

Environmental conservation

- the basis of human society development -

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WHY IS BIODIVERSITY IMPORTANT?



Biodiversity = “the variety of life”

(Gaston & Spicer, 2005)

Direct-use values

Food
Building Materials
Fuel
Paper Products
Fiber (clothing, textiles)
Industrial products (waxes, rubber, oils)
Medicine

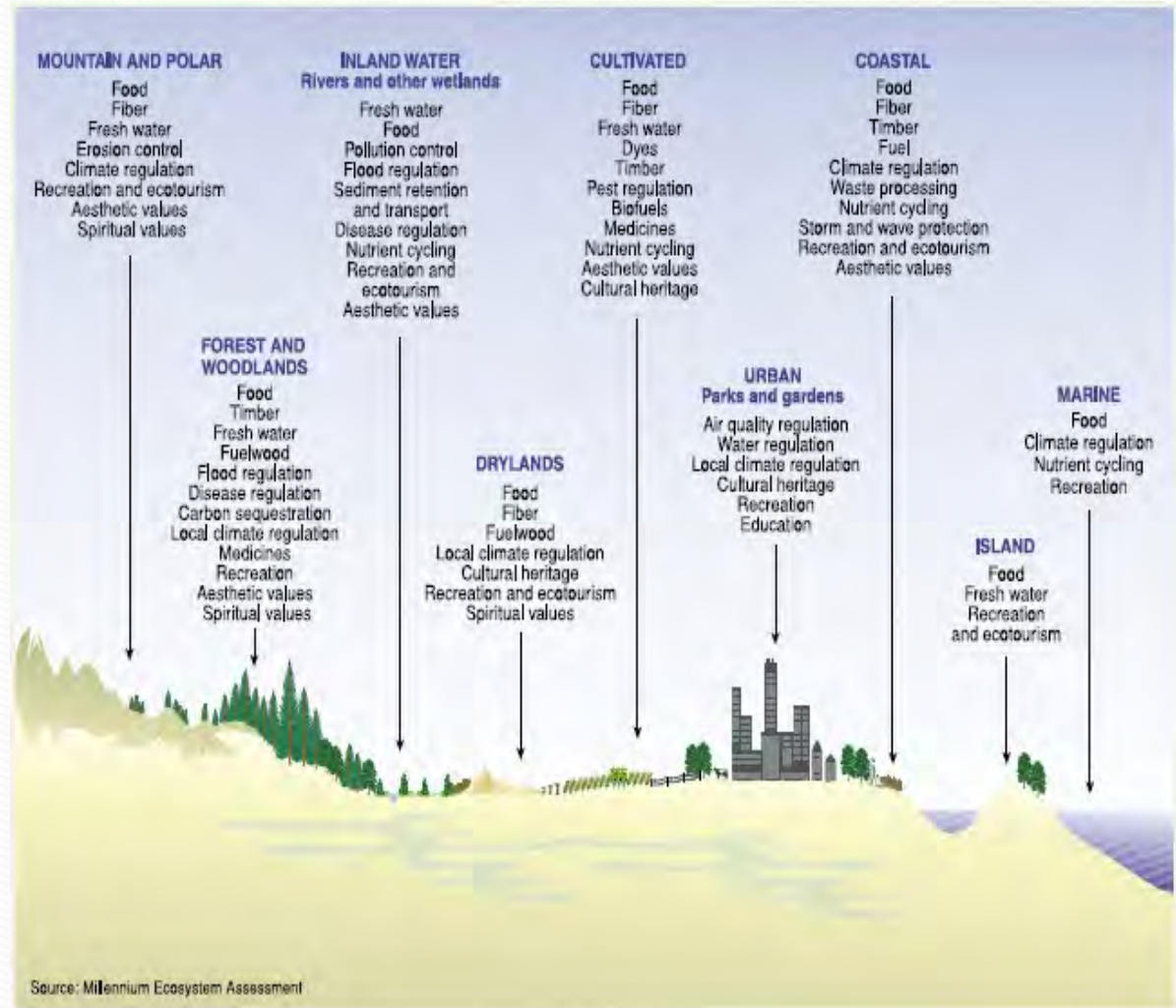
Indirect use-values

Regulating global processes, such as atmosphere and climate
Soil and water conservation
Nutrient cycling
Pollination and seed dispersal
Control of agricultural pests
Genetic library
Scientific and educational
Tourism and recreation
Cultural, spiritual, and aesthetic
Water purification

Ecosystem services

ES - benefits provided by the environment (MEA, 2005)

<p>Provisioning</p> <ul style="list-style-type: none"> - food - water - raw material (oil, coal, wood, construction) - medicines 	<p>Supporting</p> <ul style="list-style-type: none"> - photosynthesis and oxygen production - waste purification - habitat provisioning - pollination - soil formation
<p>Regulating</p> <ul style="list-style-type: none"> - climate - atmospheric composition - flood/drought mitigation - biological control of pests 	<p>Cultural</p> <ul style="list-style-type: none"> - aesthetic - recreational - spiritual - historic - scientific - educational - eco-tourism





