

The Three Elements of Forest Sustainability

In the past 100 years, humans have learned a lot about ecosystems, biological diversity, nutrient cycling, and energy flow. Despite this new knowledge, we are still faced with the dilemma of how to use our forests in sustainable ways.

Forest sustainability may be defined as managing forests to meet the needs of the present without compromising the ability of future generations to meet their needs. It is often seen as a balance between society's demands on forests, and the need to preserve forest health and diversity. Many people use a "triple bottom line" approach to measure sustainability by looking at three elements: economy, environment, and society.

One way to think of those three elements is shown in Figure 1. Each of the elements—economic prosperity, environmental protection, and social well-being—is interdependent with the others, and each may be present to a greater or lesser degree in a particular situation. The ultimate goal of forest sustainability involves a balance of all three, as indicated by the shaded area in the middle.

Another way to think about the three elements of sustainability is showing in Figure 2. As this diagram shows, the human economy depends on society and social well-being. Society, in turn, depends on the environment, which provides air, energy, food, raw materials, and so on. Thus the economy relies on society, which in turn, relies on the natural environment.

The essential idea of forest sustainability is that environmental, social, and economic issues and ideals must be included in decisions and actions that affect forests, while also taking into account future and present needs.

Figure 1: The Elements of Sustainability

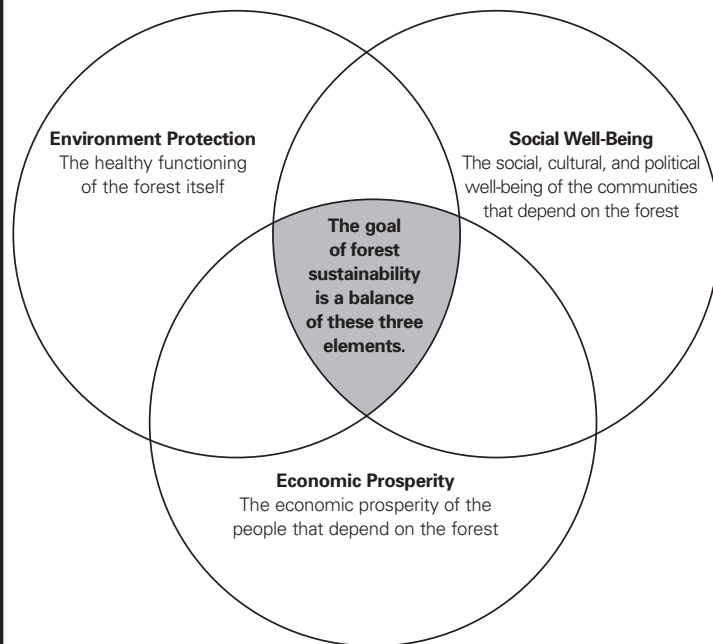
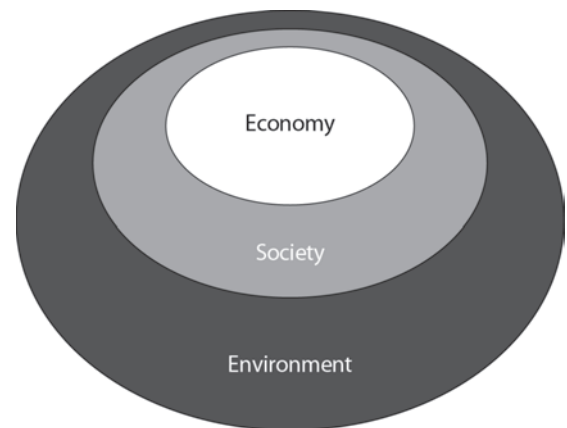


Figure 2: "Triple Bottom Line" of Sustainability



Sources

Floyd, Donald W. "In the Eye of the Beholder," in *Forest Sustainability: The History, the Challenge, the Promise*. Durham, NC: Forest History Society, 2002.