In 1993, Tutsi and Hutu forces in Rwanda began negotiations for a coalition government in which both ethnic groups would share power. The negotiations were cut short in 1994 when Rwanda's president, a Hutu, was killed in an airplane crash, supposedly shot down by rebel forces. This incident lit the flames of genocide. Over the next three months or so, between 500,000 and 1,000,000 civilians—mostly Tutsis and some moderate Hutus—were killed. Some sources estimate that casualties were even higher.

International responses ranged from insufficient to callous. United Nations peacekeepers were instructed not to use force to restore order. There were also too few peacekeepers to protect all Rwandans. Individual countries, including the United States, evacuated their personnel from the country after Belgian peacekeepers were killed. UN peacekeepers and individual nations failed to evacuate any Rwandans. The Rwandan genocide focused attention on the lack of leadership in the international community. It became clear that the United Nations needed to think seriously about its role in violent conflicts if it wanted to effectively protect human lives and human rights.

**Sudan**

Another genocide erupted in 2003 in Darfur, a region located in western Sudan. The people involved were all Muslims, but some were nomads of Arab descent while others were non-Arab farmers. The government of Sudan was controlled by Arab Muslims. Two Darfur rebel groups composed of non-Arabs took up arms against the Sudanese government in response to attacks from nomads. In response, the Sudanese government unleashed Arab militias known as the Janjaweed on the region. Together with Sudanese forces, the Janjaweed attacked and destroyed hundreds of villages throughout Darfur, slaughtering more than 200,000 people, mostly non-Arab Muslim Africans. More than one million people were displaced, creating a refugee crisis that spilled into neighboring Chad. Despite negotiations, appeals, and the International Criminal Court charging Sudan’s President Omar al-Bashir with war crimes, the genocide continued.

The genocides in Bosnia, Rwanda, and Sudan became stains on the conscience of the world. International organizations and the broad global community were supposed to defend human rights after the Jewish Holocaust. Considering the millions of lives lost and human dignity shattered, the failure of the international community appeared obvious. (Test Prep: Write a paragraph comparing recent genocides with the Holocaust. See page 542.)

**Global Challenges**

The global community also had to grapple with hunger, environmental damage, and global epidemics. Many of these problems continue today.

**Hunger**

There had long been relief organizations, such as CARE and the UN's World Food Program, which distributed food to starving people in times of emergency. However, many people looked for more long-term solutions to the problem through economic development and better farming practices.
The Green Revolution In the mid-twentieth century, the Green Revolution emerged as a possible long-term response to hunger. Scientists developed new varieties of wheat, rice, and other grains that had higher yields and greater resistance to pests, diseases, and drought. The new varieties were first developed by crossbreeding—breeding two varieties of a plant to create a hybrid. More recently, scientists have used genetic engineering—manipulating a cell or organism to change its basic characteristics. Farmers also used more irrigation, fertilizers, and pesticides. In Brazil and elsewhere, forests were burned down and the land was plowed for agriculture. Acreage devoted to crops increased dramatically worldwide. Grain production increased sharply.

The Green Revolution solutions were not free of problems. Many small farmers could not afford the new fertilizers or pesticides, reducing their ability to compete with large landowners. Many small farmers were forced to sell their land, increasing the holdings of large landowners even more. Also, since some of the techniques developed in the Green Revolution involved the use of mechanized equipment, fewer jobs were available for farm laborers. Finally, the heavy applications of chemicals damaged the soil and the environment.

Genetic engineering created its own set of concerns as well. Some argued that a genetic modification designed to give a plant resistance to insects might inadvertently cause a decline in the population of pollinating insects, such as bees. Another problem was the loss of old seed varieties as new genetically engineered plants were adopted.

Environmental Challenges In the early twenty-first century, societies were confronted by many environmental problems, including global warming.

Scientists cited data showing that the emissions of carbon dioxide caused by the burning of fossil fuels were causing global warming, an increase in the average temperature of the world. If nations did not curb their carbon footprint—the amount of carbon dioxide that each person produces—global warming would produce catastrophes: more powerful hurricanes, more severe droughts, and rising sea levels that could flood islands and coastal areas.

