibilities, no accountability. A Gorakhpur resident cannot identify which NGO covers their area. Generic mention, not a defined partnership.	Section 6 — Stakeholder Engagement
SECTION 7 — Awareness, Communication & Capacity Building				
28	Does the plan include awareness, preparedness, and training materials (e.g., modules, pamphlets, infographics)?	Awareness and Capacity Building	IEC materials tasked to named Gorakhpur departments with block-level distribution tracking (Annexures). NIC portal URL (gorakhpur.nic.in), FM radio, WhatsApp groups, newspapers all named. Capacity building of 200 Aapda Mitras referenced. Sufficiently specific to be actionable.	Section 7 — Awareness & Capacity
29	Are communication materials differentiated for different audience groups? (based on ease of understanding, language etc.)	Knowledge dissemination for public	Different content types are assigned to different departments (farmers get crop IEC, children get bookmarks, ASHA workers get health training) but the actual content of none of these materials is shown or specified. A Gorakhpur school teacher doesn't know what the bookmark says or where to obtain it. A Gorakhpur ASHA worker doesn't know what her heat training covers. These are directives to create materials — not the materials themselves. Not actionable.	Section 7 — Awareness & Capacity
30	Does the plan include training for first responders and frontline health workers on heat-health protocols?	Frontline Worker training	Health dept. names specific cadres: 108 emergency workers, MHU staff, paramedics, ASHA workers, Aarogya Mitras, nurses, ward boys/girls. Zonal Heat Officer assigned for health centre audits. 200 Aapda Mitras named. Gorakhpur-grounded and actionable.	Section 7 — Awareness & Capacity
SECTION 8 — Integration, Monitoring & Evaluation				
31	Does the plan demonstrate multi-sectoral involvement?	Integration of Department	Strongest element of the plan. 13 named Gorakhpur departments with individual SOPs, named officers, reporting mechanisms. IMD, DDMA, Municipal Corp, NIC, Health, ICDS, Education, Panchayat Raj, Labor, GIDA, Transport, Animal Husbandry, Electricity, Agriculture/Forest, Jal Nigam all covered.	Section 8 — Integration & M&E
32	Does the plan include provisions for improvability, including update schedules and revision mechanisms?	Updates in Action Plans	Annual review mandated (Phase VI), NIC website upload specified, every department has post-season revision task. Updated plan to be posted on gorakhpur.nic.in. Gorakhpur-specific mechanism.	Section 8 — Integration & M&E
33	Is the plan replicable or aligned with standard government formats for accessibility and scaling?	Similarity to Govt. Format	Follows NDMA format — but format compliance is precisely why most content is generic rather than local. Replicability is not a measure of usefulness to a Gorakhpur resident. In fact, the template adherence has crowded out Gorakhpur-specific data. Scored 0 because from an end-user utility lens this criterion rewards the document for its weakness.	Section 8 — Integration & M&E

34	Does the plan define KPIs for monitoring effectiveness?	Performance review	Annexures collect operational counts (cooling centres activated, patients, deaths, IEC distributed) but define no targets, baselines, or success thresholds. No mortality rate reduction goal, no coverage percentage target. Data collection ≠ KPIs.	Section 8 – Integration & M&E
35	Does the plan designate a monitoring or supervisory authority?	Reporting Mechanism	ADM F/R Gorakhpur named as nodal monitoring authority. DDMA email provided. All departments report to DDMA daily during heat wave. CMO submits signed epidemiological report post-season. Zonal Heat Officer audits health centres. Clear and Gorakhpur-specific.	Section 8 – Integration & M&E
