

Toward a framework for operationalising Mindfulness label in Gelephu Mindfulness City

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Abstract

Contemporary cities that prioritise economic growth and innovation often report significant trade-offs among economic development, social well-being, and ecological integrity. The unveiling of the Gelephu Mindfulness City (GMC) vision, which plans to embed mindfulness into all aspects of the city's design and function, redefines the concept of “city label,” a thematic urban identity or branding used by planners, researchers, and global bodies to guide modern urban planning and policy. To support and complement GMC's vision, this paper contextualises the mindfulness city label through systems thinking, reviews prominent city labels by thematic focus, and explores how leading cities employ indicator frameworks to monitor performance and guide policy formulation across time and space. The discussion operationalises Bhutan's Gross National Happiness (GNH) Index to align with the multi-dimensional components of mindfulness city. Logical analysis of the GMC framework reveals a distinctive “economies-in-society-in-mindfulness” system contrasting with the conventional market-centric city model structured around “markets-cities-people” logic.

The mindfulness city label demonstrated high (H) or medium-to-high (M-H) emphasis across seven key urban dimensions, positioning it as one of the most balanced and holistic models to date. To operationalise GMC's global aspiration, this article highlights the need and strategic opportunity to integrate the GNH framework with internationally recognised sustainability standards and safe bio-physical benchmarks. Such an integrative approach will offer a scalable planning model for cities seeking to harmonise human well-being, innovation, and planetary responsibility.

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Introduction

The promotion of cities as engines of economic growth and human capital development has become a central focus in contemporary strategic agendas. This paradigmatic shift, often described as the “century of cities”, is marked by urban areas that occupy less than three percent of the earth’s land surface yet provide livelihoods for 55 percent of global population and generate 60 percent of global GDP (Rodrigues & Franco, 2020). While central to human prosperity and innovation, the scale and density of cities also generate multi-dimensional and multi-scale social, ecological, economic, and material impacts. Urban areas currently consume 75 percent of world’s natural resources, generate 70 percent of all waste, account for over 70 percent of global CO₂ emissions, consume between 60 and 80 percent of global energy, and are among the leading drivers of biodiversity loss and land use transformation (Khan & Zaman, 2018; Inostroza & Zepp, 2021). From a value-based perspective, these pressures cause cascading and compounding impacts on social well-being, causing socio-economic inequalities in urban residents’ lives (Wiedmann & Allen, 2021; Oxford Economics, 2025).

To navigate persistent urban challenges, ensure that cities are inclusive, safe, resilient, and sustainable (UN SDG 11), and to enhance competitiveness and global visibility, contemporary cities are adopting innovative labels based on their characteristics, aspirations, or certifications. A few such categories include global status (e.g., global city, mega city), environmental focus (e.g., eco-city, low carbon city, biophilic city), technology and innovation (e.g., smart city, innovation city), quality of life (liveable city, cultural city), resilience (e.g., resilient city, sponge city), and mobility and transportation (Khan & Zaman, 2018; Pevcin, 2019).

Over the years, the sustainable city concept has evolved to align more closely with SDGs, emphasising environmentally sound, socially inclusive, and economically viable urban systems. In many cases, city managers integrate sustainable cities with Information and Communication Technologies, giving rise to the smart sustainable city label (Wątróbski et al., 2022). Since urbanisation is a continuous spatio-temporal process, leading cities are also developing innovative databases and frameworks to guide their development trajectories towards thematic targets. For instance, Global North cities such as Copenhagen, Glasgow, and Amsterdam

have adopted “doughnut economics models”, which define measurable parameters for ecologically safe and socially just urban development by localising the UN 2030 Agenda and planetary boundary (PB) limits (Raworth, 2017; Richardson et al., 2023). Cities in the Global South such as Nigeria use social, technological, economic, environmental, and political analyses as a tool for better understanding of sustainability issues. Additionally, international organisations and research institutes have developed measurement frameworks (e.g., Sustainable Cities Index, Global Cities Index, and ISO 37120) that employ continuous variables and physical indicators to monitor urban performance across multiple dimensions simultaneously. These standardised frameworks offer valuable templates for urban development worldwide. A review of these frameworks reveals a transition from siloed to more integrated approaches, while also highlighting a persistent trend where urban areas continue to overshoot ecological limits and/or under-reach social foundations (Díaz et al., 2024; UN ESCAP, 2025). Many prevailing frameworks prioritise economic competitiveness, technological innovation, and carbon metrics, often at the expense of deep ecological regeneration, spiritual well-being, social equity, and cultural identity. They mostly emphasise what is measurable rather than what is meaningful, overlooking intergenerational well-being (Khan & Zaman, 2018; Rodrigues & Franco, 2019; Wątróbski et al., 2022).

