

# Overview of the Ecological Footprint

## Global Footprint Network: <http://www.footprintnetwork.org/>

The Ecological Footprint is a resource management tool that measures how much land and water area a human population requires to produce the resources it consumes and to absorb its wastes, taking into account prevailing technology.

In order to live, we consume what nature offers. Every action impacts the planet's ecosystems. This is of little concern as long as human use of resources does not exceed what the Earth can renew. But are we taking more?

Today, humanity's Ecological Footprint is over 20% larger than what the planet can regenerate. In other words, it now takes more than one year and two months for the Earth to regenerate what we use in a single year. We maintain this overdraft by liquidating the planet's natural resources. This is a vastly underestimated threat and one that is not adequately addressed.

By measuring the Ecological Footprint of a population (an individual, a city, a nation, or all of humanity) we can assess our overdraft, which helps us manage our ecological assets more carefully. Ecological Footprints enable people to take personal and collective actions in support of a world where humanity lives within the means of one planet.

### **The Challenge and the Goal: *Sustainability***

Sustainability is a simple idea. It is based on the recognition that when resources are consumed faster than they are produced or renewed, the resource is depleted and eventually used up. In a sustainable world, society's demand on nature is in balance with nature's capacity to meet that demand.

When humanity's ecological resource demands exceed what nature can continually supply, we move into what is termed ecological overshoot. According to a report by the World Resources Institute, the United Nations Environment Programme, the United Nations Development Programme, and the World Bank, *World Resources 2000-2001, People and Ecosystems: The Fraying Web of Life*, in addition to the growing depletion of non-renewable resources such as minerals, ores and petroleum, it is increasingly evident that renewable resources, and the ecological services they provide, are at even greater risk. Examples include collapsing fisheries, carbon-induced climate change, species extinction, deforestation, and the loss of groundwater in much of the world.

We depend on these ecological assets to survive. Their depletion systematically undermines the well being of people. Livelihoods disappear, resource conflicts emerge, land becomes barren, and resources become increasingly costly or unavailable. This depletion is exacerbated by the growth in human population as well as by changing lifestyles that are placing more demand on natural resources.

### **Our Approach to Sustainability: *Resource Accounting***

Keeping track of the compound effect of humanity's consumption of natural resources and generation of waste is one key to achieving sustainability. As long as our governments and business leaders do not know how much of nature's capacity we use or how resource use compares to existing stocks, overshoot may go undetected - increasing the ecological deficit and reducing nature's capacity to meet society's needs.

The Ecological Footprint is a resource accounting tool used to address underlying sustainability questions. It measures the extent to which humanity is using nature's resources faster than they can regenerate. It illustrates who uses how much of which ecological resources, with populations defined either geographically or socially. And, it shows to what extent humans dominate the biosphere at the expense of wild species.

The Ecological Footprint clarifies the relationship of resource use to equity by explicitly tying individuals' and groups' activities to ecological demands. These connections help decision makers more accurately and equitably shape policy in support of social and environmental justice.

Continued overshoot is not inevitable. The Ecological Footprint provides a systematic resource accounting tool that can help us plan for a world in which we all live well, within the means of our one planet.