

## **PRESS RELEASE**

### **Dhaka on the Brink: Enact Nature's Rights and Natural Right Led Governance to Halt 7x Urban Growth, 60% Waterbody Loss, and 5°C Heat Rise**

Dhaka, 27 July 2025: Change Initiative's new report, *"Dhaka Without Nature? Rethinking Natural Rights Led Urban Sustainability,"* reveals that between 1980 and 2024, Dhaka's built-up area grew 7 times, land surface temperature rose by 3–5°C, and 60% of waterbodies were lost. Based on 44 years of satellite data and urban heat mapping, the study exposes the city's environmental decline driven by unplanned urban expansion. At the report's launch today in Dhaka, Change Initiative called for legislating nature's rights and embedding Natural Rights Led Governance (NRLG) to protect the capital from ecological collapse. The findings frame Dhaka's crisis not just as an urban planning failure, but a violation of ecological justice and fundamental rights.

Study has been conducted by M. Zakir Hossain Khan with the support of Sabrin Sultana and Md. Fuad Hassan. Key findings of the study are illustrated below-

#### **Tree Cover Vanishing: (Minimum Standard is 9 m<sup>2</sup>/person)**

- Dhaka lost **half its trees** since 1980 — from 21.6% to just 11.6%.
- Per Capita tree coverage for Dhaka Metropolitan Area (DNCC & DSCC) is 3.44 m<sup>2</sup>. Where, DNCC has **4.23 m<sup>2</sup> per person** and DSCC has **2.33 m<sup>2</sup> per person**
- Most areas fall **far below the 9 m<sup>2</sup>/person** green space standard.
- **Tree deserts:** Adabar, Rampura, Kafrul, Bangshal, and Wari have **virtually no trees**.

#### **Waterbodies Drying Up: (Minimum Standard is 4.5 m<sup>2</sup>/person)**

- **61% of waterbodies gone** since 1980 — now only 4.8% coverage citywide.
- Per Capita waterbody for Dhaka Metropolitan Area (DNCC & DSCC) is 1.43 m<sup>2</sup>. Where, DNCC has **1.79 m<sup>2</sup> per person** and DSCC has **0.97 m<sup>2</sup> per person**
- **Dry zones:** Sutrapur, Mirpur, Gendaria, and Kafrul are nearly waterless.
- Only 6 thanas barely meet the minimum waterbody standard.

#### **Heat Hitting Dangerous Levels (comfortable level is 26-30°C)**

- LST has jumped **3–5°C** — **no area under 30°C** today.
- Hotspots: Shyampur, Hazaribag, Tejgaon, Rampura, Darussalam all above 32°C.
- Former cooler zones are **now overheated** — Dhaka has **no climate refuge** left.

#### **Concrete Takeover: (maximum standard is 50%)**

- Built-up area grew **7x**, now covering **50%+ of the city**.
- Urban saturation: Adabar, Mirpur, Rampura, Uttara Paschim, Kafrul, Bangshal, Sutrapur, Wari, Kalabagan, Dhanmondi, Shyampu, Kotwali, Chalkbazar, Paltan, Hazaribag are all 80-90% built-up.
- **37 of 50 thanas** exceed safe construction thresholds.

**Inequality in Access to Natural Resources:** Green and blue spaces still survive mostly in wealthier or peripheral zones like Uttarkhan and Turag. Central and densely populated zones - Wari, Bangshal, Kotwali - are stripped of all ecological buffers.

#### **What Needs to Happen Now: A Clear Plan for Recovery**

For survival of Dhaka with the nature the minimum ecological standards (**9 m<sup>2</sup> of tree cover and 4.5 m<sup>2</sup> of waterbody area per capita**) the city could experience an average reduction in land surface temperature (LST) of approximately **1.01°C**.

M Zakir Hossain Khan, Chief Executive of Change Initiative claimed that "Dhaka is heading toward 25 million residents by 2035. With tree cover now at 11.6%, waterbody coverage at 1-2%, and rising temperatures threatening urban health, the city is on the verge of climate collapse. Cities like Singapore and Seoul maintain tree coverage between 30 - 47%. Even Delhi and Jakarta rank ahead. Only Karachi trails Dhaka and we are heading there fast.

**Dhaka must avoid Karachi's trajectory and instead embrace Singapore's model of nature integration, adapted through local wisdom and equity.** The NRLG-aligned recovery plan for Dhaka isn't about cosmetic greenery - it's a structural shift to recognize ecological rights as core to urban sustainability and climate survival. The state and community are stewards, not a sovereign over nature."

The report reframes this crisis through the Natural Rights-Led Governance (NRLG) lens - arguing that nature itself has been denied its fundamental rights to exist, regenerate, and support life. **Four key rights frame this new model are Right to Life and Dignity** (Nature must live for us to live); **Freedom from Exploitation** (The city cannot grow by suffocating its own lungs); **Social Harmony and Justice** (No one should be punished with heat because of where they live); and **Recognition of Indigenous Knowledge** (Community stewardship must lead the way).

Dr. Riffat Mahmood, Associate Professor, Department of Geography and Environment, Jagannath University told the reporters that, "Transforming flyovers into vertical gardens, engaging youth through environmental education, and empowering communities with stewardship models are essential steps in creating a sustainable urban environment in Dhaka. These actions not only improve green space but also encourage collective responsibility towards nature, fostering long-term environmental resilience."

In the reflection of the recent verdict of the International Court of Justice Change Initiative calls for the immediate measures, backed by measurable targets which are a) *Legislate Nature's Rights; criminalize wetland & forest filling*; b) *Reform DAP with ecological buffers & critical zones*; c) *Limit FAR in eco-sensitive areas*; d) *Enable community guardianship of natural resources*; e) *Mandate green zoning & eco-compensation*; f) *Restore waterbodies*; and g) *Impose 5x higher tax on concrete compare to nature-friendly structures*. Moreover, as medium term measures CI recommended for g) *Targeted Nature-Based Solutions for Dhaka*; h) *Prioritize low-income, dense areas for green investment*; i) *Plant 56.5 km<sup>2</sup> of trees in nature-deprived zones*; j) *Restore wetlands to reduce heat by ~1°C*; k) *Reintroduce ecological buffers & community water stewardship*; l) *Focus on heat-vulnerable and water-stressed Thanas*; m) *Ensure digital natural accountability for all stakeholders*; and n) *channel sustainable and nature finance toward nature-based solutions*.

*Why Now? Because Later Might Be Too Late. Let's give Dhaka its breath back - before it's too late.*

**Full Report Download:** <https://www.changei.earth/post/dhaka-without-nature-rethinking-natural-rights-led-urban-sustainability>

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