The unveiling of the Gelephu Mindfulness City (GMC) initiative as a Special Administrative Region in Bhutan by His Majesty the King in December 2023, marked a transformative moment in both national development and global urban innovation (<https://gmc.bt>; ESCAP, 2025). This visionary initiative reimagines conventional city models by conceptualising a strategic cross-border economic hub that integrates mindfulness into the design and functioning of seven key economic clusters: Health and Wellness, Education and Thought Leadership, Green Energy and Tech Industries, Aviation and Logistics, Agritech and Forestry, Spirituality, and Tourism (Nedup, 2025). Drawing on the philosophy of Gross National Happiness (GNH) (Ura et al., 2012), the city aims to promote ecological sustainability, cultural preservation, a circular economy, and contemplative well-being for its projected one million residents across a 2,500 km² catchment area. Concurrently, GMC aspires to become a globally innovative and replicable model for integrating ecological integrity, holistic wellness, and compassion-centred governance (Nedup, 2025; UN ESCAP, 2025). Already, this philosophically compelling and globally resonant vision has

attracted international leaders, conscious investors, scholars, and visionaries committed to building a more compassionate and balanced future. Since the Royal announcement, the city's vision has been articulated across multiple platforms, including official broadcasts, talent recruitment drives, and the Bhutan Innovation Forum. Central to these discussions is the commitment to integrating mindfulness into every aspect of urban design and function, through holistic approach such as mindful production and consumption, eco-centric infrastructure, operation on 100% renewable energy, maintenance of 60 percent forest cover, eco-friendly transport, low carbon and regenerative infrastructure, preservation of Bhutan's spiritual and cultural values, and the development of a values-based economic system (<https://gmc.bt>, Nedup, 2025). While the vision represents a paradigm shifting model for urban development, public discourse remains limited regarding how its multi-dimensional mindfulness aspirations will be operationalised, monitored, and evaluated to ensure long-term alignment with its core objectives.

As GMC aspires to become a globally replicable model, it presents a strategic opportunity to integrate localised, social sustainability standards and ecological benchmarks into its framework. Such integration could offer a scalable model for cities aiming to harmonise human well-being with ecological integrity. Focusing on these themes, this paper first conceptualises mindfulness within the GMC context and assesses its alignments and divergences from existing global city labels. Second, it reviews how leading cities employ indicators, data systems, and methodologies to monitor sustainability outcomes. Next, it explores whether the GNH Index and its sub indicators adequately capture GMC's mindfulness components. Recognising that mindfulness is shaped by broader socio-ecological contexts, the discussion considers how global standards, and safe biophysical benchmarks can be integrated with the guiding philosophy of GNH.

Results of analyses

Conceptualising Mindfulness in Context of Contemporary Cities

GMC's approach to urban mindfulness is illustrated through the Subject-Object-Boundary logical thinking framework by Lai (2021). In this model (Fig. 1), mindfulness functions as the Boundary holon, serving as the foundational DNA of the city that shapes both its inhabitants and structural

design. The word “holon” proposed by Koestler refers to an entity that is simultaneously a whole and a part within a larger system, reflecting inherent whole–part relationship between all components (Mella & Gazzola, 2017). The subject holon includes people, such as residents and visitors, while the object holon comprises infrastructure, the natural environment, and the city’s seven economic clusters. This framework presents an inside-out hierarchy in which economic systems are embedded within society, and society itself is rooted in mindfulness, forming an “economies-in-society-in-mindfulness” system. It suggests that the city emerges not only through its physical form but also inner transformation, proposing that sustainable urbanism begins with the mind. This human-centric and value-driven model contrasts with the conventional market-centric paradigm, which prioritises individualism and economic performance over people, operating on a “markets-cities-people” logic (Emerson & Smiley, 2018).

