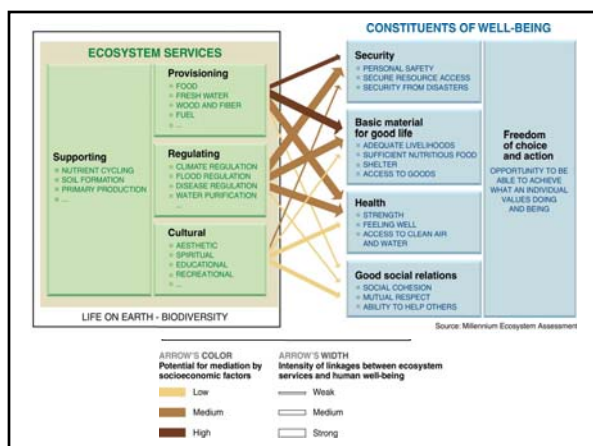


LS 2X03 - Lecture 3 – Ecosystems and Human Well-Being

1. Human Well-Being
2. Provisioning Services
3. Regulating the Environment
4. Supporting Services
5. Ecosystem Alterations
6. The Current Picture

Key Concepts

- Human Well-Being
- Provisioning Services
- Regulating the Environment
- Supporting Services
- Ecosystem Alterations and potential for ecosystem rehabilitation
- The Current Picture: trends



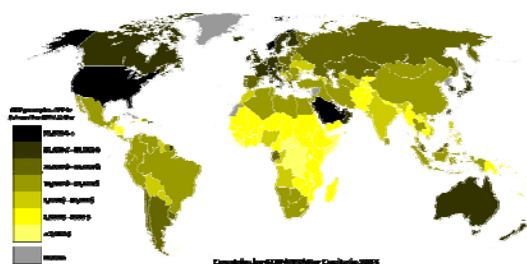
1. Human Well-Being

- Security:



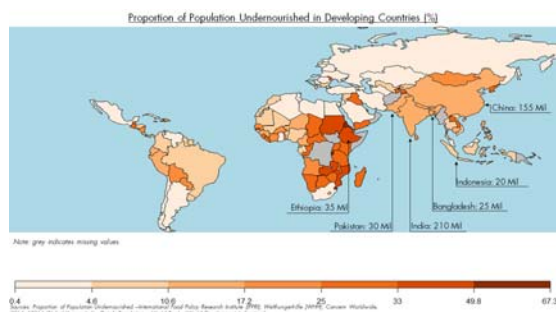
Human Well-Being (2)

-



Human Well-Being (3)

-



Human Well-Being (4)

-



Human Well-Being (5)

-



2. Provisioning Services



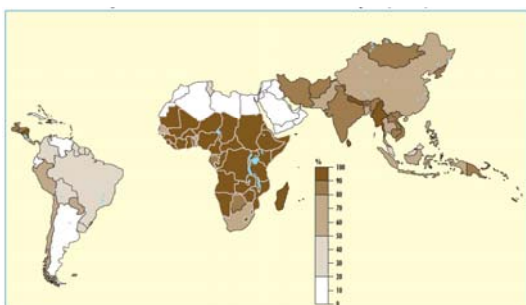
Provisioning Services (2)

-



Provisioning Services (3)

-



Provisioning Services (4)

- Traditional medicine:



2. Regulation of the Environment

• Carbon Sequestration



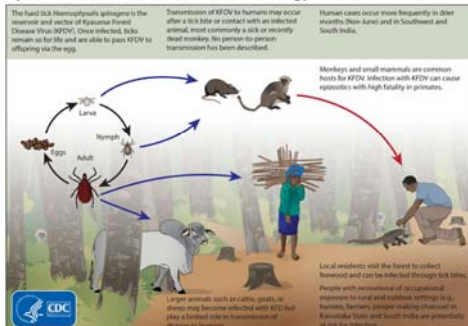
Regulating the Environment (2)

• Water Flow Regulation



Regulating the Environment (3)

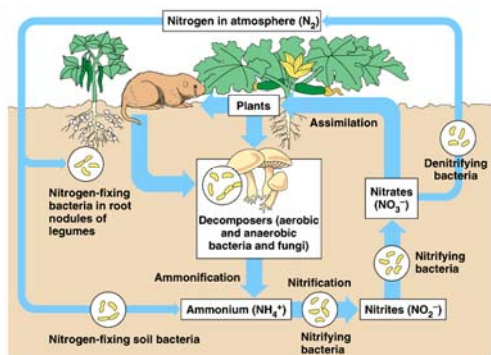
Kyasanur Forest Disease (KFD) Virus Ecology