36	Does the plan include an After-Action Review (AAR) protocol following significant heat events?	Post-Heat event Review	Post-season tasks say 'assess HAP and participate in revision' – vague seasonal review, not a structured AAR. No protocol for who convenes it, what data is mandatory, within what timeframe, or how findings formally update the next version.	Section 8 – Integration & M&E

SUMMARY – CONTEXTUAL EVALUATION

Total Questions			
Total Score (out of 35)			
Percentage Score (%)			

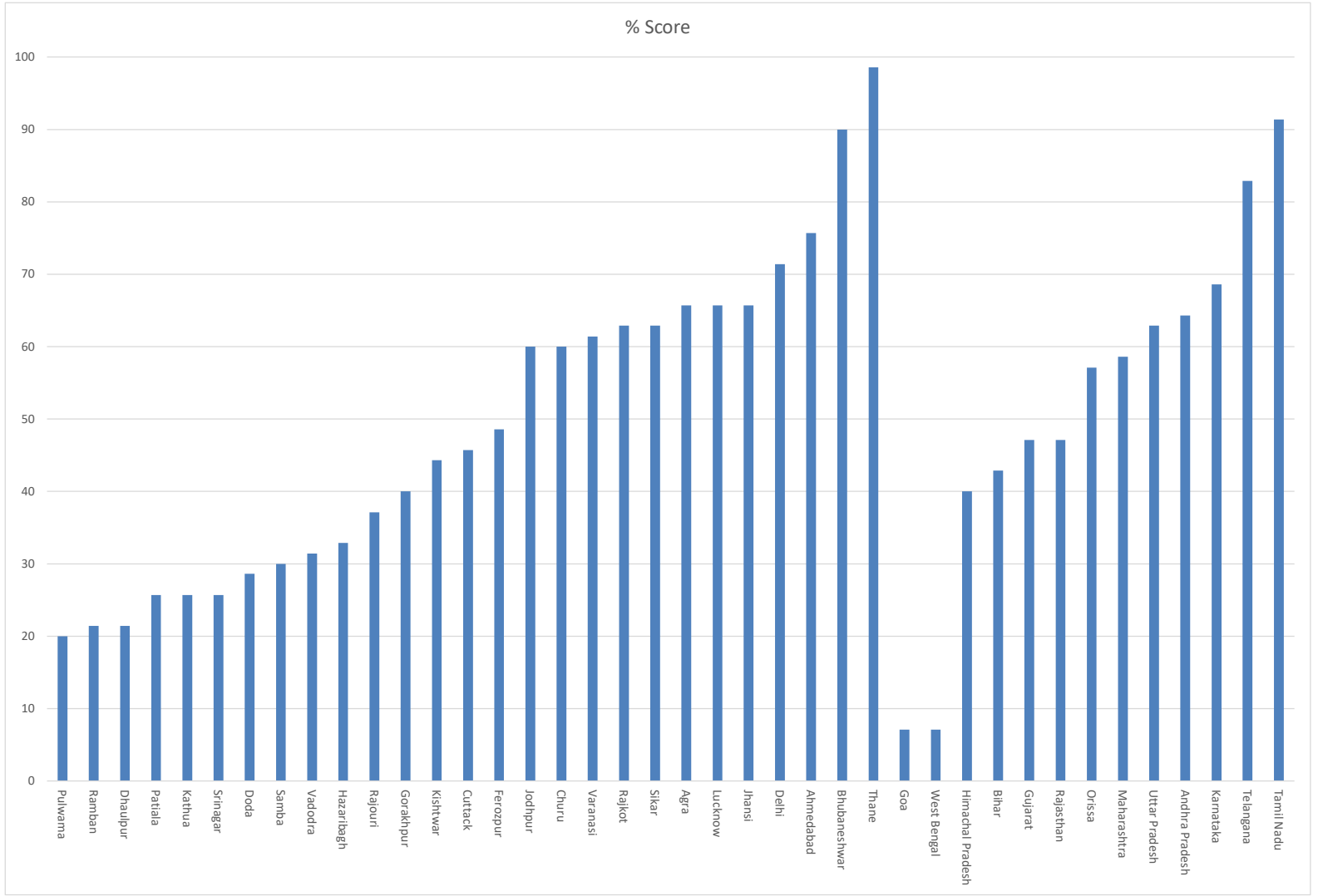
HEAT ACTION PLAN — EVALUATION SCORECARD FOR CITY																																			
Scoring lens: "Can an unknown person in a city read this and act on it?" 1 = Specific, contextual & actionable for Gorakhpur 0.5 = Generic, informational, copying of national guidance, or vague directive 0 = absolutely absent or no acknowledgement																																			
Q#	Question	Parameter	Example of evaluation for each HAP, here (Gorakhpur)	Sections	Gorakhpur	Jhansi	Agra	Lucknow	Varanasi	Doda	Rajauri	Kathua	Kishtwar	Pulwama	Ramban	Samba	Srinagar	Jodhpur	Sikar	Churu	Patiala	Ferozpur	Cuttack	Bhubaneswar	Thane	Ahmedabad	Rajkot	Vadodra	Hazratnagar	Delhi	Gujrat	Karnataka	Himachal		
					2019	2023	2025	2025	2022	2024	2024	2024	2024	2024	2024	2024	2024	2023	2023	2023	2022	2024	2023	2024	2020	2024	2019	2024	2016	2024	2024	2020	2024	2024	
SECTION 1 — Heat Taxonomy & Physical Context																																			
1	What is the definition of a heat wave or extreme heat in the context of the geographical location?	Definition	Generic IMD/WMO national thresholds only (48°C plains, 5°C departure). No Gorakhpur baseline temperature, no city-specific absolute threshold stated. Figure 1 AWS graph is a reference section, not a definition. A Gorakhpur resident cannot determine "is it a heat wave in my city today" from this.	Section 1 — Heat Taxonomy	0.5	1	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	1	0.5	1	1	1	1	1	0.5	0.5	0.5	0.5	0.5	1	0.5
2	Does the plan include a historical trend analysis of heat risk?	Historical climatic analysis	Gorakhpur-specific AWS recorded min temperature variation for Sador sub-division vs rest of district (Figure 1, March 2019). Heat Gorakhpur events cited (Cyclone Hudhud 2014, floods 2017). National death data (Figure 2) is broader context but local AWS data anchors this to Gorakhpur.	Section 1 — Heat Taxonomy	0	1	1	1	1	0.5	1	1	1	0.5	0	0	0	0	1	1	1	0.5	0.5	1	1	1	1	0.5	0.5	1	1	1	1	1	
3	Does the plan provide projections of future heat risk?	Projection, future risk	No Gorakhpur-specific projections. Generic Paris Agreement 1.5°C reference only. No scenario-level climate model output for Gorakhpur.	Section 1 — Heat Taxonomy	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0	0	1	1	0	0	0	0	0	0	0.5	0	1	0.5
4	Does the plan quantify physiological heat stress using indices such as WBGT, HI, UTCI, etc.?	Quantification adhering to index	Heat Index concept normal and physiology explained (dry bulb + relative humidity) but this is textbook content — no Gorakhpur HI values given, no table mapping HI levels to Gorakhpur's typical summer conditions. Phase III of strengthening plan proposes to develop thermo-hygrometric thresholds in the future but they don't exist yet in this document. (Referenced) as an extractable Gorakhpur heat.	Section 1 — Heat Taxonomy	0	0	1	1	1	0.5	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1	1	1	0	0.5	0.5	0.5	0.5	0	0.5	0	
5	Does the plan assess compound heat hazards (e.g., heat combined with humidity, air pollution, or drought)?	Compounding impacts	Gorakhpur-specific PM2.5 + 225 µg/m³ (14x permissible) cited with local hours. Sador sub-division identified as more polluted via AWS, humidity's compounding role assessed. The name Gorakhpur's specific pollution problem as a compound hazard — not generic.	Section 1 — Heat Taxonomy	1	1	1	1	1	0	0.5	0	0.5	0	0	0	0	0	0.5	0	0	0.5	0.5	1	1	1	0	1	0	0	1	0	1	0.5	