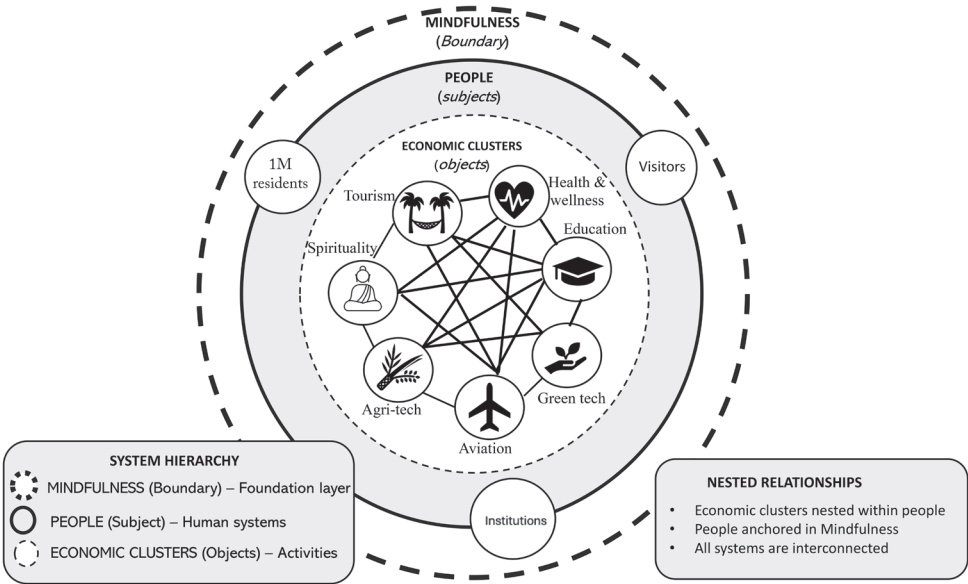


Fig 1. Conceptual structure of mindfulness in GMC.

Global City Labels and Positioning the Mindfulness Label

City labels that emphasise desirable traits have become increasingly popular tools for attracting tourists, investors, and residents. A review analyses of

fifteenth prominent city labels (Table 1) across seven dimensions; social, cultural, economic, environmental, technological, mobility, and safety/security, reveals a wide range of urban branding strategies and thematic emphases (Khan & Zaman, 2018; Hatuka et al., 2018; Pevcin, 2019; Wątróbski et al., 2022; Breuste, 2023). Smart cities and smart sustainable cities, for instance, place strong emphasis on technology and mobility, integrating advanced digital infrastructure to enhance urban efficiency and quality of life. In contrast, green cities and eco-cities prioritise environmental protection, green infrastructure, and resource efficiency, while cultural cities focus on preserving heritage, local identity, and artistic expression. However, it is a general overview, and numerous subcomponents and overlapping exist within each category. As visualised, many labels and their thematic priorities share commonalities, and are often used interchangeably due to the lack of standardised definitions (Schraven et al., 2021). This frequent co-occurrence of multiple labels within a single urban context suggests that contemporary cities are increasingly adopting hybrid approaches, moving toward more integrated and holistic urban development strategies.

Comparatively, the mindfulness city exhibits a high (H) or medium-high (M-H) level of emphasis across all seven dimensions, making it one of the most balanced and holistic urban models. It fills critical gaps by incorporating inner and collective awareness, spirituality and traditional values, alongside innovation and long-term balance between material progress and ecological integrity.

Table 1. Review report of global city labels and their thematic priorities

City label	Major focus	S	C	Ec	En	T	M	SS	City example
Global city	Hub of economic, political, and social influence with global connectivity.	H*	L	H	L	H	H	L	New York, San Francisco
Green city	Prioritises green spaces, eco-efficiency, and environmental protection.	M	L	H	H	M		L	Freiburg, Vancouver, Singapore
Smart /virtual / intelligent city	Technology is a central feature, use advanced computing systems, and big data analyses.	L	L	H	L	H	H	H	Dubai, Melbourne, Seoul.
Resilient city	Disaster risk reduction, improve city resilience, and multi scale networks.	M	H	M	L	H	M	H	New York, Seattle, Shanghai.
Eco-city	Minimise resource consumption, waste production, sustainable transport and greening.	M	H	M	H	L	H	L	Copenhagen, Miaofeng
Cultural city	Prioritising unique cultural assets and utilises tradition and history.	M	H	M	M	L-M	L-M	M	Kyoto, Florence, Ubud in Bali.
Low/zero carbon city	Reducing carbon footprint and deploying energy efficient technologies.	L-M	L	M	H	M-H	L-M	M	Oslo, Vancouver
Sponge city	Enhances water retention and urban flooding mitigation.	L-M	L	M	H	M-H	L-M	H	Shenzhen
Biophilic city	Reconnecting people with nature, integration of biodiversity and green networks.	L-M	L	L	H	L	M	L-M	Singapore, Portland
Sustainable city	Ecologically responsible, socially inclusive, and economically viable development	M-H	M	M	M-H	M-H	M-H	M	Freiburg, Helsinki
Smart sustainable city	Combines smart technology with sustainability goals to enhance quality of life.	M-H	M	M	M-H	H	L	L	Vienna, Singapore

