

ECOSYSTEMS SERVICES

Summary of Week 8

What ecosystem services do you have in and around your living area?

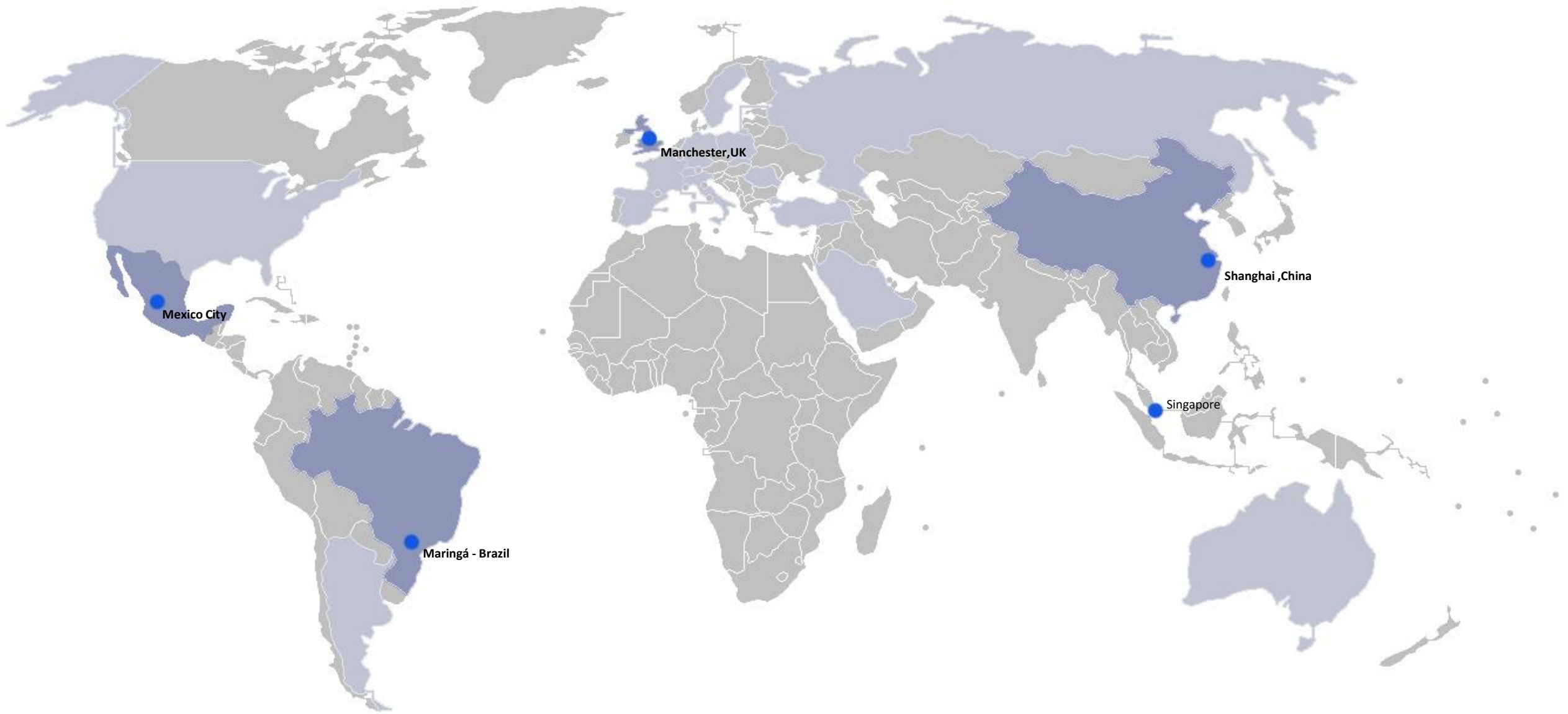
- a. Provisioning services
- b. Regulating services
- c. Habitat or Supporting services
- d. Cultural services

For more information you can also refer to:

MA, Millennium Ecosystem Assessment, 2005a. Ecosystems and Human Well-being: Synthesis. Island Press,: Washington, DC.

MA, Millennium Ecosystem Assessment, 2005b. Ecosystems and Human Well-being: Wetlands and Water Synthesis. World Resources Institute: Washington, DC

Where do participants live?



Ecosystem services in Mexico City

Provisioning Services



river Cutzamala

most of this kind of services come from the outside of the city like for the water

water storage, conduction, purification and distribution of fresh water

Habitat or Supporting services



National Autonomus University of Mexico

botanical garden with all the species of plants of the country

Regulating Services



“Viveros de Coyoacan”