Efforts to Fight Global Warming People agreed that global warming required a global response, but countries disagreed on how to reduce carbon emissions. Developed nations in Western Europe and the United States argued that developing countries, such as China, India, Russia, and Brazil, needed to curb their rapidly increasing output of carbon dioxide. For example, in 2007, China surpassed the United States as the world's biggest emitter of carbon dioxide. Developing countries responded that they were trying to provide electricity, automobiles, and a path out of poverty for their citizens, things developed countries had done by using immense quantities of coal and oil. They wanted the wealthier countries to make greater reductions.

The first major international agreement to reduce carbon emissions was the Kyoto Protocol, signed in 1997. However, the United States refused to ratify it, and China and India were not required to agree to the strictest terms of the protocol. A deal signed by 195 countries in 2015, the Paris Agreement, renewed hopes for progress against global warming. It was supported by the leaders of both the United States and China.

Earth Day Initiated in 1970, citizens in the United States designated April 22 each year as Earth Day, a day for people to focus on environmental themes. Organizers hoped to highlight recycling, developing alternative energy, eating locally grown and organic foods, and passing antipollution legislation.

Greenpeace Founded as an organization to advocate for the environment, Greenpeace grew into a multinational agency with offices in 40 countries. It battled deforestation, desertification, global warming, the killing of whales, and overfishing. Greenpeace engaged in lobbying and education, but it became famous for its direct actions, such as confronting whaling boats in the ocean.

Green Belt Movement In 1977, the National Council of Women of Kenya organized the Green Belt Movement to plant trees to stop deforestation, to reduce soil erosion, and to provide more fuel for home cooking. It then expanded its mission to encourage ecotourism and to set up Green Belt organizations in Tanzania, Uganda, Lesotho, Malawi, and Zimbabwe.

Nonfossil Fuel Energy As concerns about global warming increased, companies and nations began to invest in alternatives to coal and oil, such as wind, solar, tidal, and geothermal power. High costs initially slowed development of such sources. However, as new techniques and technology reduced costs, these sources became increasingly attractive options.

Nuclear power was a widely used replacement for fossil fuels. However, serious accidents at three nuclear power plants—Three Mile Island in Pennsylvania (1979), Chernobyl in Ukraine (1986), and Fukushima in Japan (2011)—caused people to consider how to make this energy source safe.
Gender Issues  During the twentieth century, women made great strides toward equality. In the first part of the century, the percentage of women who could read and who attended college increased, and in country after country, women won the right to vote.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
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<tbody>
<tr>
<td>United States</td>
<td>1920</td>
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<tr>
<td>Brazil</td>
<td>1932</td>
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<tr>
<td>Turkey</td>
<td>1934</td>
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<td>Japan</td>
<td>1945</td>
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<td>India</td>
<td>1947</td>
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<tr>
<td>Morocco</td>
<td>1963</td>
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In 1979, the United Nations adopted the Convention on the Elimination of All Forms of Discrimination Against Women. The treaty outlined many rights and protections, including the right to vote and to hold office, the right to freely choose a spouse, the right to access the same education as men, and the right to access family planning resources and birth control. The convention also outlined laws against sexual crimes against women. Much progress was made after the signing of the convention. The availability of microcredits allowed many women to start small businesses and to improve their economic condition and education. The spread of information about family planning improved the health of families. As of 2015, only two nations did not allow women to vote.

Challenges remain, however. According to a report issued by the World Health Organization on March 8, 2012, “In many countries, women are not entitled to own property or inherit land. Social exclusion, ‘honor’ killings, female genital mutilation, trafficking, restricted mobility and early marriage among others, deny the right to health to women and girls and increase illness and death throughout the life-course.”