City label	Major focus	S	C	Ec	En	T	M	SS	City example
Compact City	High-density, mixed-use development, and efficient public transport.	L	L	H	L	M-H	M-H		Tokyo, Delhi
Zero waste city	Sustainable production, responsible consumption, and circular economy.	M	L	M	H	L-M	L	L	San Francisco,
Creative city	Attract, cultivate, and mobilise creative assets.	H*	L	H	L-M	H	H	H	Shanghai
Mindfulness city	Guided by GNH philosophy, emphasising holistic well-being, economic development, ecological integrity, and cultural foundations.	H	H	M-H	H	M-H	M-H	M-H	Gelephu

Note: S = society, C=cultural, Ec=economic, En=environment, T=technology, M=mobility, S=safety& security, L=Low, M=medium, H=high, H* = high polarisation. The rankings for the Mindfulness City label were assigned by authors based on aspirations drawn from available literature and public communications.

Although detailed documentation on GMC is not yet publicly available, an analysis of existing literature and media suggest that the mindfulness label and its economic clusters span three major thematic clusters: sustainable, smart, and liveable cities (Fig. 2). For instance, green energy and agritech contribute to sustainable city, tech industries and education support smart city infrastructure, while health and wellness reinforce livability. From a transformative perspective, it represents the first urban label to explicitly integrate spirituality and consciousness into municipal planning. This integration broadens the scope of urban discourse by addressing “why we live” (values and meaning) alongside “how we live” (sustainability, technology, and livability). It thus marks a significant shift in urban planning, bridging material progress with spiritual fulfilment (Schraven et al., 2021).

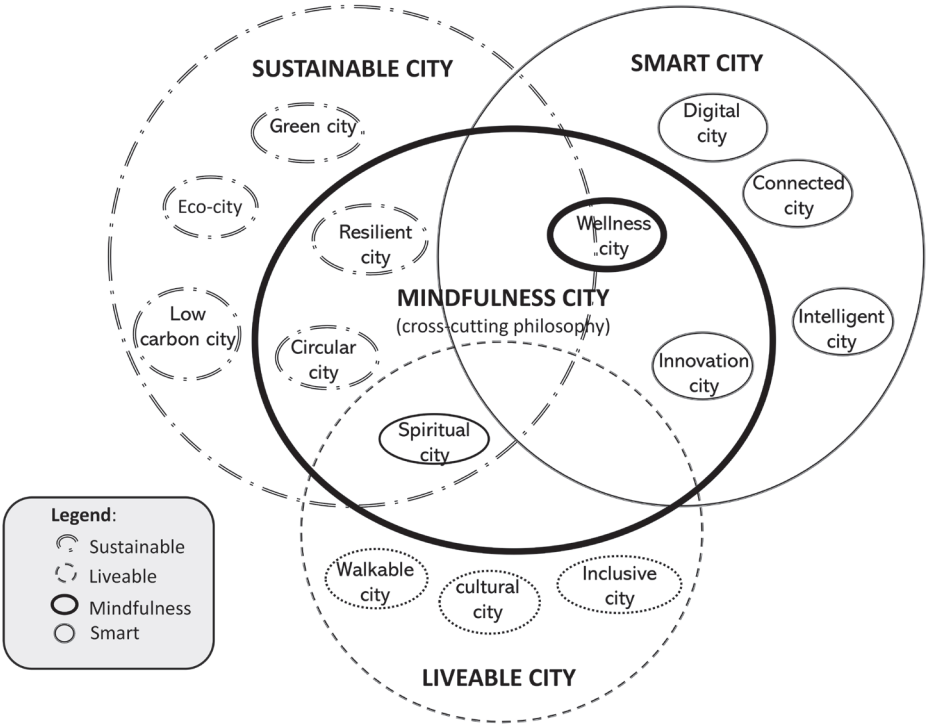


Fig 2. A conceptual framework showing how mindfulness city label intersects with three major urban clusters (Designed by authors in line with Table 1).

