

## Common Economic Terms

### **Allocation:**

The process of apportioning resources to the production of different goods and services. The market is one of a variety of possible mechanisms of allocation.

### **Carrying Capacity:**

The number of people that can be supported by a given ecosystem, given their consumption of natural resources and use of technology.

### **Competitive Market:**

A market in which there are enough small buyers and sellers of an identical product that no single buyer or seller is sufficiently large to affect the market price.

### **Complementarity:**

When goods or factors of production have to be used together rather than instead of each other. For example, fish and fishing boats are complements.

### **Comprehensive Efficiency:**

The ratio of services gained from human-made capital stock to the services sacrificed from the natural capital stock.

### **Demand:**

The relationship between price of a good and the quantity of the good that consumers would purchase at that price.

### **Development:**

The improvement in quality of goods and services, as indicated by their ability to increase human well-being, provided by a given throughput.

### **Distribution:**

The apportionment allocation of income, wealth or resources among different people.

### **Ecological Footprint:**

The number of hectares of productive land or sea required to support one average person at the world average consumption level.

### **Ecosystem Health:**

Ecosystem health is an academic discipline that has evolved partially because traditional renewable resource management has resulted in the loss of critical ecological services. Part of

the problem has been that decision makers have either used ecology, which tends to look at ecosystems as if they were pristine, or economics, that says let's forget about ecosystems and look at the benefits and costs to companies and individuals.

With these extremes we've never looked at how to regulate human activity in ecosystems so that ecosystems remain healthy. Along with ecological economics, ecosystem health has evolved partially to fill this gap. Ecosystem health is defined as a systematic approach to the preventative, diagnostic and programmatic aspects of management of human interaction with ecosystems, and to understanding the relationships between ecosystem health and human health.

**Ecosystem Services (or Ecological Services):**

Ecosystem functions that are of value to humans. These include climate regulation, protection from the sun's harmful ultraviolet rays, purification of air and water, mitigation of floods and droughts, detoxification and decomposition of wastes, generation and renewal of soil and soil fertility, pollination of crops and natural vegetation, control of agricultural pests, gas regulation, water regulation, water supply, erosion control, purification of air and water, and renewal of soil and soil fertility, gas regulation, detoxification and decomposition of wastes, dispersal of seeds and nutrient movement, and maintenance of the biodiversity from which humanity derives key elements of its agricultural, medicinal and industrial systems.

**Ecosystem Structure:**

The individuals and communities of plants and animals of which an ecosystem is composed, their age and spatial distribution, and the non-living natural resources present. The elements of ecosystem structure interact to create ecosystem functions.

**Efficient Allocation:**

In the traditional economic definition, efficient allocation occurs when no other allocation could make at least one person better off without making anyone else worse off.

**Entropy:**

Although matter and energy are constant in quantity (first law of thermodynamics), they change in quality. The measure of quality is entropy -- essentially a physical measure of the degree of "used-up-ness" or capacity of matter or energy to be useful to human purposes.

**Environmental Economics:**

The branch of neoclassical economics that addresses environmental problems such as pollution, negative externalities, and valuation of nonmarket environmental services. In general, environmental economics focuses almost exclusively on efficient allocation and accepts the

assumption of neoclassical economics that the economic system is the whole and not a subsystem of the global ecosystem.

**Externality:**

An unintended and uncompensated loss or gain in the welfare of one party resulting from an activity of another party.

**Fallacy of Composition:**

The argument that what is true for the part must necessarily be true for the whole, or vice versa.

**Fallacy of Misplaced Concreteness:**

To draw conclusions at a level of abstraction or concreteness different from the level of abstraction of the concepts in which the argument is made.

**Growth:**

A quantitative increase in size, or an increase in throughput.

**Human-made Capital:**

Includes equipment, buildings, plants and inventories created by the factors of production and used to produce goods both now and in the future.

**Human Needs Assessment:**

A multidimensional concept of welfare that goes beyond income and wealth to include capabilities, capacities, and other existential categories.

**Index of Sustainable Economic Welfare (ISEW):**

An alternative to the GNP, the ISEW is calculated by adjusting personal consumption for various factors that affect either sustainability and welfare either positively or negatively, such as depletion of natural capital, increasing inequality in income distribution, defensive expenditures, and so on.

**Matrix of Human Needs:**

A cross-classification of basic dimensions of existence with basic human values, yielding a richer and more detailed description of welfare than that traditionally used in economics.

**Monopoly:**

A single seller of a commodity.

**Natural Capital:**

The infrastructure of life on Earth. Stocks or funds provided by nature that yield a valuable flow into the future of either natural resources or ecological services.

**Nonmarket Value:**

Value recognized by people but not usually expressed in prices because the valuable thing either is not currently, or cannot be, traded in markets.

**Opportunity Cost:**

The best alternative given up when a choice is made.

**Optimal Scale of the Macroeconomy:**

Occurs when the increasing marginal social and environmental cost of further expansion of the overall economy are equal to the declining marginal benefits of the extra production. Beyond the optimal scale, growth becomes uneconomic, even if the expansion of the economy is conventionally referred to as "economic growth."

**Risk:**

The known probability of occurrence of an event.

**Scale:**

The physical size of the economic subsystem relative to the ecosystem that contains and sustains it.

**Sink:**

That part of the environment that receives the waste flow of the throughput and may, if not overwhelmed, be able to regenerate the waste through biogeochemical cycles back to usable sources.

**Social Capital:**

Social capital is the underpinning and core fabric of social communities. Left intact, social capital has a stream of benefits, including safety and security, friendship and community, a sense of civic identity, etc.

**Source:**

That part of the environment that supplies usable raw materials that constitute the throughput by which the economy produces, and which ultimately returns as waste to environmental sinks.

**Steady-State Economy:** The economy viewed as a subsystem in dynamic equilibrium with the parent ecosystem/biosphere that sustains it. Quantitative growth is replaced with qualitative development or improvement as the basic goal.

**Substitutability:**

The capacity of one factor (or good) to be used in the place of another, the opposite of "complementarity."

**Supply:**

The relationship between the price of a commodity and the quantity that would be supplied at each price.

**Thermodynamics:**

The branch of physics that tells us that matter and energy can be neither created nor destroyed, and that the entropy in the total system always increases.

**Throughput:**

The flow of raw materials and energy from the global ecosystem's sources of low entropy (mines, wells, fisheries, croplands) through the economy, and back to the global ecosystem's sinks for high entropy wastes (atmosphere, oceans, dumps).

**Transaction Cost:**

The cost of making a transaction, including legal fees, the cost of gathering information, locating the interested parties, the time costs of bargaining, and so on.

**Uncertainty:**

A situation in which we may know the range of possible outcomes but do not know the probability distribution of outcomes. Uncertainty is unmeasurable.

**Uneconomic Growth:**

Growth of the macroeconomy that costs us more than it is worth. A situation in which further expansion entails lost ecosystem services that are worth more than the extra production benefits of the expanded economy.

**Waste Absorption Capacity:**

The capacity of an ecosystem to absorb and reconstitute wastes into usable forms through biogeochemical cycles powered by the sun. This capacity is a renewable resource that can be overwhelmed and destroyed, or used within sustainable limits.

**Welfare:**

A psychic state of want satisfaction or enjoyment of life - an experience, not a thing. Creation of welfare is the basic purpose of economic activity.