

# Enviornmental sociology

11 M.A

3<sup>rd</sup> semester

# ECOLOGICAL FOOTPRINT



# What is ecological footprint ?

An **ecological footprint** is the measure of the human demand on earth's ecosystems and environment. It's measured in a way that compares our consumption of natural resources and waste creation with the ability of our planet to regenerate those natural resources and absorb our waste

# What does the Ecological Footprint measure?

- The Ecological Footprint measures the amount of biologically productive land and sea area an individual, a region, all of humanity, or a human activity that compete for biologically productive space. This includes producing renewable resources, accommodating urban infrastructure and roads, and breaking down or absorbing waste products, particularly carbon dioxide emissions from fossil fuel. The Footprint then can be compared to how much land and sea area is available. Biologically productive land and sea includes cropland, forest and fishing grounds, and do not include deserts, glaciers and the open ocean. Current Ecological Footprint Accounts use global hectares as a measurement unit, which makes data and results globally comparable. Calculation methods are standardized so results of various assessments can be compared.

# What is biocapacity?

Biocapacity is shorthand for biological capacity, which is the ability of an ecosystem to produce useful biological materials and to absorb carbon dioxide emissions.

# What is overshoot?

- Overshoot, which in this context is shorthand for ecological overshoot, occurs when a population's demand on an ecosystem exceeds the capacity of that ecosystem to regenerate the resources it consumes and to absorb its carbon dioxide emissions.
- The Ecological Footprint is often used to calculate global ecological overshoot, which occurs when humanity's demand on the biosphere exceeds the available biological capacity of the planet. By definition, overshoot leads to a depletion of the planet's life supporting biological capital and/or to an accumulation of carbon dioxide emission



# What is a global hectare?

- A global hectare is a common unit that encompasses the average productivity of all the biologically productive land and sea area in the world in a given year. Biologically productive areas include cropland, forest and fishing grounds, and do not include deserts, glaciers and the open ocean.
- Using a common unit, i.e., global hectares, allows for different types of land to be compared using a common denominator. Equivalence factors are used to convert physical hectares of different types of land, such as cropland and pasture, into the common unit of global hectares

Video