6	Does the plan include LCZ/UHI assessment or an equivalent urban heat topology analysis?	Urban Heat Island effect assessment	UHI is named but the analysis is generic — "unplanned urban growth exacerbates heat" applies to any Indian city. Sador AWS differential is noted but not mapped spatially, not classified by built-form or land cover. No neighbourhood-level differentiation. A Gorakhpur resident cannot identify whether their area is a heat island.	Section 1 — Heat Taxonomy	0	0.5	0	0.5	0.5	0	0	0	0.5	0	0	0	0	0	0.5	0.5	0.5	0	0	1	1	1	0.5	0.5	0	0	1	0	0.5	0	
SECTION 2 — Population & Vulnerability																																			
7	Does the plan assess the impacts of heat risk on populations, including morbidity and mortality?	Physiological and psychological impacts of heat	Table 2 provides generic health outcomes guidance on heat risk, cramps, exhaustion, stroke with generic first aid. Though no Gorakhpur-specific data, it is directly usable by any Gorakhpur resident. Physiology of heat reducing perspiration is explained. Reasoned as — clinical guidance is universally applicable.	Section 2 — Vulnerability	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0	0.5	0.5	0.5	0.5	0.5	0.5	0	0.5	1	1	1	1	1	0.5	0.5	0.5	1	1	1	0.5
8	Does the plan identify vulnerable population groups, including intersectional vulnerabilities?	Marginalized sections (economic)	Liste the marginalised national groups (children, elderly, pregnant women, slum communities, outdoor workers) — identical to the NDMA guidelines cited as [2]. No Gorakhpur-specific data: how many such people, which wards/blocks they concentrate in, local asset survey findings. A Gorakhpur officer cannot use this to locate or prioritize vulnerable populations.	Section 2 — Vulnerability	0	1	1	1	1	0.5	0.5	0.5	1	0.5	0	0.5	0.5	0.5	1	1	1	0	0.5	0.5	1	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9	Does the plan specifically address outdoor and informal sector workers with dedicated protocols?	Livelihood — Marginalized sections	Labor dept. (P24) and GDA sections on Gorakhpur-specific MGNREGS workers, construction workers, GDA factory workers addressed with technical heat, mandatory ice packs, AC relief chambers in industries, named officer obligations. Actionable in Gorakhpur context.	Section 2 — Vulnerability	1	1	1	1	1	0.5	0.5	0	0.5	0.5	0	0.5	0.5	0.5	0.5	1	0.5	1	0.5	1	1	1	1	1	0.5	0.5	0.5	1	1	0	0
10	Does the plan assess non-human exposures such as livestock, ecosystems, and urban green?	Non-Human Impact	Animal husbandry section names Chief Veterinary Officer Gorakhpur as responsible. Sub-division coverage (of 7 sub-divisions) specified. Khari/Vice crop context relevant to Gorakhpur agriculture. Forest fire monitoring in Gorakhpur forests named. Locally grounded.	Section 2 — Vulnerability	1	1	1	1	0	0.5	0.5	0.5	0.5	0	0	0.5	0	0	0	1	0	0	1	0	0	0	1	0	0.5	0.5	0.5	0.5	0.5	0.5	0
11	Does the plan assess exposure of anthropogenic assets such as critical infrastructure, amenities, and financial capital?	Physical and Virtual Infrastructure	Electricity dept. mentions "continuous power supply to hospitals, jails, schools" but names none of them specifically. No list of Gorakhpur hospitals, schools, jails and other priority assets. A Gorakhpur resident cannot verify their local hospital is protected. Generic directive without asset inventory.	Section 2 — Vulnerability	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0.5	0	0	1	0.5	0	0	0	1	0	0	0	
SECTION 3 — Risk Assessment & Mapping																																			
12	Does the plan utilize a risk assessment framework (e.g., IPCC, UNDRR, or H + E + V), and is it relevant?	Risk Assessment framework	Lack of any risk calculation framework. No acknowledgement to the requirement of risk calculation and thus no risk maps or assessments.	Section 3 — Risk Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0	
13	Does the plan map risk components (hazard, exposure, vulnerability) spatially?	Risk Assessment and Maps	DDMA mandates risk mapping of all Gorakhpur sub-divisions (pre-season task 1). Labor dept. and GDA mandate high-risk maps of outdoor worker areas. Health dept. maps health centers in heat-affected zones. Annexure 1 lists all 27 blocks. Maps are mandated as Gorakhpur-specific deliverables even if not reproduced in the document.	Section 3 — Risk Mapping	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0.5	0	1	1	1	0.5	1	0	0.5	1	0.5	1	0.5
