

What Is Sustainable Development?

Purpose

Evaluate the purpose, practices, and desirability of sustainable development.

Introduction

The processes that transform a less developed country into a more developed country often create unintended by-products. In the past, economic development has typically involved an increased use of money, commercial exchange, manufactured goods, and the services of others, replacing barter, subsistence farming, and self-sufficient living. These economic changes are typically accompanied by considerable changes in social organization. As large-scale economic organizations, such as firms and corporations, become increasingly important, social relationships—within families, local communities, and traditional social networks—are often dramatically altered. Development has also put increasing demands on the environment and on government and public policy. For future development to be sustainable, all of these changes must be considered.

The production of material goods and energy can cause significant damage to the environment. The last 25 years have seen growing concern about how to meet the essential needs of human life on Earth—a goal that requires consideration of both our desire for continued industrial and economic development and our need to reduce the amount of harm done to the environment. The term **sustainable development** is typically used to refer to the achievement of industrial and economic growth in ways that do not cause environmental degradation.

Sustainable Development and Sustainability

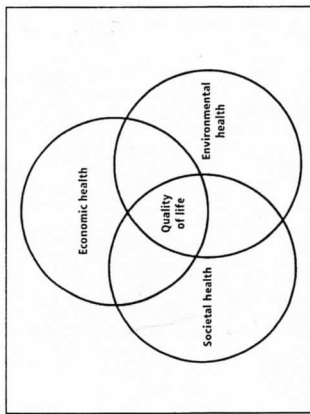
In 1990, the World Commission on Environment and Development, a group sponsored by the United Nations, defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Two assumptions underlie this definition: that development must continue, and that future development efforts should differ from those of the past. Although development has historically led to increased resource use and significant ecological impact, it can be carried out in ways that preserve natural resources. Sustainable development ensures that future generations of humans—and all other life on Earth—will continue to have access to needed resources. Unfortunately, there is no single, agreed-upon way to maximize sustainability.

The sustainability of a society depends on day-to-day decisions made by its members. The decisions they reach will depend to some extent on how well-informed they are and on how many options are available to them. For example, an individual will be more likely to participate in a recycling program if he or she understands that recycling not only conserves dwindling resources and landfill space, but can also reduce energy consumption. If most or all of the individuals in a community understand the impact of their actions, they are more likely to design and implement community-wide efforts that promote sustainability, like recycling programs. To create a sustainable culture, both public policy and individual decision-making must be based on accurate information. Public policy in particular must be mindful of a wide range of issues—some immediate and obvious and others distant (in space or time) and uncertain—involving the assessment of risks and the availability and distribution of resources. Ultimately, however, it is the daily actions of individuals that determine whether or not a society’s practices will be sustainable.

Currently, many of the practices that allow modern societies to function, such as burning fossil fuels to heat water and generate electricity, limit the resources that will be available to future generations. Recent development has resulted in depletion of resources, extinction of entire species of organisms, and reduction in the environment’s natural ability to recycle and purify resources such as air, water, and soil that

are necessary for life on Earth. Unfortunately, many sustainable alternatives, such as solar power, are considered to be more expensive, making them less competitive in today’s world economy. When companies and individuals calculate the cost of producing products and services, they usually do not include in their calculations an estimate of the cost of environmental damage and resource depletion. As a result, in many cases the apparent cost of production—and the price paid by consumers—does not accurately represent a product’s true long-term cost. Hidden costs are borne by the public at large, locally or globally, and will continue to be borne in the future.

For this reason, many sustainable alternatives are rejected on strictly economic grounds, because they seem to be more expensive than current practices. Other sustainable alternatives may be less convenient and are thus rejected because they represent a reduction in the standard of living, despite being less expensive in both the short and long term. Most people would prefer to maintain their current standard of living in a sustainable way, provided that the out-of-pocket cost is not too high. Cost, environmental damage, and standard of living must each be weighed, and the trade-offs between them considered, in any decisions involving sustainable development.



When considering which alternatives are sustainable, trade-offs involving quality of life issues must be evaluated. Quality of life is affected by the economic, social, and environmental health of a community.

Analysis



Individual Analysis

- 1.** Why do you think sustainable development has only recently been proposed as a goal for society?
- 2.** Describe a sustainable method and a non-sustainable method currently available to meet each of the following survival needs. Explain why each method is sustainable or non-sustainable.
 - a.** food
 - b.** shelter
 - c.** heat
- 3.** Transportation, although not a survival need, is critical to the functioning of almost all societies.
 - a.** What governmental or industrial changes would make transportation more sustainable in your community?
 - b.** What can you and other members of your community do to make transportation more sustainable in your community?
- 4.** Should sustainable development be a goal in our society? Explain your point of view.
- 5.** Describe an example of non-sustainable development in the world today.
 - a.** Propose changes that would make this development more sustainable.
 - b.** What are the trade-offs you would have to consider when deciding whether or not to make these changes?