Global City Monitoring Frameworks

Following the adoption of city labels, many cities develop suites of indicators to monitor performance, guide policy formulation, and enable benchmarking across time and space. These indicators are typically categorised as single indicators, which measure specific phenomenon (e.g., population density), or composite indicators, which integrate multiple variables using weighted systems (Kitchin et al., 2015; Michalina et al., 2021). Their underlying data are also increasingly accessible to public, often updated in real time through sensors, mobile applications, and visualised using interactive platforms such as city dashboards (e.g., London city dashboard <http://citydashboard.org/london>, Dublin Dashboard <http://www.dublindashboard.ie/>).

Table 2 provides a summary of twelve internationally recognised city indicators. In addition, individual cities often develop tailored tools and indicators aligned with their specific city labels and aspirations. For example, the “green factor tool” has been implemented in Seattle, Berlin, Helsinki, and other Finnish cities to guide green city planning (Juhola, 2018). Similarly, smart city initiatives are evaluated using frameworks such as the Smart City Maturity Model, Smart City Assessment, and Smart City Index (Gazzeh, 2018). Eco-cities often rely on input output analysis, life cycle analysis, and ecological footprint metrics. Many cities also align their targets with international benchmarks through collaborative initiatives between cities and companies.

Comparative analyses in Fig. 2 highlight the mindfulness city model as one of the most balanced and holistic urban models. However, to align with its philosophical vision, curiosity is if GMC develops well-defined databases and robust monitoring framework. As evidenced by leading global cities, such systems not only reinforce a city vision but also enhance its potential for replication (Schraven et al., 2021).

Table 2. Analyses of global city indicators

Indicator / frameworks	Year	Sub-indicators & themes	Implementing / certified cities	Source
ISO 37120 for sustainable cities and communities.	2014	19 themes (covering economy, education, energy, environment, governance, transportation aspects) with 104 core and supporting indicators.	100 cities (certification levels; Platinum, Gold, Silver, Bronze)	https://www.dataforcities.org/iso-37120
The Doughnut Economy framework	2019	For safe and just space for humanity, covering social (from social priorities of SDG), ecological (from PB framework), local, and global levels.	Switzerland, Amsterdam, Glasgow, Copenhagen, Portland	https://doughnuteconomics.org/
Sustainable City Development Index	2022	Set of SDG targets and indicators specific to Brazil.	770 municipalities in Brazil	https://sdgs.un.org/partnerships/sustainable-cities-development-index
Corporate Knights Sustainable Cities Index	2022	Evaluate 12 indicators (covering pollutant emission public space, infrastructure, transport, solid waste, sustainable policies)	70 cities (Stockholm, Oslo, and Copenhagen)	Torrie & Morson (2023)
Sustainable Cities Index, Arcadis	2015	Evaluate four pillars of sustainability: Planet, People, Profit and Progress.	100 cities around the world (Amsterdam top in 2024)	https://www.arcadis.com/en/insights/perspectives/global/sustainable-cities-index-2024
Resilient cities Grosvenor	2014	Dimensions of vulnerability: climate, environment, resource, infrastructure, community.	50 major cities (Canadian and US cities top the ranking)	https://resilientvirginia.org/
Oxford Sustainability Index	2016	Evaluate 10 environmental sectors (related to CO ₂ , energy, transport, water, waste, land use, flood risk).	City of Oxford to built-up urban areas in Great Britain	https://aether-uk.com/Resources/Oxford-Sustainability-Index