Medical Challenges and Breakthroughs

Advancements in science and medicine, combined with government-run public health measures, drastically reduced illnesses and death from many diseases. But other diseases persisted and new ones emerged. Some diseases were related to poverty, including malaria, tuberculosis, and cholera. Others emerged as new global epidemics, such as HIV/AIDS and Ebola. Yet others were known as lifestyle diseases, such as diabetes and heart disease. Some conditions, such as Alzheimer’s disease, afflicted mainly the elderly.

Antibiotics  In 1928, Scottish biologist Alexander Fleming was working in his lab in London when he accidentally discovered that a particular fungus produced a substance that killed bacteria. He had discovered penicillin. Penicillin became the first antibiotic, a useful agent in curing bacterial infections. During World War II, antibiotics saved the lives of soldiers who would have died in any previous war from a minor wound that became infected. After the war, antibiotics spread to civilian use, where they fought a range of illnesses.

However, the extensive use of antibiotics carried a risk. By killing off certain strains of a disease, antibiotics allowed the evolution of strains of the disease unaffected by them. These antibiotic-resistant strains could be untreatable, raising fears of renewed epidemics of diseases once under control.

Malaria  A parasitic disease spread by mosquitoes in tropical areas, malaria killed more than 600,000 people per year, the majority of whom were young African children, in the early twenty-first century. The international NGO Doctors Without Borders treated about 1.7 million people annually with drugs. Preventative approaches were also developed, such as distributing mosquito nets treated with insecticide.

Tuberculosis  A bacteria that affects the lungs causes tuberculosis. Before 1946, there was no effective drug treatment available, and many people died from the disease. A cure was developed involving antibiotics and a long period of rest. In the early twenty-first century, a strain of tuberculosis resistant to the usual antibiotics appeared. The number of patients increased, especially in prisons, where people live in close quarters. The World Health Organization (WHO) began a worldwide campaign against tuberculosis in the 2010s.

Cholera  A bacterial disease that spreads through contaminated water, cholera caused more than 100,000 deaths per year, mostly in developing countries. Methods to counter cholera include boiling or chlorinating drinking water or pouring water through cloth filters, a less effective form of prevention. Like tuberculosis and malaria, cholera affects mainly poor people.

Smallpox  The disease smallpox had plagued the ancient Egyptians and devastated the native population of the Americas and Australia. As recently as the 1960s, it killed millions of people a year. However, the WHO conducted a global vaccination campaign to eradicate the disease. In 1979, scientists declared success. In one of the greatest accomplishments in modern medicine, smallpox had been eliminated from the entire world.

Polio  Caused by water contaminated by a virus transmitted in fecal matter, polio once infected 100,000 new people per year. It could result in paralysis and sometimes led to death. So the world cheered when an American researcher, Dr. Jonas Salk, announced on April 12, 1955, that an injectable vaccine against polio had proven effective. Six years later, an oral vaccine, developed by Dr. Albert Sabin, became available.

Vaccines became the centerpiece of a global public health campaign to eliminate polio. A joint effort by governments, private organizations, and United Nations agencies began in 1988. In less than thirty years, polio was eliminated in all but a few countries. In places where it still existed, such as Pakistan and Afghanistan, war made administering the vaccine difficult.
and religious fundamentalism made people fearful of programs advocated by outsiders. Still, the success of the campaign demonstrated that coordinated global efforts could address global problems.

**HIV/AIDS** Between 1981 and 2014, acquired immunodeficiency syndrome (AIDS), which is caused by the human immunodeficiency virus (HIV), killed more than 25 million people around the world. HIV weakens the immune system, so people more easily succumb to other illnesses. The virus is contracted through the exchange of bodily fluids, usually through unprotected sex, blood transfusions, or sharing intravenous needles. By the mid-1990s medical researchers had developed ways to treat the disease, but not to cure it. Antiretroviral drugs could stop HIV from weakening the immune system, thus allowing a patient to live with the virus for many years. However, the drugs were very expensive, so access to treatment was difficult, particularly for patients in poor countries. After 2000, the WHO, the United States government, and private groups increased funding for AIDS prevention and treatment in Africa, but the disease remains a serious problem today.

