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Dimensions of local Action for biodiversity

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CBD Regional Workshop for East, South and Southeast Asia on Cities and Biodiversity

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Outline

- Introduction
- Challenges in Assessment
- Challenges in Planning
- Dimensions of local biodiversity planning

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The UNU and its Institutes

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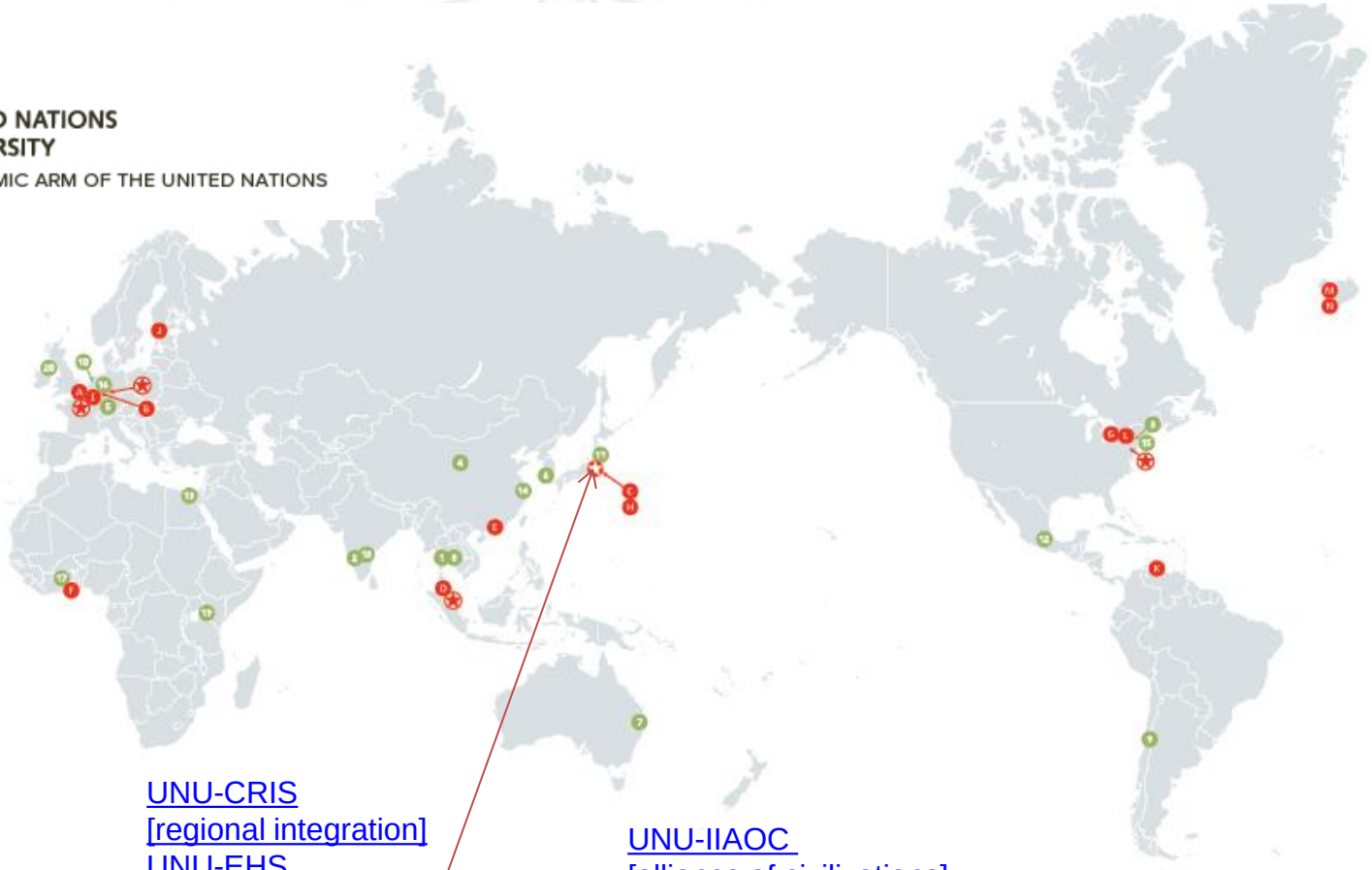

