



<http://www.teebweb.org>

mathieu.durrande@upf.edu

## MY Carbon Footprint Harvesting

House	Flights	Car	Motorbike	Bus & Rail	Secondary	Total CO2
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My carbon footprint is very high with almost 7.98 tonnes of CO2.

- Your footprint is 7.98 tonnes per year
- The average footprint for people in Spain is 7.70 tonnes
- The average for the industrial nations is about 11 tonnes
- The average worldwide carbon footprint is about 4 tonnes
- The worldwide target to combat climate change is 2 tonnes

I have used...

<http://www.carbonfootprint.com/calculator.aspx>

### Your Carbon Footprint:

- House 0.73 tonnes of CO2
- Flights 4.12 tonnes of CO2
- Car 0.11 tonnes of CO2
- Motorbike 0.00 tonnes of CO2
- Bus & Rail 0.13 tonnes of CO2
- Secondary 2.89 tonnes of CO2

**Total = 7.98 tonnes of CO2**

**Secondary:** Food Preference • Organic Produce • In season food • imported food and goods • Fashion • Packaging • Furniture and electricals • Recycling • Recreation • Car Manufacture • Finance and others services



## Let's define....

- ❑ **Biodiversity** is the variation of life forms within a given ecosystem or on the entire Earth.
- ❑ **Ecosystem** refers to the combined physical and biological components of an environment and humans
- ❑ **Ecosystem services** are the benefits that people obtain from ecosystems – the goods and services of nature



## Let's define....

- ❑ **Biodiversity loss:** The decline of genetic diversity and distribution and abundance of species diversity, the loss of ecosystem structures, and/or the impairment of ecological functions
- ❑ **Ecosystem degradation:** A persistent reduction in the capacity to provide ecosystem services.
- ❑ **Natural capital:** An extension of the economic notion of capital (manufactured means of production) to environmental 'goods and services'.

# The Economics of Ecosystems & Biodiversity



**Provisioning Services**



**Regulating Services**



**Cultural Services**



**Supporting Services  
& Habitat**



## Provisioning Services: Goods produced or provided by ecosystems

- Food
- Freshwater
- Raw materials
- Genetic resources
- Medicinal/other biochemical resources
- Ornamental resources
- Energy





## Regulating Services:

Natural processes regulated by ecosystems

- Air purification
- Climate regulation
  - Global (CO<sub>2</sub> sequestration)
  - Regional and local
- Moderation of extreme events
- Water purification and waste treatment
- Maintenance of soil fertility
- Erosion prevention
- Biological control
- Pollination





## Cultural Services:

Cultural and social benefits obtained from ecosystems

- Recreation
- Ecotourism
- Spiritual and religious experiences
- Inspiration for culture, art and design
- Information for cognitive development







## Supporting Services:

Functions that maintain all other services

- Nutrient cycling
- Primary production
- Photosynthesis
- Water cycling
- Maintenance of biodiversity



# The Economics of Ecosystems & Biodiversity



<https://www.youtube.com/watch?v=A-QpKiU-NHo>



## The Economics of Ecosystems & Biodiversity

### Responding to nature's Invisibilities; A Recap so far

- ❑ The value of biodiversity and ecosystem services is **not being fully reflected** in the markets, price signals and policies
- ❑ Decision making (at company, policy & citizen level) often **fails to take into account** the local to global benefits of biodiversity and ecosystem services
- ❑ **Assessing ecosystem service benefits** is critical
- ❑ There is a **need to improve the economic signals** to help take the values of nature into account
- ❑ There is a growing recognition of the need to improve and **invest political capital in natural capital accounts** and integrated environmental and economic accounts