14	Does the plan include dynamic risk maps and acknowledge limitations or updating mechanisms?	Updates in Risk Assessment and Maps	Absent. Annual HAP review is mentioned but no specific commitment to refresh maps on a defined trigger (demographic change, land-use update, new climate data). Maps are one-time pre-season preparation tasks.	Section 3 — Risk Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0.5	0	1	0
SECTION 4 — Solutions & EWS & Response																																			
15	Does the plan propose short-term solutions at individual and community levels (e.g., cooling measures)?	Short term solutions	Specific Gorakhpur locations named for water tanks: Original SAGAR, Bank Road SAGAR, Compterganj, Padleganj, near Khajepi police station, Kuraim chauraha Banaganj, Bhajawala station road. Opening of public parks, cooling centres, public address system activation of text to specific Gorakhpur alert levels. DTV measures are generic but the equipment infrastructure is local.	Section 4 — Solutions & EWS	1	1	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	1	0.5	1	1	1	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	
16	Does the plan include long- and medium-term solutions such as retrofitting, ABU, and development strategies?	Long Term Solutions	All generic: "promote green infrastructure", "energy efficient buildings", "shade paint", "transverse foreplanting". No specific Gorakhpur projects, no named sites, no allocated budgets, no timelines, no responsible agency with a deliverable. These are operational statements indistinguishable from national-level bullet points. Not actionable for Gorakhpur.	Section 4 — Solutions & EWS	0	1	1	1	0.5	0	0	0	0.5	0	0	0	0	0	1	0.5	1	0	0.5	0	1	1	1	1	0.5	0	0	0.5	1	1	0.5
17	Does the plan define heat alert thresholds and trigger levels for forced response activities?	Thresholds for heat stress	Table 1 defines four tiers (Green/Yellow/Orange/Red) with conditions tied to Gorakhpur's IMD alert system. Departmental SOPs throughout explicitly reference these alert colours as activation triggers. Actionable and locally operationalised.	Section 4 — Solutions & EWS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.5	1	1	1	1	1
18	Does the plan include tools or systems for weather data recording?	Tools and recording stations	AWS or Tahsil-SAGAR photographed and documented (Figure 3). Climate Cell of DDMA Gorakhpur operates it. IMD URLs for Gorakhpur data provided. Specific and verifiable.	Section 4 — Solutions & EWS	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	1	1	0.5	1	0	0	1	0.5	1	0	
19	Does the plan establish Early Warning System (EWS) infrastructure linked to meteorological authorities (e.g., IMD)?	EWS	Full Gorakhpur EWS chain mapped: IMD Gorakhpur → NIC → DDMA (email: ddma@gorakhpur.gov.in) → named cascade to Gram Pradhan. 5-day IMD forecast and 2-day CDO maps referenced with specific URLs. WhatsApp group per department named. A Gorakhpur official can identify exactly who to contact.	Section 4 — Solutions & EWS	0.5	0.5	0.5	0.5	0.5	1	1	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1	1	1	1	1	1	0.5	0.5	1	0.5	1	1
20	Does the EWS integrate health outcome data such as morbidity and mortality feedback?	EWS — linked to social data	Absent. EWS is entirely meteorological. Morbidity/mortality data is collected post-season via Annexure 2 but never fed back into alert threshold calibration. No loop between observed health outcomes and EWS sensitivity.	Section 4 — Solutions & EWS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0	0.5	0	0	0
