# Chapter 1

# Moving Toward a New Way of Living

## Chapter Overview

Chapter 1 defines sustainability and explains the change in thinking necessary for becoming a sustainable society. Although some people can imagine a sustainable future, many are trapped within a historically derived worldview that they can control nature by promoting technology as a solution for everything. This kind of hubris is a barrier to positive change; it hinders progress toward sustainable solutions. To make progress, people need to think critically, look at how information is derived and filtered through social and scientific systems. You can start making this change in our own life. Once you can think critically about the past and present situation, you can visualize and then realize sustainable solutions.

## Vocabulary Terms

Agricultural Revolution

consumerism

developed countries

developing countries

ecological limits

economics

environmentalism

exponential

green

Green Revolution

hubris

indigenous

modern civilization

New World

preservationism

robber barons

standard of living

subsistence agriculture

sustainability

Sustainability Revolution

symptomatic problems

Titanic syndrome

utilitarian conservationism

worldview

## Terms With Definitions

**Agricultural Revolution—**About 10,000 years ago, the transition from a hunter-gatherer lifestyle to a settled agriculture lifestyle.

**consumerism—**A socioeconomic system to foster the desire to purchase goods and services in ever greater amounts; usually unrelated to meeting basic needs.

**developed countries—**Countries that overall have a high average monetary fund and a technologically developed lifestyle.

**developing countries—**Countries that are monetarily poor and have a primarily agrarian workforce. Developing countries usually aspire to become monetarily and technologically advanced.

**ecological limits—**The point at which natural resources are used beyond their ability to regenerate them. Air and water cleaning, soil formation, wild species reproduction, and population maintenance are some examples of services with ecological limits.

**economics—**The analysis of production, distribution, and consumption of goods and services.

**environmentalism—**A broad philosophy that demonstrates concern for the overall health of the environment. It can range from mostly anthropocentric to highly ecological in what is included, but generally includes nonhuman aspects.

**exponential—**Something that begins slowly, but quickly increases, creating massive numbers, often over a fixed set of time intervals. Consider the simple sequence 1, 10, 100, 1000, 10,000, 100,000, 1,000,000 for just six sequential time intervals with exponential growth.

**green—**A general term that refers to anything that is environmentally or Earth friendly.

**Green Revolution—**The increased growth of food worldwide through the adoption of agricultural research, development, and technology transfer initiatives. While it began slowly after World War II, it accelerated in the 1960s.

**hubris—**Extreme arrogance, or an overestimation of competence and abilities in meeting potential problems that are often ignored as a consequence. The ability to control nature is one such sense of human hubris.

**indigenous—**Belonging to a specific place. Usually applied to people and species that are endemic to an area.

**modern civilization—**A generalterm that usually describes developed countries after the Industrial Revolution.

**New World—**A term used by Europeans to describe the recently discovered American continent in the early 1500s.

**preservationism—**An effort to preserve, conserve, and protect things such as natural or historic areas of intrinsic value.

**robber barons—**Pejorative term used to describe unscrupulous, even despotic behaviors by industrialists and bankers to become monetarily wealthy and powerful.

**standard of living—**The level of material comfort measured by the goods, services, and luxuries readily available to an individual or average member of a given nation.

**subsistence agriculture—**Often a varied set of crops and livestock that are grown to feed just the farmer, family, and maybe extended family, leaving little surplus for trade.

**sustainability—**Literally, the capacity to endure. It is applied thinking that integrates economic, sociocultural, and ecological systems for long-term and equitable human and natural benefit.

**Sustainability Revolution—**A new phase of economic and societal thinking that focuses on sustainability principles as a root solution.

**symptomatic problems—**Problems that appear on the surface, and have their roots in a deeper problem that is not being addressed.

**Titanic syndrome—**Afirm belief that a technology- or human-produced system cannot fail. It is based on the steamship Titanic that was considered “unsinkable” but actually sank on its maiden voyage after striking an iceberg in 1912.

**utilitarian conservationism—**A philosophy of the early 1900s that maximizes resource usage for the greatest good over the longest time.

**worldview—**A way of understanding the world around us. It includes cultural assumptions about oneself, the place of others, and the place and role of humans within the natural world.

## Extended Learning Activities

1. **Group presentation.** Imagine the world in the future (see sidebar on page 6). Get into groups of three or four students. Each student chooses two of the items in the Consider This sidebar on page 6 and describes how the world would look if those items were to become a reality. Then, each group presents the combined visions of the world to the rest of the class.
2. **Research project.** Interview members of your home community or college campus to determine what assumptions or misconceptions are prevalent regarding perspectives on moving toward sustainable living.
3. **Evaluate scientific research.** Read one peer-reviewed research article that addresses an environmental issue. Evaluate the article and determine the following:

* What phases of the scientific method were used?
* Who carried out the research (including their credentials)?
* How was the information obtained?
* What type of research was conducted?
* Did the argument make sense based on the methodology used and results gathered?
* Also, provide your overall thoughts of the article and provide valid arguments as to why you agree or disagree with the findings.

## Research and Response Questions

1. Research a country that has a high standard of living and determine its overall level of happiness. Consider things such as rates of suicide, hours per week worked, perceptions of children and daycare, diet, overall health, divorce rates, and so on. Decide whether or not this country should be a model for the world and discuss the factors used to make your decision.
2. Research different worldviews held by different countries and discuss how these worldviews relate to their impact on the world’s ecosystems.

## Web Links

[Environmental History Timeline: 1890-1920](http://www.radford.edu/wkovarik/envhist/5progressive.html)

[Environmental Milestones: A Worldwatch Retrospective Timeline | Worldwatch Institute](http://www.worldwatch.org/node/3944)

[The Scientific Method Today](http://www.scientificmethod.com/)

[SustainAbility](http://www.sustainability.com/)

[Sustainability at the EPA](http://www.epa.gov/sustainability/)