UNU-CRIS
[regional integration]
UNU-EHS
[environment & human security]
UNU-FLORES
[material fluxes & resources]
UNU-IAS
[advanced study for sustainability]

UNU-IIAOC
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UNU-IIGH
[global health]
UNU-IIST
[software technology]
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[Africa's natural resources]

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[water, environment, health]
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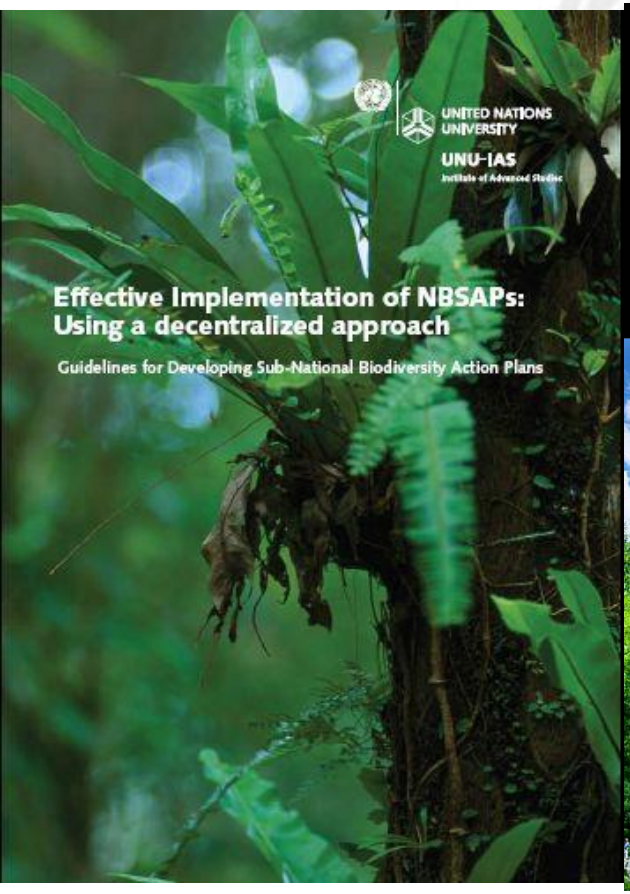
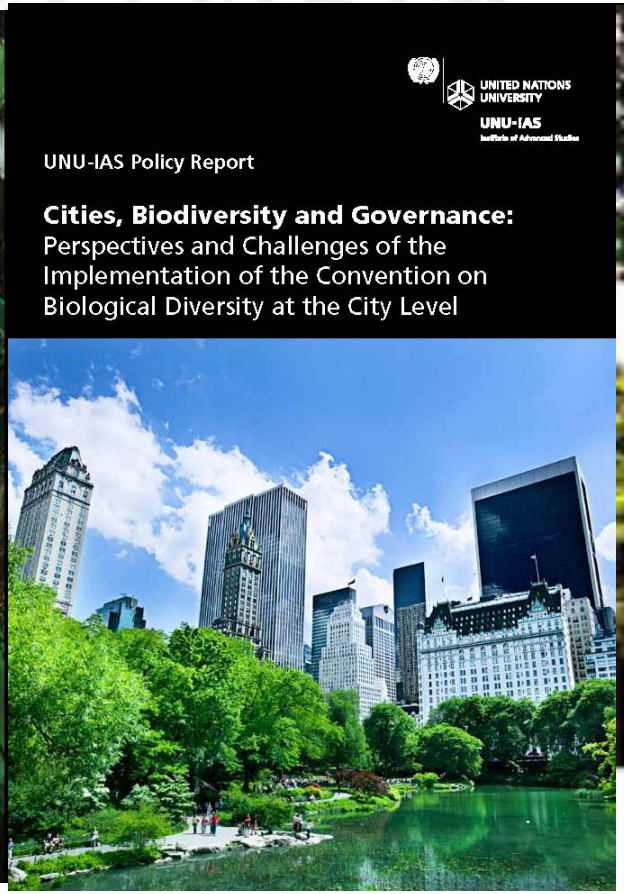
Our work on national and local biodiversity plans





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Why cities

- Key decisions are made in cities, has a massive *potential* to affect the status of biodiversity globally
- Cities offer unique opportunities for learning and education about a resilient and sustainable future
- Cities have a large a potential to generate innovation and governance tools and therefore can – and must – take the lead in sustainable development because ultimately all implementation is local

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Cities and biodiversity

- **Cities can only exist because they appropriate resources from outside their boundary**
- Impact of cities on biodiversity is multi-scalar
  - Local (direct in locality)
  - Regional (water resources, ecosystem services)
  - Global (mining, deforestation, raw materials for consumption)

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Cities and biodiversity

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Consequences of urbanisation

- Transformation of space
  - habitat destruction
  - Landscape fragmentation
  - Urban sprawl
- Invasive species
- Urban heat island and climate change

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At the city level..