21	Does the plan specify cooling centres/emergency resources, including locations, capacity, and activation protocols?	Heat Action — protocol	Named locations: Gajghar, Bank Road, Compterganj, Padleganj, Khajepi, Kuraim chauraha, Bhajawala station road, temples, mosques. Annexure 1 lists all 27 blocks with cooling centre count. Daily status-reporting to DDMA email mandated. Activation tied to alert levels. A Gorakhpur resident can navigate to named locations.	Section 4 — Solutions & EWS	1	0.5	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0	1	1	1	1	1	0.5	1	0.5	0.5	0.5	0.5	0.5
SECTION 5 — Governance, Coordination & Funding																																			
22	Does the plan include a maintenance scheme with timelines for municipal interventions?	Maintenance of solutions and protocols	Three-phase seasonal cycle exists for departmental tasks but no maintenance protocol for deployed physical assets (water tanks, cooling centres, AWS stations, shade nets). No inspection schedule, no named maintenance officer per asset, no condition reporting mechanism. "Post-season HAP review" → maintenance scheme.	Section 5 — Governance	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0.5	1	1	0	0.5	0	0	0	0.5	0.5	0.5	0.5
23	Does the plan define a government coordination mechanism, including roles, contacts, and stakeholders?	Government flow of responsibility	Figure 4 readability chart maps the full Gorakhpur hierarchy: ADM / JPR named as nodal authority. Daily conference calls mandated during heat alert. Named cascade: DM → Municipal Commissioner → CMD → CVO → CEO GDA → Gram Pradhan. DDMA email provided. Gorakhpur-specific and fully navigable.	Section 5 — Governance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	Does the plan address funding and financial mechanisms?	Funding	Although ex-grate Rs 4 lakh per heat-wave death mentioned. Otherwise municipal Corp and GDA mention "invasion of funds in budget" without amounts. No HAP budget, no financing strategy, no cost estimates for cooling centres or ICE. An officer cannot plan or procure from this.	Section 5 — Governance	1	1	1	1	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1	0.5	0	0	0	0	0.5	0	0.5	0.5
25	Does the plan integrate with other government plans (e.g., DRR, climate adaptation, urban planning)?	Integration of Policies	National schemes are cited (NDMA guidelines, PMFAY, MGNREGS, CCBC, SPMY) but no description of HOW or Gorakhpur HAP ties to the IP. DRR, IP, climate action plan, or Gorakhpur master plan. A Gorakhpur officer cannot determine from this how this HAP relates to other plans they must follow. Citation + integration.	Section 5 — Governance	0	0.5	0.5	0.5	0.5	0	0.5	0	0.5	0	0	0	0	0	0.5	0.5	0.5	0	0.5	0.5	1	1	0.5	0.5	0	1	0.5	0.5	0.5	0.5	
SECTION 6 — Stakeholder Engagement																																			
26	Does the plan include surveys, stakeholder engagement, and insights?	Social Survey	Absent. No community heat risk perception survey, no structured consultation process, no local stakeholder needs assessment described.	Section 6 — Stakeholder Engagement	0	0.5	0.5	0.5	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	1	1	1	0	0	0	0	0	0.5	0
27	Does the plan define roles for private sector and NGO/CBO partnerships?	Private Responsibility	UNICEF UP created, NGOs mentioned as targets to "encourage". SHS/REWA listed as dissemination targets — but no specific NGO names, no contact details, no defined responsibilities, no accountability. A Gorakhpur resident cannot identify which NGO covers their area. Generic mention, not a defined partnership.	Section 6 — Stakeholder Engagement	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0.5	1	0	0.5	0	1	1	1	0.5	0	0.5	0.5	0.5	0	0	0
SECTION 7 — Awareness, Communication & Capacity Building																																			
28	Does the plan include awareness, preparedness, and training materials (e.g., manuals, pamphlets, infographics)?	Awareness and Capacity Building	IEC materials listed by named Gorakhpur departments with block-level distribution tracking (Annexures). NIC portal URL (gorakhpur.nic.in), FM radio, WhatsApp groups, newspapers all named. Capacity building of 200 Appala Miras referenced. Sufficiently specific to be actionable.	Section 7 — Awareness & Capacity	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	0.5	1	1	1	1	1	0.5	0.5	1	1	1	1	1