Impact on economy

Biodiversity and ecosystems offer crucial services to mankind:

21–72 trillion USD/y ≈ World Gross National Income (58 trillion USD in 2008)

(UNEP, 2010)

The loss of biodiversity and ecosystems is a threat to the functioning of the planet, our economy and human society

(TEEB, 2009)

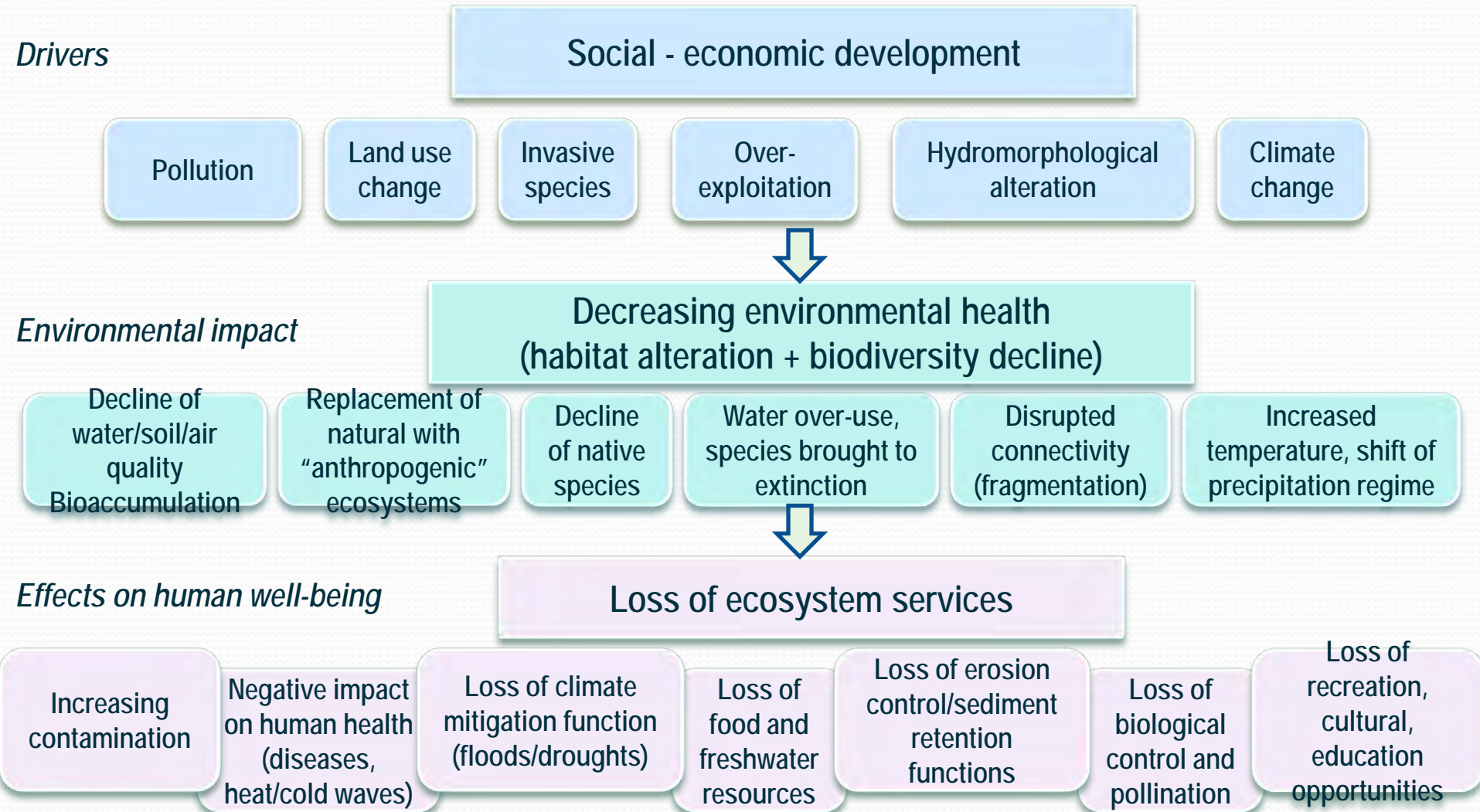
World Business Council for Sustainable Development: *Business cannot function if ecosystems and the services they deliver (water, biodiversity, food, climate) are degraded or out of balance*

(MEA, 2005)

Organisation for Economic Cooperation and Development: *The protection of biodiversity and ecosystems must be a priority in our quest to build a stronger, fairer and cleaner world economy*

(Living Planet Report, 2010)

Environmental degradation - decline of human well-being



Sustainable development = Balance human and environmental needs



Thank you for your attention