- Usually reduces species richness for most biotic communities
- Humans directly control plant richness, evenness and density
- Certain species may flourish in the absence of competitors, predators
- Species may be disrupted by urban development
  - Bats around street lights
  - Humans (obesity)
- Some may adapt to urban environment
  - Rats, foxes, cockroaches, crows

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Managing biodiversity at the city level

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Issues with indicators/scoring

- Varies with city capacity and organisation
- Not all indicators make sense for every city
  - Definition of natural (wasteland is not natural but can harbour high biodiversity)
  - protected areas where no public land exists
  - Public-private partnerships providing funding not counted as part of the official budget
- Not all geographical locations may have the same level of biodiversity
- Requires flexible interpretation

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Application of the CBI

- Diagnostic tool
  - Decide on allocation of funds between three indicator areas
- Urban planning tool
- Local biodiversity strategy and action planning (LBSAP)
  - Target setting
  - Monitoring/self assessment
- Tool to help mainstream biodiversity into planning

- Common tool that enables cities to share experiences internationally

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Final point for consideration

- Ultimately CBI tells you ‘what’ but not ‘how’
- So after having calculated the CBI and set targets based on objectives key issue for any city to understand is:
  - How do we create governance mechanisms that allow us to reach these goals?

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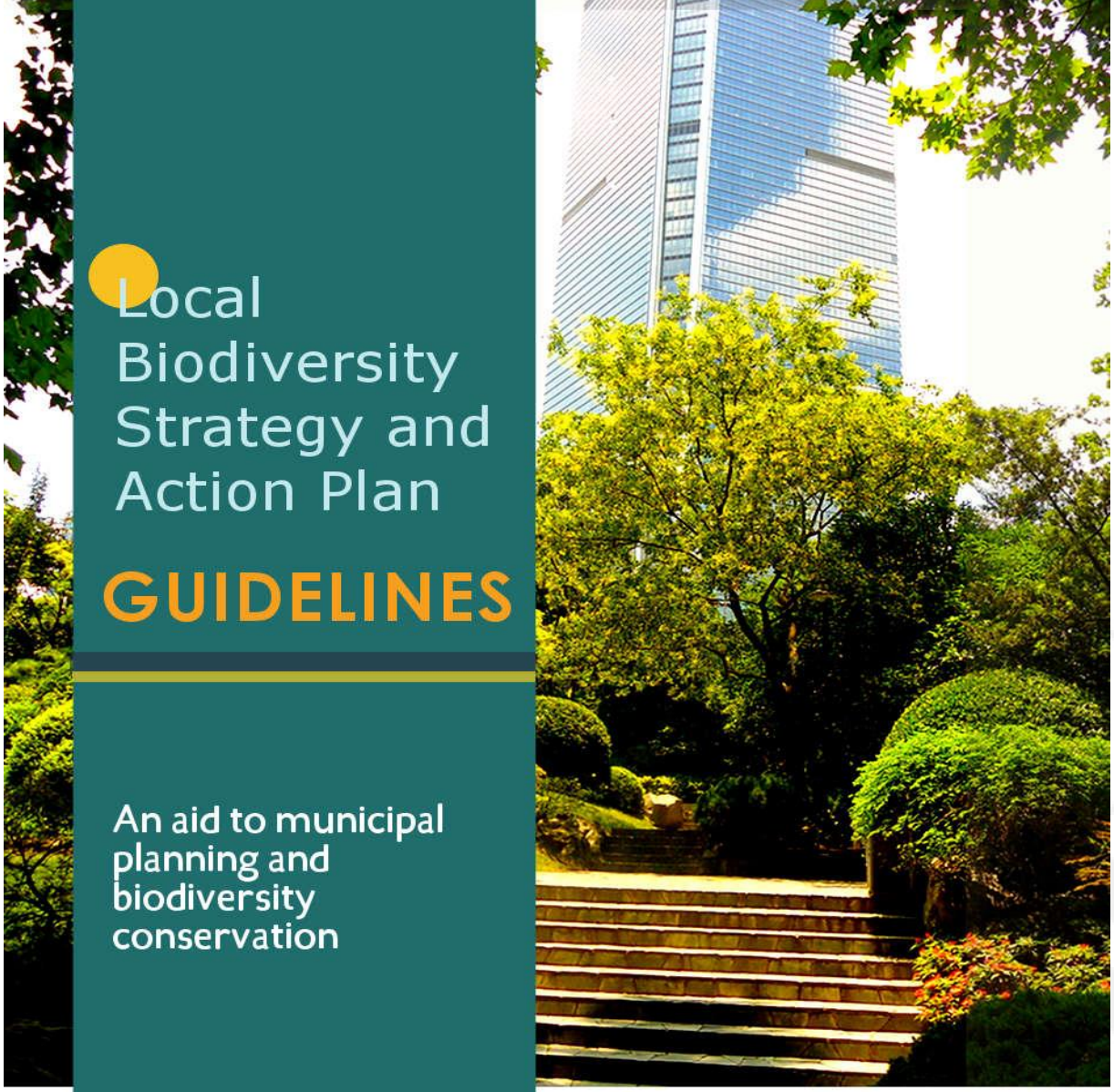
Local Biodiversity Strategy and Action Plan