Cultural, Spiritual, and Recreational Services



3. Supporting Services: Soil

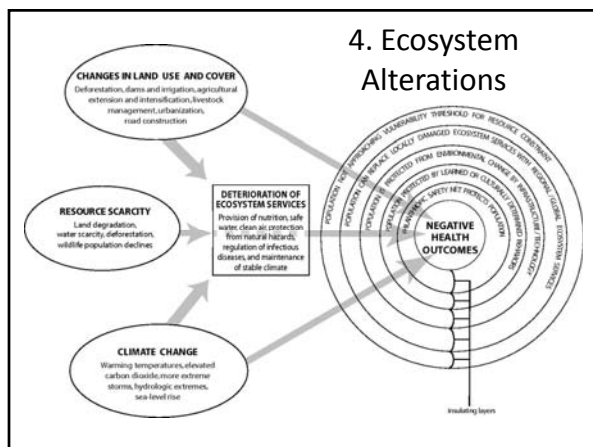




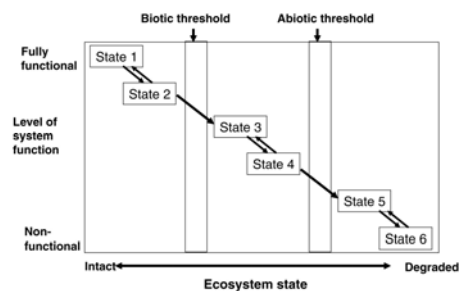
Supporting Services: Grazing



4. Ecosystem Alterations

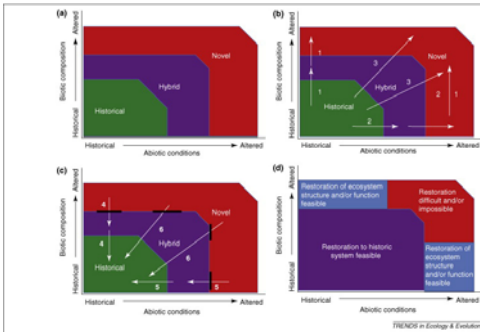


Ecosystems develop under varying levels of Biotic and Abiotic Alterations



Hobbs RJ, Cramer VA. 2008. Annu. Rev. Environ. Resour. 33:39–61

Ecosystems develop under varying levels of Biotic and Abiotic Alterations (2)



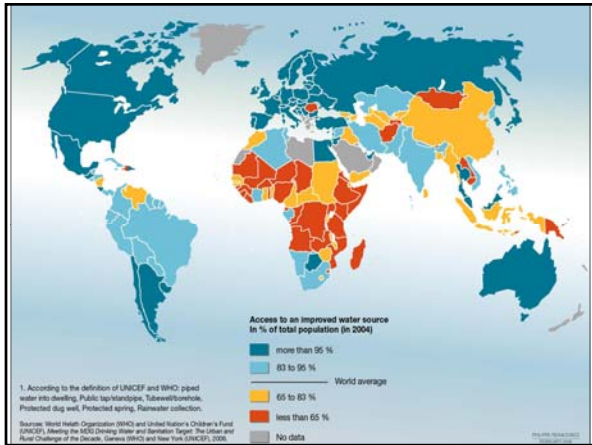
The Current Picture: Poverty and Hunger

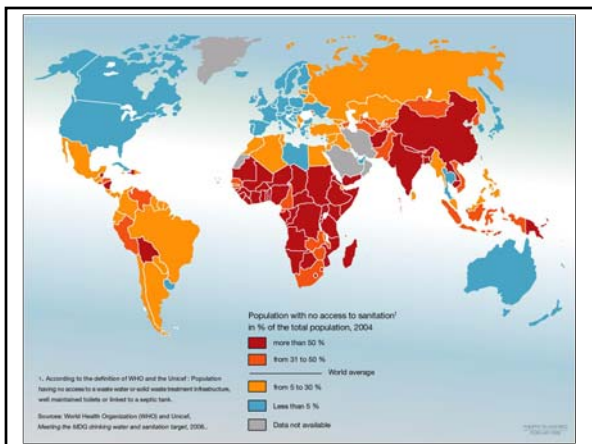


Poverty and Hunger (2)

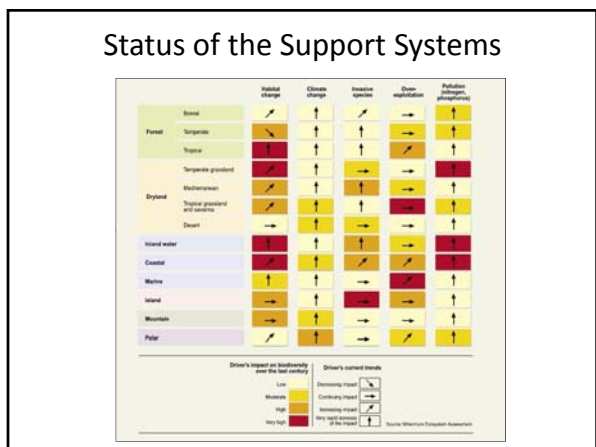


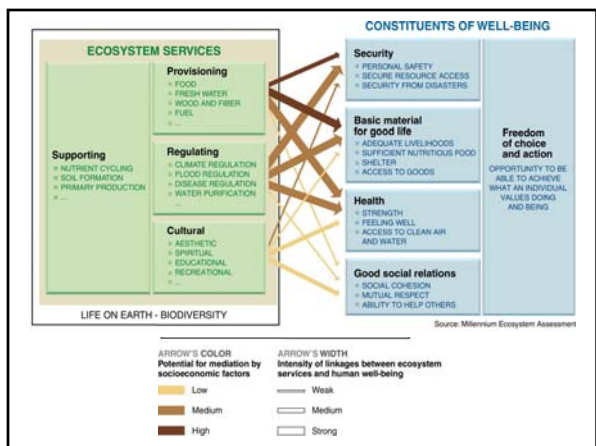












Conclusion

- Ecosystem services provide the foundation of human well-being
- Human well-being include multiple interrelated factors including human health
- Mounting negative impacts on ecosystems are associated to poverty, displacement, and human disease

End of Lecture Question

1. Of the services provided by ecosystems, which one do you consider the most important?

•

TO DO!

1. For next Lecture: read Article 2
2. Tutorials this week: Introduction to Term Paper + Group Discussion
