

URBAN ECOSYSTEM

TATA SUSTAINABILITY MONTH, JUNE 2021



WHAT IS IT?

The Urban Ecosystem has gained considerable attention during the last few decades because of its **RELEVANCE TO WILDLIFE CONSERVATION, HUMAN WELFARE, AND CLIMATE CHANGE ADAPTATION.**

Despite their steel, concrete, crowds and traffic, cities and towns are still ecosystems whose condition profoundly marks the quality of our lives.

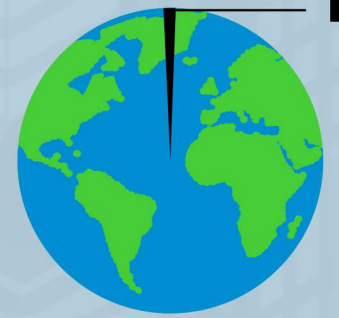
FUNCTIONING URBAN ECOSYSTEMS HELP CLEAN OUR AIR AND WATER, COOL URBAN HEAT ISLANDS, AND SUPPORT OUR WELL-BEING BY SHIELDING US FROM HAZARDS AND PROVIDING OPPORTUNITIES FOR REST AND PLAY. THEY CAN ALSO HOST A SURPRISING AMOUNT OF BIODIVERSITY.



WHY IS IT IMPORTANT?

Urban areas occupy less than 1 per cent of the Earth's land surface but house more than half of its people.

1%



By restoring ecological functions we can design **MORE LIVEABLE, HEALTHY AND RESILIENT CITIES**



Investing in urban ecological infrastructure may often be **ECONOMICALLY ADVANTAGEOUS**



Urban ecosystems will have a crucial role in increasing the adaptive capacity **TO COPE WITH CLIMATE CHANGE**

HOW IS IT DEGRADED?



POOR PLANNING

Results in sealing of soils and leaves little space for vegetation amid the houses, roads and factories



POLLUTION

Waste and emissions from industry, traffic and homes pollutes waterways, soil and the air



UNCHECKED URBANIZATION

This results in an urban sprawl that gobbles up more and more natural habitat and fertile farmland



CLIMATE CHANGE IMPACTS

Such as increased rainfall intensity, storm surges, and flooding and urban heat island effects severely affect the urban systems

HOW BAD IS THE SITUATION?

Urban areas are centres of major environmental problems such as high population density, inadequate water supply, wastewater, solid waste, loss of green and natural spaces, urban sprawl, pollution of soil, air, traffic, noise, etc.



98% of cities in low- and middle-income countries with more than 100,000 inhabitants do not meet WHO air quality guidelines



27% of the urban dwellers in the developing world do not have access to piped water at home

2 billion people globally don't have access to waste collection services. Large volumes of uncollected waste create multiple health hazards

WHAT CAN BE DONE TO RESTORE THEM?

1 COMMITMENT

Restoring urban ecosystems requires awareness and commitment from both citizens and decision makers



2 PROTECTION

Permeable sidewalks and urban wetlands can protect against flooding and pollution



3 URBAN PLANNING

Thoughtful urban planning can ensure a well-balanced ecosystem



4 PARKS & RECREATION

Contaminated industrial areas can be rehabilitated and turned into urban nature reserves and places for recreation and relaxation

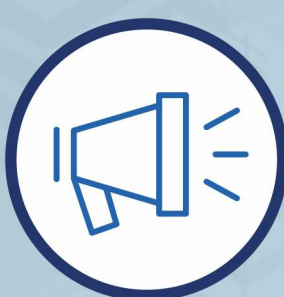


5 MICROCLIMATE REGULATION

Urban parks and vegetation, including green roofs and green walls, reduce the urban heat island effect



WHAT CAN MY ORGANIZATION DO?



CREATE LARGE SCALE AWARENESS



PARTICIPATE IN PRIVATE-PUBLIC PARTNERSHIPS such as waste management, infrastructure development and housing



SUPPORT CSR INITIATIVES to protect urban ecosystems

WHAT CAN I DO TO HELP?



PLANT NATIVE TREES IN YOUR NEIGHBOURHOOD/ GARDEN



USE WATER AND ENERGY JUDICIOUSLY AND MAINTAIN CLEANLINESS



PARTICIPATE IN CIVIC PLANNING AND HOLD LOCAL GOVERNMENT BODIES ACCOUNTABLE