GUIDELINES

An aid to municipal planning and biodiversity conservation



ICLEI Local Governments for Sustainability

LAB Local Action for Biodiversity

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Convention on Biological Diversity

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Basic Steps

- Assemble a team
- Determine resource requirements
- Set a timeframe
- Understand mainstreaming
  - Political context
  - Planning context
  - Identify and work with stakeholders
  - Undertake biodiversity assessment

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Strategy

- Firstly, the local strategy needs to join efforts with other initiatives related to biodiversity at the different levels to get maximum synergy among the efforts, such as the Aichi Targets and NBSAPs.
- Secondly, it should be based on the proper assessment of the local biodiversity using the assessment tools that map the conditions of the biodiversity and ecosystem services locally, such as the CBI and TEEB.
- Thirdly, in order to be effective, the strategy should focus on changing on-going development processes that can affect positively or negatively the biodiversity.
- Finally, the strategy should reflect a vision to contain the main threats to biodiversity locally and the opportunities to improve biodiversity overall.

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Dimensions of local biodiversity planning

National (NBSAP)

Spatial

Local (LBSAP)

Sectoral
(e.g. economy, transport, health, sanitation)
different stakeholders)

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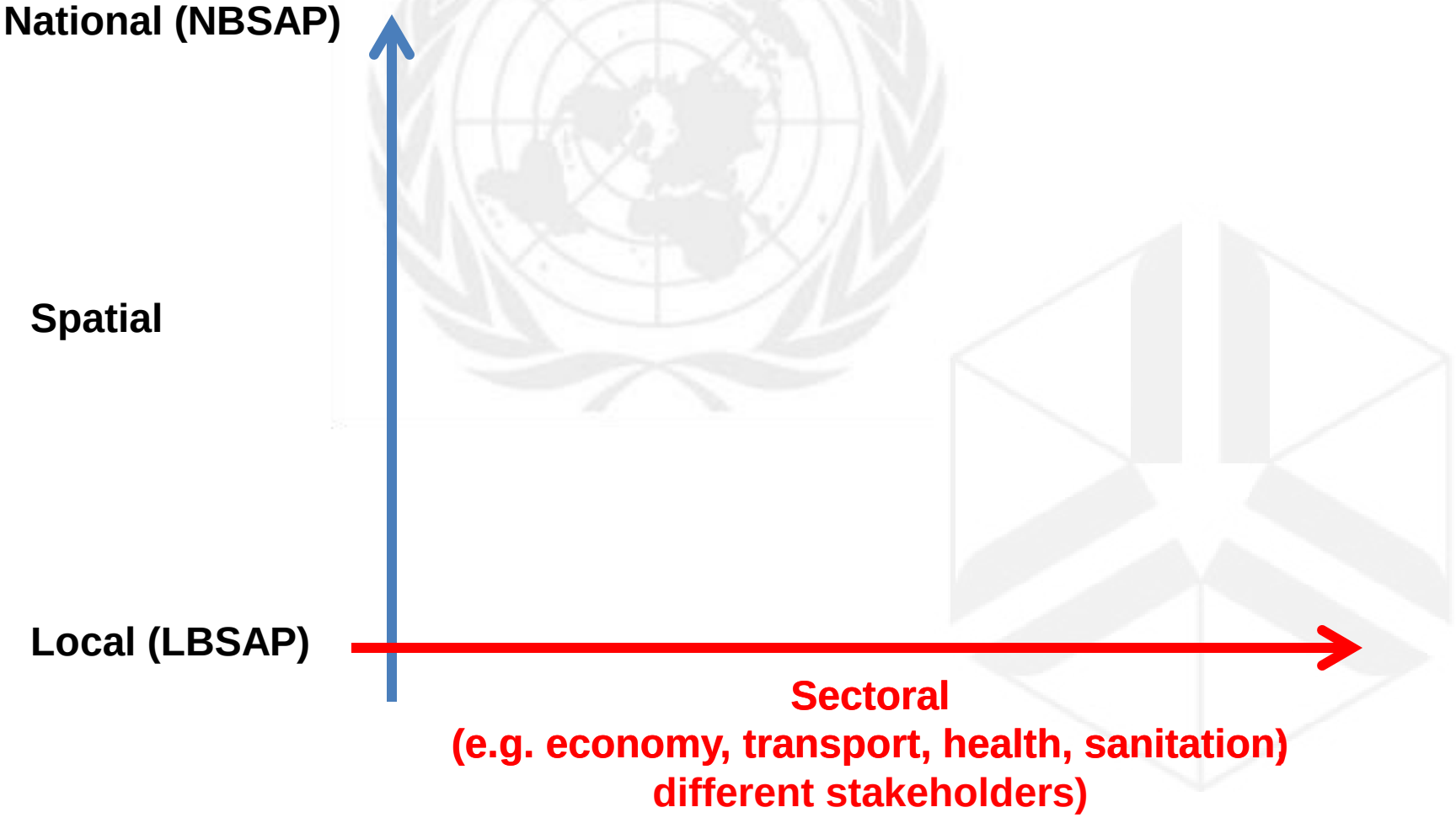
Dimensions of local biodiversity planning



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Dimensions of local biodiversity planning

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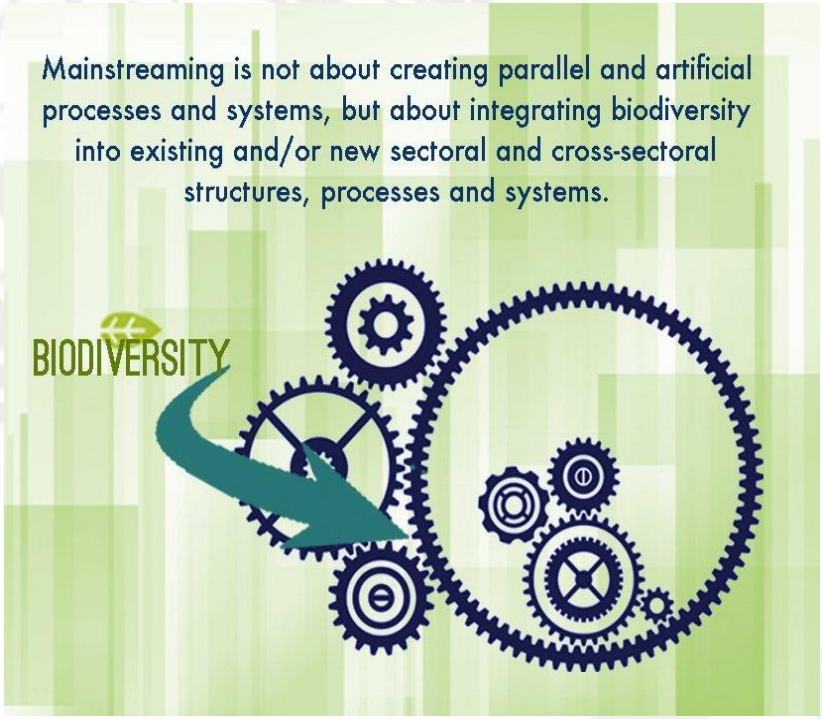