29	Are communication materials differentiated for different audience groups? (based on ease of understanding, language etc.)	Knowledge dissemination for public	Different content types are assigned to different departments (farmers get crop IEC, children get booklets, ASHA workers get health training) but the actual content of none of these materials is shown or specified. A Gorakhpur school teacher doesn't know what the booklets say or where to obtain it. A Gorakhpur ASHA worker doesn't know what the health training covers. These are directives to create materials — not the materials themselves. Not actionable.	Section 7 — Awareness & Capacity	0	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0	0	0	0.5	0.5	0.5	0.5	1
30	Does the plan include training for first responders and frontline health workers on heat-health protocols?	Frontline Worker training	Health dept. names specific cadres: IMR emergency workers, MHJ staff, paramedics, ASHA workers, Anganwadi Miras, nurses, ward boy/girls. Zonal Heat Officer designated for health centres outside. 200 Appala Miras named. Gorakhpur-grounded and actionable.	Section 7 — Awareness & Capacity	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0	0	0	0.5	1	0.5	0.5	0.5	0.5	0.5	1	1	1	1	0.5	0.5	0.5	1	0.5	0.5	0.5	
SECTION 8 — Integration, Monitoring & Evaluation																																			
31	Does the plan demonstrate multi-sectoral involvement?	Integration of Department	Strongest element of the plan. 13 named Gorakhpur departments with individual SOPs, named officers, reporting mechanisms: IMD, DDMA, Municipal Corp, NIC, Health, SCDS, Education, Transport, Labour, GDA, Transport, Animal Husbandry, Electricity, Agriculture/Forest, Jal Nigam all covered.	Section 8 — Integration & M&E	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5
32	Does the plan include provisions for improvability, including update schedules and revision mechanisms?	Updates in Action Plans	Annual review mandated (Phase VI), NIC website upload specified, every department has post-season revision task. Updated plan to be posted on gorakhp																																

HEAT ACTION PLAN — EVALUATION SCORECARD FOR STATES

Read this and act on it? 1 = Specific, contextual & actionable for Garakhpur | 0.5 = Generic, informational, copying of national guidance,

State	Andhra Pradesh	Tamil Nadu	West Bengal	Goa	Bihar	Uttar Pradesh	Odisha	Maharashtra	Rajasthan	Score	Total Criteria Score	Percentage	Q#	Question	Parameter	Sections
111	90	185	13	49	54	184	88	92	58							
2021	2024	2024	2023	2024	2019	2024	2019	2024	2017							
SECTION 1 – Heat Taxonomy & Physical Context																
1	0.5	1	0	0.5	0.5	0.5	1	0.5	0.5	26.50	39.00	67.95	1	What is the definition of a heat wave or extreme heat in the context of the geographical location?	Definition	Section 1 – Heat Taxonomy
1	1	1	0.5	1	1	1	0.5	1	0.5	38.00	39.00	76.92	2	Does the plan include a historical trend analysis of heat risk?	Historical climatic Analysis	Section 1 – Heat Taxonomy
0	0	0.5	0	0.5	0.5	0	0	1	0	9.00	39.00	23.08	3	Does the plan provide projections of future heat risk?	Projection, future risk	Section 1 – Heat Taxonomy
1	1	1	0	0	0	1	0.5	0.5	0	15.50	39.00	39.74	4	Does the plan quantify physiological heat stress using indices such as WBGT, HI, UTCI, etc.?	Quantification relating to Index	Section 1 – Heat Taxonomy
1	1	1	0	0	0	1	1	0.5	0	19.00	39.00	48.72	5	Does the plan assess compound heat hazards (e.g., heat combined with humidity, air pollution, or drought)?	Compounding Impacts	Section 1 – Heat Taxonomy
0.5	0	1	0	0	0	0.5	0	0	0	10.50	39.00	26.92	6	Does the plan include LCZ/UT assessment or an equivalent urban heat typology analysis?	Urban Heat Island effect assessment	Section 1 – Heat Taxonomy
SECTION 2 – Population & Vulnerability																