Indicator / frameworks	Year	Sub-indicators & themes	Implementing / certified cities	Source
Sustainable Cities Mobility Index	2017	23 indicators grouped into sub-indices of “People, Planet and Profit”.	100 cities worldwide (Hong Kong tops overall index; by region)	https://www.arcadis.com/
European Green Capital Award & Green Leaf Awards	2008	Evaluate seven areas related to air, water, biodiversity, land use, circular, and climate change.	10 eligible applicant cities for 2027	https://environment.ec.europa.eu/topics/urban-environment/european-green-capital-award_en
Urban sustainability framework	2018	Measuring frameworks; “enabling” dimensions and four “outcome” dimensions.	A guide for cities seeking to enhance their sustainability	https://documents1.worldbank.org/(GEF, WB, UN)
Integrated Sustainability Monitoring of 58 EU-Cities	2014	Three pillars of sustainability (ecological, socio-cultural and economic) with 19 underlying themes.	58 EU-Cities (Amsterdam top)	https://pure.uvt.nl/ws
Global cities index	2024	Evaluate economics, human capital, quality of Life, environment and governance categories.	Across 1,000 cities (New York top)	https://www.oxfordeconomics.com/global-cities-index-2024/

Operationalising GNH Index: is it enough for Mindfulness?

Bhutan's GNH Index offers a holistic developmental framework that transcends conventional economic indicators by incorporating nine interrelated domains (Ura et al., 2012). His Majesty has emphasised that "GMC will be drawing on GNH philosophy while embracing the opportunities of the modern world." While GNH provides a strong ethical and cultural foundation, its operationalisation at the urban scale remains a critical question, particularly in capturing the multi-dimensional attributes that define a mindfulness city. In this context, mindfulness extends beyond personal well-being and inner awareness to encompass collective consciousness, ecological integrity, technological ethics, and socio-economic balance. This raises curiosities such as "Can the GNH Index capture these evolving dimensions? How can it be adapted to monitor progress over time? And how might GNH position GMC as a globally replicable model of innovation and sustainable urbanism?"

Table 3 examines the alignment between key components of GMC and GNH Index, assessing coverage across domains and their corresponding sufficiency thresholds. The GNH index's nine domains, 38 sub-indexes and variables offer a philosophically rich and culturally rooted framework that captures subjective well-being, inner values, traditional knowledge, community life, and ecological attitudes (Penjore, 2017; Rai, 2024). However, despite its depth, the analyses show the GNH index falling short in comprehensively capturing emerging components like eco transport, mindful technology, and circular economy practices that are central to GMC's vision.

Similarly, it can subjectively cover components such as health, education, mindful consumption, and clean air; yet it creates a measurability gap due to the lack of objective or value-based benchmarks. Living standard and Time use indicators of GNH rely partly on objective sufficiency cut-off drawn from Bhutan's Poverty Analysis Report and Regulation on working conditions of the Ministry of Labour and Human Resources. However, most sufficiency cut-off values are subjective, limiting their ability to track behavioural or socio-ecological impacts, an essential requirement for branding GMC as a "mindful city."

This indicates that while GNH can serve as the ethical and cultural backbone for the GMC vision, it must be complemented by internationally recognised benchmarks to ensure operational viability. To that end, several potential thresholds and complementary indicators are noted to support GMC's long-term monitoring and replicability. For instance, mindful consumption can be quantified using footprint indicator families and benchmarked against localised PB or SDG targets. Furthermore, self-reported safety indicators under Community Vitality or Health domains can be objectively strengthened through tools such as the WHO-5 Wellbeing Index, SDG 3.8, or ISO 37120 *standards*.

The Ecological Diversity and Resilience domain, which measures people's environmental awareness and concern across seven environmental issues, can be benchmarked against a localised safe operating space, as adopted in various eco-city frameworks. Similarly, the urban use indicator of the GNH Index, which evaluates concerns such as traffic congestion, green space inadequacy, lack of pedestrian infrastructure, and urban sprawl, could be objectively measured using the Green Factor Tool (Juhola et al., 2018). Incorporating real-time performance metrics and sensor-based data, as practiced in smart and sustainable cities, can further enable GMC to align its practices with global sustainability standards while maintaining its mindfulness driven identity.