Sectoral
(e.g. economy, transport, health, sanitation; different stakeholders)

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Scalable approach

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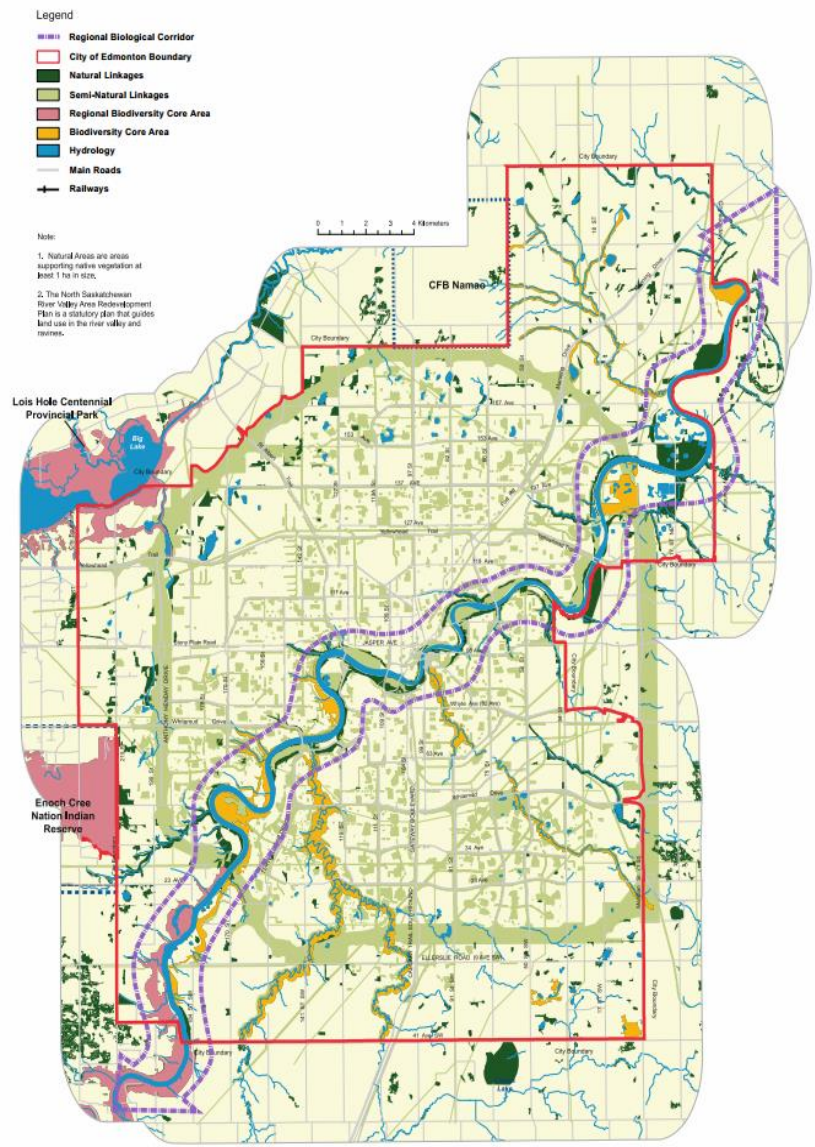
Edmonton, Canada



- Edmonton planning a network of ecological corridors through the city
- Developed 4 city plans
  - *The Way We Green (environment)*
  - *The Way We Grow (economy)*
  - *The Way We Live (social justice)*
  - *The Way We Move (transport)*
- Aim is to align them to each other to do integrated planning, finding synergies and conflicts between the plans

