The Green Infrastructure Handbook

A practical tool to plan, finance, and deliver Green Infrastructure (GI) at scale

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The Green Infrastructure Handbook

Enabling Cities to Plan and Deliver Green Infrastructure

PURPOSE

- Provide a practical, step-by-step framework for city-scale GI planning
- Support cities to move from concept → planning → investment → implementation
- Help design and integrate GI into mainstream urban planning and infrastructure systems
- Translate GI/NbS into actionable and investable

IT HELP CITIES TO

- Identify and prioritize projects and investments
- Build evidence for decision-making (benefits, costs, impacts)
- Design connected GI networks at city and district scale
- Strengthen implementation and delivery capacity

CONTEXT

- All GEF-8 SCIP participating cities have identified GI as a key priority activity
- Growing global demand for integrated, nature-based urban solutions
- Increasing recognition that GI is essential for resilience, livability, and sustainable growth

Practical Framework for GI Planning

*Green Infrastructure is not a collection of isolated green spaces or aesthetic additions—it is a **strategic infrastructure system** that connects parks, waterways, forests, green streets, wetlands, and mobility corridors into a **coherent network** that supports urban services, strengthens resilience, and improves quality of life*

*This handbook responds to this need by providing a **practical, integrated planning framework** to design, plan, finance, and implement GI at district, city and regional scale.*

APPROACH

- **Network-based planning** (not isolated projects)
- **Multi-scale application** (district → city → region)
- **Integration into urban systems** (planning, transport, infrastructure)
- Focus on **implementation and investment readiness**

THREE-LAYER MODEL

Green Infrastructure: Vegetation-based systems that delivers ecosystem services and urban livability

Blue Infrastructure: Water systems that regulates water flows and enhances resilience

Slow Mobility: Public open spaces for staying and moving that include urban nature

Practical Framework for GI Planning

Analysis

- Understand **urban systems, risks, and opportunities**
- Map existing green–blue assets and gaps
- Identify priority areas based on **climate, biodiversity, and equity needs**

Planning

- Design a **connected GI network** at city and district scale
- Define typologies, standards, and spatial priorities
- Integrate GI into **urban plans and sectoral strategies**

Investment

- Translate plans into a **pipeline of bankable projects**
- Assess **costs, benefits, and economic value**
- Identify financing sources and **leverage public and private capital**

Implementation

- Deliver projects through **coordinated, cross-sectoral action**
- Align with existing infrastructure and urban development processes
- Ensure **quality, inclusiveness, and long-term functionality**

Monitoring

- Track performance using **clear indicators and metrics**
- Evaluate impacts on resilience, livability, and ecosystems
- Adapt and improve through **learning and feedback loops**

From Handbook to Impact

Target users

- GEF-8 project cities
- Other interested cities (Global South focus)
- Planners, municipalities, IFIs

Operations and Maintenance

- Define roles and responsibilities
- Ensure long-term maintenance
- Monitoring and adaptive management mechanisms

Partnerships

- ESA (data and geospatial tools)
- Technical experts and global partners
- Alignment with World Bank NbS work

Next steps

- Dissemination and training
- Pilot cities
- Scaling through programs and financing