Table 3. Analyses of key components of GMC and GNH Index

GMC Component	GNH coverage?	GNH Domain/ indicator	Type	Existing GNH sufficiency cut-off	Possible threshold / metric
Spirituality	Yes	Psychological Well-being; spirituality	Self-reporting of four variables	4 (regular spiritual activity)	Accessibility of spiritual practices, clinical thresholds.
Health and Wellness	Yes	Health, Time Use, living standard	Subjective & objective	8 hours work/sleep, 26 healthy days/month, household size to 4.7, housing standard MDG, income	SDG 3.8, WHO-5, ISO 37120.
Education	Yes	Education	Subjective & objective	Literacy, schooling, knowledge (19 scores), and value.	SDG 4.4.1; digital literacy; environmental education, ISO 37120
Green Tech	—	<i>No tech-specific measure</i>	No tech-specific measure	No tech-specific measure	Footprint metrics with PB threshold, and Technomass for material analysis.
Aviation	—	—	—	—	ICAO Carbon Emissions Calculator, airport sustainability index, Technomass
Agri Tech	Partial	Living Standards, Ecological Resilience	Subjective & objective	No tech specific measure	Biophysical accounting, LCA analysis, and capacity thresholds.
Renewable Energy	Indirect	Ecology; environmental responsibility	Self-reporting of environmental concerns	insufficient if >5 major concerns.	% renewables in energy mix, ISO 37120.

GMC Component	GNH coverage?	GNH Domain/ indicator	Type	Existing GNH sufficiency cut-off	Possible threshold / metric
Eco-friendly Transport	Indirect	urban use	self-reporting worries about traffic congestion, pedestrian streets.	—	Green Factor tool, Technomas, SDG 11.2, ISO 37120
Carbon Footprint	—	—	—	—	Footprint families relative to PB limits.
Wildlife Conservation	Subjective only	Ecological Diversity & Resilience	responsibility towards environment		PB (functional integrity).
Clean Air	Subjective only	Ecological issue (air pollution)	Subjective	major concern - not a concern	WHO guidelines, PB limits (aerosol).
Mindful Consumption	Partial	Living Standards, Psychological Well-being	Indirect	No direct measure	Ecological footprint with PB limits
Urban Sustainability	Broadly	All GNH Domains	Subjective & objective	Sufficiency in 2/3 domains	SDG 11.6, incorporates social and earth carrying capacity, ISO 37120.
Traditional Values & Culture	Yes	Cultural diversity and resilience	Subjective & objective	cultural participation of 6-12days/year, artistic skill in one art, important in <i>Driglam Namzha</i> .	—
Mindful Production	—	—	—	—	Green Factor tool, Technomas, production-based footprints
Climate & Disaster Resilience	Partial	Living standards (housing), community vitality, ecological issues, urban use	Indirect	Housing safety perception, floods & soil erosion concern reporting	Green Factor tool, buildings resilient, climate risk index, ISO 37120, SDG 11.5 target.

Globalisation of Mindfulness City Label

Unlike most contemporary city labels that exhibit thematic silos or trade-offs, the mindfulness city represents one of the most balanced and holistic urban models to date. Furthermore, GNH index provides a philosophically rich and culturally rooted framework that captures most of GMC's core components. However, the city's multi-dimensional components and global aspiration highlights both the necessity and strategic opportunity to synthesise GNH with international sustainable city standards and ecological benchmarking that define safe socio-ecological operating spaces. Such integration would not only enhance the credibility and measurability of GMC's implementation but also position it as a groundbreaking model for global urban sustainability. The Doughnut Economics model, adopted by many leading EU cities, provides an exemplary approach to this integration challenge (Doughnut Economics Action Lab, 2020). The established collaboration between the Doughnut Economics Action Lab, Oxford University, and the Royal Government of Bhutan through the Thimphu Paro Regional Strategy project (2020 to 2022) offers a valuable foundation for exploring such integration (MoIT, 2022).

As visualised in Fig. 3 the globalisation of mindfulness label hinges on the convergence of four foundational frameworks: GNH, UN SDGs 11, ISO 37120 standards, and Planetary Boundary Limits (PB limits). Each of these pillars brings complementary strengths, where GNH embeds spiritual, cultural, and ethical dimensions; SDGs provide universal social and development priorities; ISO 37120 offers measurable city performance metrics; and PB establishes science based ecological thresholds. To translate this vision into practice, each framework must be operationalised through a set of actionable and scalable indicators. For instance, the PB can be measured using ecological, material, and carbon footprint indicators to track ecological sustainability. The SDGs can be tailored to the urban scale using localised targets and indicators, and ISO 37120 contributes to standardised urban metrics including air quality, energy use, public safety, and mobility performance. Meanwhile, GNH offers subjective indicators like psychological well-being, spirituality, and cultural vitality dimensions often missing in global city labels. By integrating these layers into the mindfulness city framework, GMC operationalises its vision and serves as a replicable model that harmonises inner and outer sustainability (UN ESCAP, 2025).



Fig.3. Towards globalisation of mindfulness city label.

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