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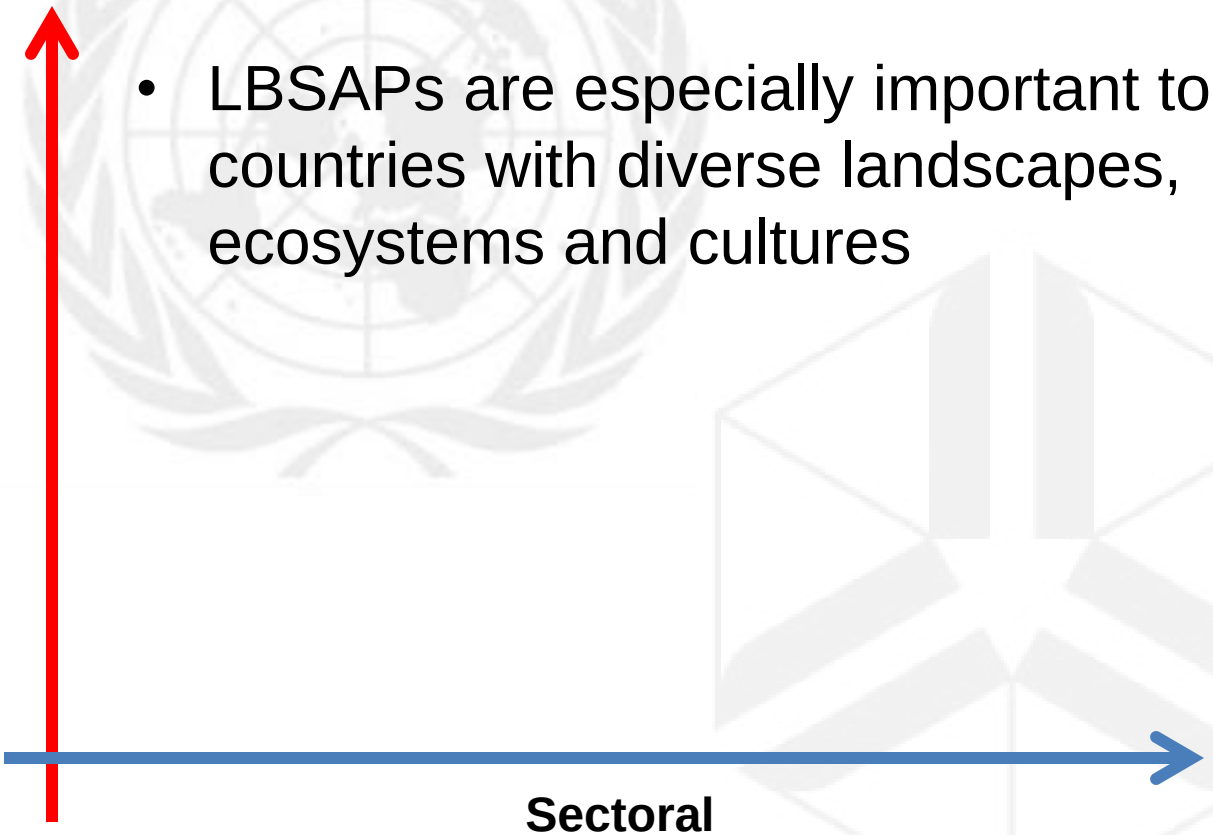
Dimensions of local biodiversity planning

National (NBSAP)

Spatial

Local (LBSAP)

- LBSAPs are especially important to countries with diverse landscapes, ecosystems and cultures



Sectoral
(e.g. economy, transport, health, sanitation)

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Two-way relationship between local and national

National – Local

- Provide guidance on biodiversity priorities, key policy signals
- Make available resources for biodiversity assessment

Local – National

- Provide fine-scale information on various local biodiversity parameters and implementation issues for better informed resource allocation
- Opportunity to make specific implementation of broad national level policies