regulating the quality of air

tree nursery and Public Park of 38.9 hectares
ecological reserve

Cultural services



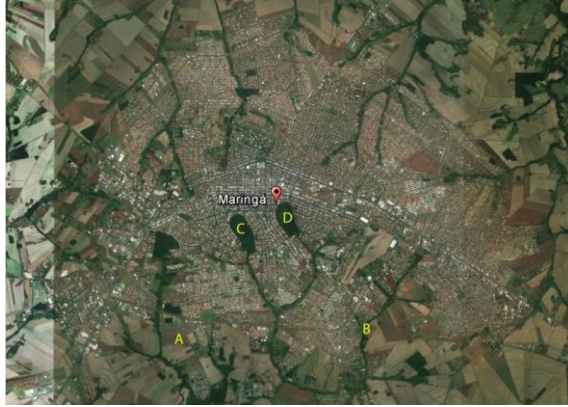
University UNAM

city full of trees, a circuit, sports, etc,

world heritage site, its extension is of 730 hectares

Ecosystem services in Maringá - Brazil

Provisioning Services

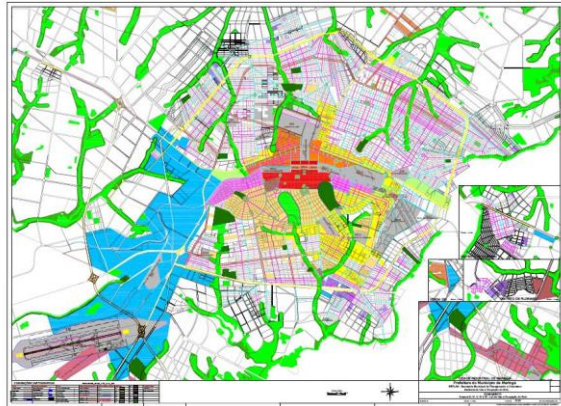


Maringá - Brazil

Food

there is a greenbelt of small farms to plant corn and soybeans for food production. (See the letter A in the map)

Regulating Services



light green in the map
permanent preservation areas

Erosion prevention and maintenance of soil fertility:

In Maringá, in the surrounding of rivers and streams inside the town no one can build.

There is a municipal law that provides 30 meters away from the rivers to riparian vegetation to prevent soil erosion, the areas are called "permanent preservation area".

Habitat or Supporting services



Natural Park

Habitats for species:

There is a park that is closed for visitation

It's a native forest untouched by man to be habitat of local species.

individual plant or animal needs to survive: food; water; and shelter.

Cultural services



Green City

Tourism

The other park in the picture is open to the tourists and citizens. Over there people can get in contact with nature.

Ecosystem services in Manchester

Provisioning Services



Hulme Community Garden Centre

Food

Large number of healthy and sustainable food initiatives

Food growing gardens

Consuming local food

Regulating Services



"Plan Bee"

Pollination

Insects and wind pollinate plants and trees which is essential for the development of fruits, vegetables and seeds.

Animal pollination is an ecosystem service mainly provided by insects but also by some birds and bats.

"Plan Bee", a project aimed to ensure a rich diversity of insects, particularly bees.

Habitat or Supporting services



Chorlton Water Park

Biodiversity

exists a network of semi-natural habitats

covering about 12% of the area of Greater Manchester

-> nature conservation, land-use designations, -
protection from inappropriate development;
-> creation of buffer zones around designated sites;
-> creation of linkages between valuable habitat areas

Cultural services



Alexandra Park

Recreation and Mental / Physical Health

Buildings

Sports facilities

Landscaping

Ecosystem services in Singapore

Provisioning Services

small domestic market that depends on imports for food, energy and industrial raw materials,

Agricultural raw materials exports

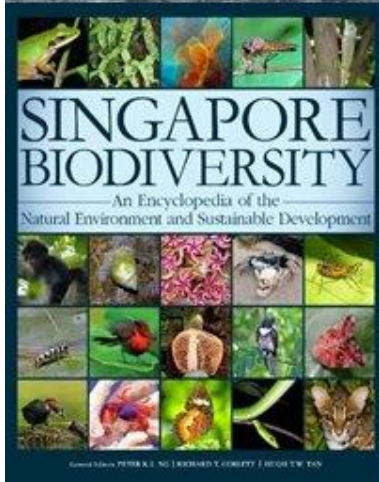


Chorlton Water Park

Regulating Services

Trees : controlling the climate change

The destruction and degradation of forests → release of CO₂



Singapore is a small island city-state

Singapore's geographical location and its equable tropical climate support lush natural vegetation

Habitat or Supporting services

NParks developed and launched the National Biodiversity Strategy and Action Plan (NBSAP) for Singapore in 2009.

“Conserving Our Biodiversity”

Cultural services

Recreation and Mental / Physical Health

Current estimates indicate that 2,053 species of vascular plants were native to Singapore and some 1,454 species are still surviving.

Today the public green areas of Singapore are mostly under the management of the National Parks Board (NParks).

Ecosystem services in Shanghai

Provisioning Services



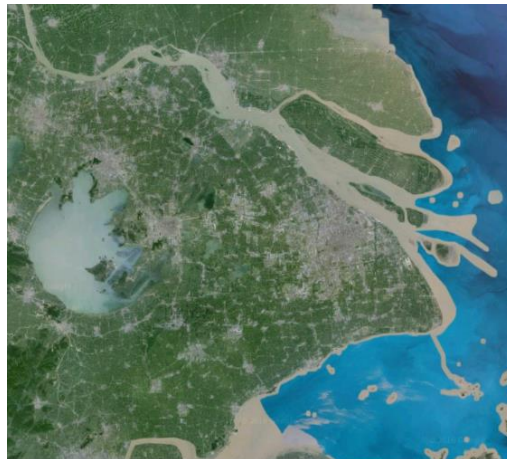
located on the Yangtze River Delta, resting on tidal flats, surrounded by natural and constructed wetlands.

rivers and lakes

fresh water sources and the sea provide the local food

Shanghai struggled for many decades (clean water)

“Wetlands”



Shanghai

Regulating Services

regulating the quality of air and soil or by providing flood and disease control.

highly populated city , fairly green

Cultural services



Sport activities



Recreation and mental and physical health

senior citizen doing all sports of activities from early morning to evening:

Habitat or Supporting services

most populous area

agricultural, handicraft industrial and economic centre