**Ebola** Discovered in the Congo in 1976, *Ebola* is a deadly disease caused by a virus that infects the African fruit bat, humans, and other primates. Humans get the virus from exposure to fluids of infected people or animals. The disease causes extensive bleeding, organ failure, and, for the majority of infected people, death. In 2014, a massive outbreak in West Africa caused fear around the world. However, a coordinated, intensive public health effort contained and then ended the outbreak. As with polio, countries demonstrated their ability to work together to confront a danger.

**Diabetes** In 2015, almost 350 million people around the world had diabetes, a disease that affects how the body uses blood sugar. Considered a lifestyle disease, diabetes can damage a person’s heart, kidneys, eyes, and extremities. The treatments included an improved diet, regular exercise, weight control, pills, and insulin injections.

**Heart Disease** Like diabetes, heart disease is associated with lifestyle changes, genetics, and increased longevity. One of the major discoveries in fighting heart disease was the heart transplant, first performed by the South African Christiana Barnard in 1967. Robert Jarvik led a team that designed an artificial heart, which was used as a temporary device while the patient waited for a compatible human heart. Other researchers developed less invasive procedures, such as replacing valves, installing stents in arteries, and replacing the vessels leading to the heart, and medications to reduce blood conditions that led to heart disease. In the 2000s, people with heart disease lived longer than similarly affected people did in the 1970s.

**Alzheimer’s Disease** As people lived longer, a form of dementia known as Alzheimer’s disease that affected elderly and some middle-aged people became an increasing concern. Alzheimer’s patients progressively lose their memory, eventually leading to a stage in which they do not recognize their loved ones. Since the disease undermines bodily functions, it leads to death. As of 2015, researchers continued to search for a cure.

**HISTORICAL PERSPECTIVES: WHAT HAPPENS TOMORROW?**

One reason people study the past is to provide insight into the future. And even though predictions are risky, people continue to make them.

**Optimism After Communism** Ending the Cold War permanently altered the global paradigm. Inspired by the fall of the Soviet Union, the decline of communism, and the spread of democracy throughout the world, some intellectuals felt hopeful. In his provocatively titled 1992 book, *The End of History and the Last Man*, Francis Fukuyama posited that history as people knew it was over. He argued that democracy was the ideal form of government and capitalism was the best economic system, and they were spreading throughout the world. Eventually, all countries would adopt them and the political and economic conflicts that had driven wars in the past would vanish.

Critics pointed out that 150 years earlier, Karl Marx had reasoned that scientific socialism would be the final phase of history. His prediction had not come true.

**Cultural Conflict** One of Fukuyama’s former teachers, Samuel Huntington, rejected the entire end-of-history argument. In response, he wrote *The Clash of Civilizations and the Remaking of World Order* (1996). While Fukuyama was influenced by the end of the rivalry between the United States and the Soviet Union, Huntington was struck by the increasing tensions around religion and culture. He claimed that people’s beliefs and affiliations would draw the fault lines for conflicts in the post-Cold War world. Huntington cited several examples of cultural conflict, including Hindu and Muslim tensions in India and the rise of Islamic fundamentalism and its hostility toward Western culture.

**Cultural Understanding** Critics asserted that Huntington’s generalizations were oversimplified and reflected a pro-Western prejudice. One of these critics is Nobel prize-winning economist Amartya Sen. In his 2006 work, *Identities and Violence: The Illusion of Destiny*, Sen rejected Huntington’s suggestion that people of different beliefs and ethnic groups could not get along, pointing to the existence of peaceful diverse societies around the world. Further, as globalization spread through all parts of life, people found many ways to identify themselves in the twenty-first century besides by religion and ethnicity.

**Hope in Technology** Debates over the post-Cold World war began before the Internet and smart phones were common. By 2011, technology was connecting people around the globe. When physicist Michio Kaku published *Physics of the Future* (2011), he was optimistic that technology and trade could break down the cultural barriers that divide people. He did not predict the end of history, but he did hold out hope for material abundance and greater peace.