1	1	1	0	0.5	1	1	1	1	1	27.00	39.00	69.23	7	Does the plan consider the impacts of heat risk on populations, including mobility and mortality?	Physiological and psychological impacts of heat	Section 2 – Vulnerability
1	0.5	1	0	0.5	0.5	1	1	0.5	0.5	25.50	39.00	65.38	8	Does the plan identify vulnerable population groups (including occupational)?	Marginalized sections (socio-economic)	Section 2 – Vulnerability
1	0.5	1	0	1	0.5	1	1	1	0.5	27.50	39.00	70.51	9	Does the plan specifically address outdoor and informal sector workers with dedicated protocols?	Livelihood – Marginalized sections	Section 2 – Vulnerability
1	0.5	1	0	1	0.5	1	1	1	0.5	21.00	39.00	53.85	10	Does the plan assess non-human exposure such as livestock, crops, and urban green infrastructure?	Non-Human Impact	Section 2 – Vulnerability
0	0.5	0.5	0	0	0	0	1	0.5	0	6.00	39.00	15.38	11	Does the plan assess exposure of anthropogenic assets such as critical infrastructure, amenities, and financial capital?	Physical and Virtual Infrastructure	Section 2 – Vulnerability
SECTION 3 – Risk Assessment & Mapping																
0	0	0	0	0	0	0	0	0	0	5.00	39.00	12.82	12	Does the plan utilize a risk assessment framework (e.g., IPCC, UNDRR, or H + E + V), and is it relevant?	Risk Assessment Framework	Section 3 – Risk Mapping
1	0.5	1	0	0	0.5	0.5	0	1	0.5	16.50	39.00	42.31	13	Does the plan map risk components (hazard, exposure, vulnerability) spatially?	Risk Assessment and Maps	Section 3 – Risk Mapping
0.5	0	1	0	0	0	0	0	0	0	6.00	39.00	20.51	14	Does the plan include dynamic risk maps and acknowledge limitations or updating mechanisms?	Updates in Risk Assessment and Maps	Section 3 – Risk Mapping
SECTION 4 – Solutions, EWS & Response																
1	1	1	0.5	0.5	1	0.5	0.5	1	1	29.50	39.00	75.64	15	Does the plan propose short-term solutions at individual and community levels (e.g., cooling measures)?	Short term solutions	Section 4 – Solutions & EWS
1	0.5	1	0	0.5	0	0.5	0.5	0.5	0	16.00	39.00	46.15	16	Does the plan include long- and medium-term solutions such as retrofitting, NCC, and development strategies?	Long Term Solutions	Section 4 – Solutions & EWS
1	0.5	1	0	1	1	1	1	0.5	1	35.00	39.00	89.74	17	Does the plan define heat alert thresholds and trigger levels for level response activation?	Thresholds for heat stress	Section 4 – Solutions & EWS
1	1	1	0	0	0.5	0	0.5	0.5	0	13.00	39.00	33.33	18	Does the plan include tools or systems for weather data recording?	Tools and recording stations	Section 4 – Solutions & EWS
1	1	1	0	1	1	0.5	0.5	1	1	28.50	39.00	73.08	19	Does the plan establish Early Warning System (EWS) infrastructure linked to meteorological authorities (e.g., IMD)?	EWS	Section 4 – Solutions & EWS
1	1	1	0	0	0	0	0.5	0	0	5.50	39.00	14.18	20	Does the EWS integrate health outcome data such as morbidity and mortality trends?	EWS – linked to social data	Section 4 – Solutions & EWS
0.5	1	0.5	0	0	0.5	0.5	0.5	0.5	0.5	20.00	39.00	51.28	21	Does the plan specify cooling centers/emergency resources, including location, capacity, and activation protocols?	Heat-Action – protect	Section 4 – Solutions & EWS
SECTION 5 – Governance, Coordination & Funding																
0.5	1	0.5	0	0	0	1	0.5	0	0	12.50	39.00	32.05	22	Does the plan include a maintenance scheme with timelines for municipal interventions?	Maintenance of solutions and protocols	Section 5 – Governance
1	1	1	0	1	1	1	0.5	1	1	37.50	39.00	96.15	23	Does the plan define a government coordination framework, including roles, contacts, and stakeholders?	Government flow of responsibility	Section 5 – Governance
0.5	0.5	1	0	0.5	0	1	0.5	0.5	0	12.50	39.00	32.05	24	Does the plan address funding and financial mechanisms?	Funding	Section 5 – Governance
0.5	0	1	0	1	0.5	0.5	0.5	0.5	0.5	16.50	39.00	42.31	25	Does the plan integrate with other government plans (e.g., DRR, climate adaptation, urban planning)?	Integration of Policies	Section 5 – Governance
SECTION 6 – Stakeholder Engagement																
1	0.5	1	0	0	0	0.5	0.5	0	1	14.50	39.00	37.18	26	Does the plan include surveys, consultation, engagement, and insights?	Social Survey	Section 6 – Stakeholder Engagement
