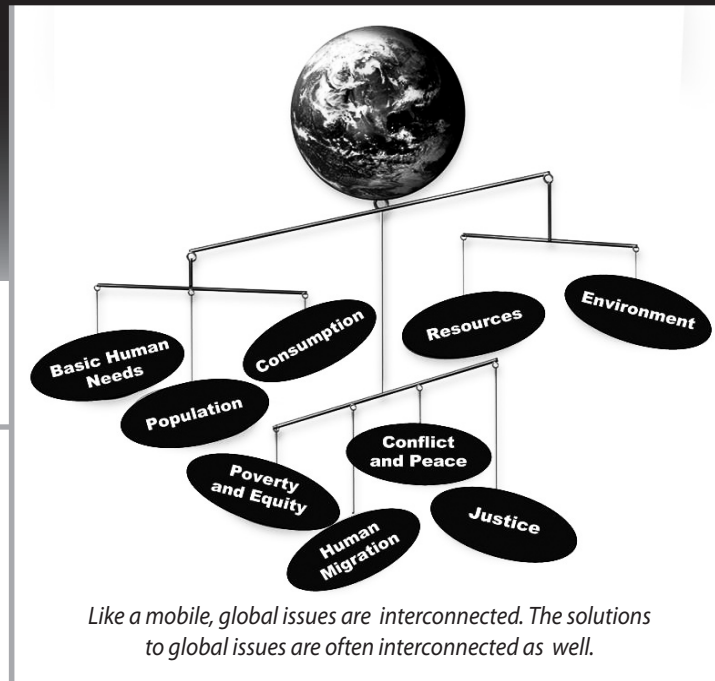


Global Issues and Sustainable Solutions

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Join us on Wednesdays and Fridays for Skills for Everyday Living, a series that goes beyond the classroom to prepare students for the many challenges of the real world. Our current topic is **Global Issues and Sustainable Solutions**, developed by *Facing the Future*. Series ends June 13.



Earth's Resources

Earth produces everything that human beings need to survive — food, water, shelter and energy — as well as the beauty and diversity of nature. Does this mean that we can expect our planet to keep meeting our needs forever, no matter how we use its resources? Consider these facts:

- During modern times, half of the planet's tropical rain forests have been destroyed or degraded
- On average, three unique plant and animal species become extinct every hour¹

Variety Is the Spice of Life!

The health of the planet depends on the health of its many ecosystems. An ecosystem is a community of organisms (plants, animals, fungi and bacteria) that function as a unit together with their environment. The interdependence among diverse organisms and their environment defines and shapes an ecosystem. When any species is taken out of an ecosystem, the entire ecosystem is affected. The variety of life in all its forms is called "biodiversity."

Unfortunately, the world's biodiversity is disappearing. Each year as many as 27,000 species of animals, plants, insects and microorganisms vanish forever.² Mountain gorillas, giant pandas and snow leopards are just a few of the more well-known animal species on the brink of extinction. Many scientists believe that between 20 percent and 50 percent of all species on Earth could disappear in the next 30 years.³ Loss of habitat is the main threat to terrestrial species that are classified as "threatened" or "endangered" by the International Union for Conservation of Nature and Natural Resources.

Beans, Birds and Biodiversity

In the developing world, many farmers cultivate a single cash crop such as coffee or cocoa rather than produce staple food crops. In the 1980s, to meet rising worldwide demand for coffee, forests in Latin America and other developing regions were extensively cut and replaced with high-yield coffee trees that grow in the sun. This resulted in hillside erosion and habitat loss for many species, especially for birds like the western tanager that depend on the shade of the forest for survival. Additionally, the extensive use of pesticides to maximize coffee tree yields often pollutes nearby rivers and the lungs of coffee workers.

Agriculture workers in the coffee industry often toil for long hours in difficult conditions, and many small coffee farmers earn prices for their coffee that are less than the costs of production. This perpetuates a cycle of poverty and debt, as farmers borrow money to get from one coffee season to the next. Thankfully, of the 25 million coffee farmers in the world, approximately 1 million farming households in the Southern Hemisphere alone have already improved their living conditions as a result of sustainable coffee production.⁴

The United States consumes about one-fifth of the world's coffee, more than any other single country. Fortunately, people in the U.S. can now purchase "shade-grown," "organically certified" and "fair trade" coffee. Shade-grown coffee promotes higher biodiversity than sun coffee because it can be grown without clearing forests. Organic coffee is grown without the use of pesticides, which is a benefit to biodiversity and farmers' health.

Fair Trade certification assures consumers that a fair price is paid to coffee farmers. To become Fair Trade certified, an importer must pay a minimum price per pound, provide credit to farmers and offer technical assistance such as learning organic farming techniques.

The dominant player in the world coffee market is Starbucks, holding about 25 percent of the world market share. Since 1998, Starbucks has developed programs to lessen its environmental impact by promoting biodiversity and economic well-being. These practices include ecologically sound growing and harvesting, reduction of emissions during roasting, use of recycled materials for the storage and transport of beans and use of recycled paper coffee cups. A portion of Starbucks coffees are shade-grown varieties and purchased at fair-trade prices.

Many other coffee roasters and sellers are also promoting sustainable coffee production. Some coffee roasters have gone a step further than buying Fair Trade certified beans by directly purchasing the beans from coffee farmers rather than buying them from a broker. This practice is called "direct trade."

Purchasing a cup of coffee may seem like a small choice, but consider the millions of cups of coffee consumed each day. All of our small choices have a large collective impact. By making choices to sustain Earth's ecosystems, we can help the planet continue to meet basic human needs.

1 E. O. Wilson, *"The Diversity of Life"* (New York: W. W. Norton & Co., 1999).

2 *Ibid.*

3 Louis Harris and Associates, *"Biodiversity in the Next Millennium,"* 1998 poll conducted on behalf of the American Museum of Natural History. <http://research.amnh.org/biodiversity/crisis/crisis.html>.

4 International Institute for Sustainable Development, *"IISD Brews Up Sustainable Coffee Report,"* September 18, 2003. http://www.iisd.org/media/2003/sept_18_2003.asp

Activity

- ❖ Learn more about coffee and biodiversity by visiting www.shadecoffee.org. Click on *Shade Coffee*, then *FAQs* and answer these questions:

- How does shade-grown coffee support increased biodiversity?
- Why do you think biodiversity is important?

Take Action!

- ❖ Take action to preserve the world's rainforests. Visit www.facingthefuture.org and click on *Fast Facts & Quick Actions* under *Latest News from Facing the Future*. Click on *Rainforests*, then choose one quick action and start making a difference today!