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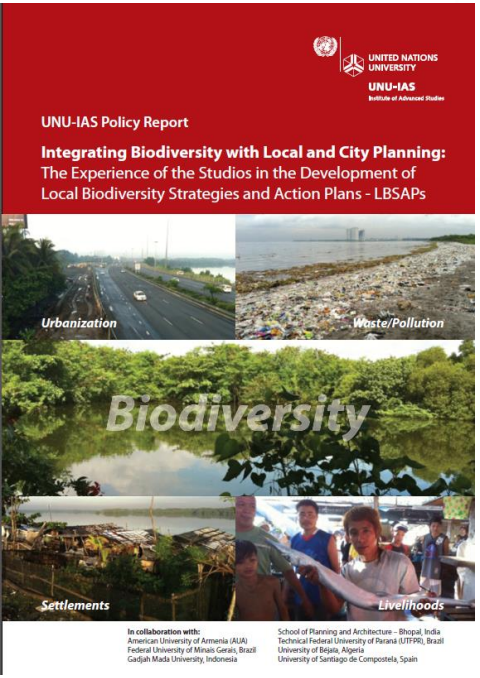
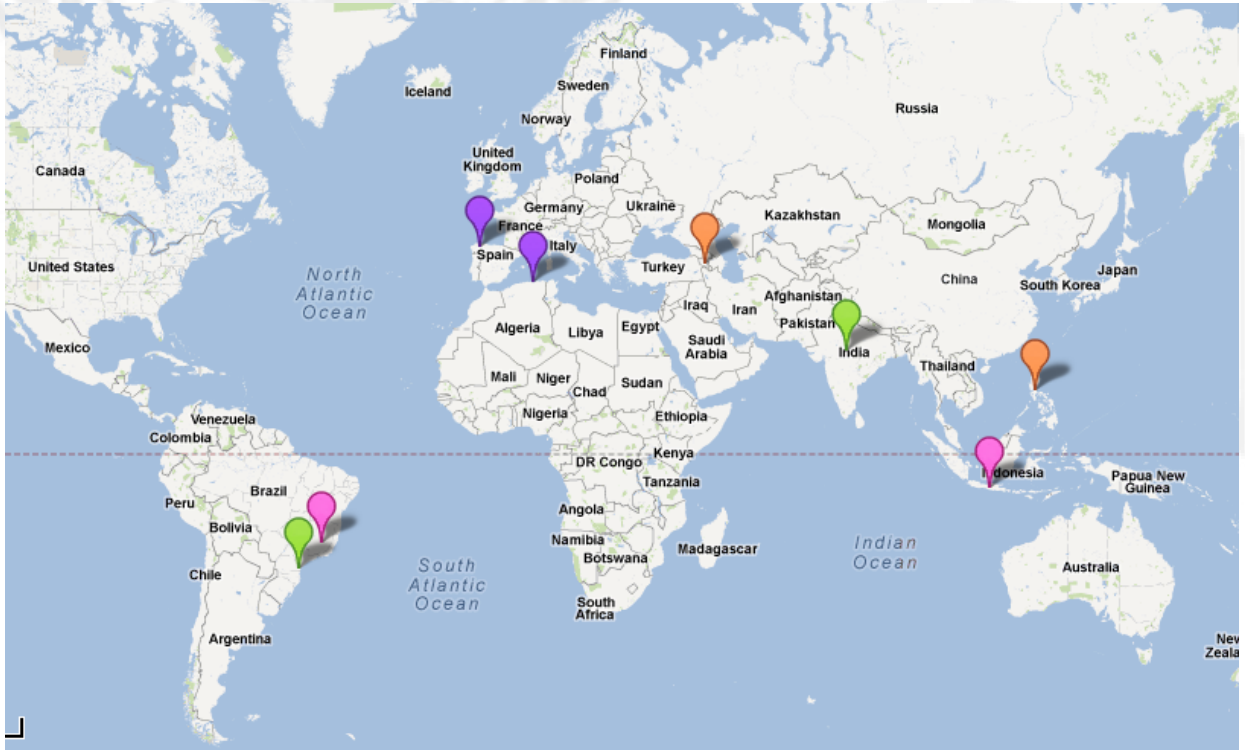
Training for biodiversity planning

- Planners are not traditionally exposed to issues such as biodiversity planning
- Tested LBSAP guidelines





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Barriers to biodiversity and ecosystem management

- *Institutional barriers*.
  - The lack of coordination among several entities working on biodiversity and local planning at the different levels. The LBSAP process can contribute to help this coordination
- *Technical barriers*.
  - Biodiversity in cities has traditionally been overlooked; little systematic data and data sharing
  - Whilst biodiversity has an intuitive understanding, ecosystem functioning can be harder to understand
  - Green spaces that are potentially important areas for biodiversity and ecosystem functioning can be identified from the land use map, but no information on quality.
- *Financial barriers*.
  - Many cities prioritise other issues over biodiversity
  - Can be difficult to immediately spot synergies or calculate payback times

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Key points

- Different cities have different impacts at different scales
- Need to train planners in biodiversity planning
- Biodiversity planning should be matched to the needs of the city and be aligned to national level priorities
- Biodiversity planning can link across many city activities such as livelihood provision, education etc
- Biodiversity is a key component to creating liveable cities, which is becoming increasing valued as a component of economic vitality