1	0.5	1	0	0.5	0	1	0	0.5	0.5	18.00	39.00	46.15	27	Does the plan define roles for private sector and NGO/CSO partnerships?	Private Responsibility	Section 6 – Stakeholder Engagement
SECTION 7 – Awareness, Communication & Capacity Building																
1	0.5	1	1	0.5	1	0.5	1	1	1	29.50	39.00	75.64	28	Does the plan include awareness, preparedness, and training materials (e.g., infographics, pamphlets, infographics)?	Awareness and Capacity Building	Section 7 – Awareness & Capacity
1	0	1	0.5	0	0.5	0	1	0.5	0.5	13.00	39.00	33.33	29	Are communication messages differentiated for different audience groups? (based on ease of understanding, language etc.)	Knowledge dissemination for public	Section 7 – Awareness & Capacity
1	1	1	0	0.5	0.5	0.5	0	1	1	23.00	39.00	58.97	30	Does the plan include training for first responders and frontline health workers at heat health protocols?	Frontline Worker Training	Section 7 – Awareness & Capacity
SECTION 8 – Integration, Monitoring & Evaluation																
1	0.5	1	0	1	1	1	0.5	1	1	34.50	39.00	88.46	31	Does the plan demonstrate multi-sectoral involvement?	Integration of Department	Section 8 – Integration & M&E
1	1	1	0	0.5	0.5	0.5	0.5	0.5	0.5	18.00	39.00	46.15	32	Does the plan include provisions for improvability, including update schedules and review mechanisms?	Updates in Action Plans	Section 8 – Integration & M&E
1	0.5	1	0	0.5	1	1	0.5	0.5	1	23.50	39.00	60.26	33	Is the plan replicable or aligned with standard government formats for accessibility and scaling?	Similarity to Govt. Format	Section 8 – Integration & M&E
0.5	1	0.5	0	0	0	0.5	0.5	0	0	7.50	39.00	19.23	34	Does the plan define KPIs for monitoring effectiveness?	Performance review	Section 8 – Integration & M&E
1	1	1	0	1	1	1	1	1	1	37.00	39.00	94.87	35	Does the plan designate a monitoring or supervisory authority?	Reporting Mechanisms	Section 8 – Integration & M&E
0.5	0.5	0.5	0	0	0	0.5	0.5	0	0	10.50	39.00	26.92	36	Does the plan include an After-Action Review (AAR) protocol following significant heat events?	Post-heat event Review	Section 8 – Integration & M&E
SUMMARY – CONTEXTUAL EVALUATION																
35	35	35	35	35	35	35	35	35	35					Total Questions		
29	22.5	32	2.5	19	16	22	20	28.5	16.5					Total Score (out of 36)		
82.9	64.3	91.4	7.1	41.9	45.7	62.9	57.1	88.6	47.1					Percentage Score (%)		

City	% Score
Pulwama	20
Ramban	21.4
Dhaulpur	21.4
Patiala	25.7
Kathua	25.7
Srinagar	25.7
Doda	28.6
Samba	30
Vadodra	31.4
Hazaribagh	32.9
Rajouri	37.1
Gorakhpur	40
Kishtwar	44.3
Cuttack	45.7
Ferozpur	48.6
Jodhpur	60
Churu	60
Varanasi	61.4
Rajkot	62.9
Sikar	62.9
Agra	65.7
Lucknow	65.7
Jhansi	65.7
Delhi	71.4
Ahmedabad	75.7
Bhubaneshwar	90
Thane	98.6
STATE	% Score
Goa	7.1
West Bengal	7.1
Himachal Pradesh	40
Bihar	42.9
Gujarat	47.1
Rajasthan	47.1
Orissa	57.1
Maharashtra	58.6
Uttar Pradesh	62.9
Andhra Pradesh	64.3
Karnataka	68.6
Telangana	82.9
Tamil Nadu	91.4



Criteria	% Score
Risk Assessment Framework	12.8
EWS Linked to Health Data	14.1
Physical Infrastructure Exposure	15.4
KPIs for Monitoring	19.2
Dynamic Risk Map Updates	20.5
Future Heat Projections	23.1
After Action Review	26.9
UHI / LCZ Assessment	26.9
Maintenance of Interventions	32
Funding & Finances	32
Tools & Recording Stations	33.3
Knowledge Dissemination	33.3
Social Surveys	37.2
Heat Index Quantification	39.7
Integration with Other Plans	42.3
Risk Assessment & Maps	42.3
Plan Updates Mechanism	46.1
Long-Term Solutions	46.1
Private Sector Partnerships	46.1
Compound Heat Hazard	48.7
Cooling Centres & Protocol	51.3
Non-Human Impacts	53.9
Frontline Worker Training	59
Similarity to Govt Format	60.3
Vulnerable Population Groups	65.4
Definition of Heat Wave	68
Physiological Impacts	69.2
Outdoor Worker Protocols	70.5
EWS Infrastructure	73.1
Short-Term Solutions	75.6
Awareness & Capacity Building	75.6
Historical Heat Trends	76.9
Multi-sectoral Integration	88.5
Designated Monitoring Body	89.7
Designated Monitoring Body	94.9
Govt. Flow of Responsibility	96.2

