The Environment

14

Learning Objectives

After having read chapter 14, you will be able to

- summarize the key goals of environmental sociology.
- explain how operational definitions and vested interests shape scientific interpretations.
- summarize key tenets of social ecology and provide examples.
- define environmental racism.
- show how "race" and class shape people's relationship with the environment and environmental pollution.

Chapter Summary

Environmental sociology is the fastest-growing sub-discipline and looks at humans' relationships with the environment. It focuses on the mistakes we have made and how they can be reversed and avoided in the future. Environmental studies involve a lot of science in their investigation of global warming, carbon emission, and the safety of drinking water. Sociology reminds us that both science and environmental science are political and deeply embedded in a social context. Scientific facts do not speak for themselves; they have to be interpreted by the researchers. Interpretations, however, are shaped by a researcher's **standpoint** (their place in the world) and are therefore subject to bias and error.

Social science offers two ways to assess arguments about scientific facts. One is to examine the **operational definitions** used in the arguments: Are they accurate? Are they appropriate? However, some ideas, such as pollution, are difficult to define and definitions are contested. The development of operational definitions is aided by the **peer review process**, which means academic articles and books are brought under the scrutiny of other experts prior to publication. Peer review is provided by the **community of scholars** and thus serves the advancement of the discipline as a whole. The second way is to identify the various stakeholders involved—those citizens, activists, researchers, governments, and corporations who hold a **vested interest** (social or financial interest) in the outcome of scientific research and the varying interpretations about the state of the environment.

Social ecology, as defined by Murray Bookchin, focuses on the relationship between the social and the environmental and the role of human behaviour in environmental issues. Social ecology emphasizes that ecological problems cannot be understood apart from the social problems from which they have risen. It has been used to better understand unsafe and unhealthy working con-

ditions, industrial pollution, corporate and government responsibility, and environmental politics. We can use Mill's **sociological imagination** to understand individual problems with broader social structures and its processes. For example, Paul Formby's fight to have asbestos viewed as dangerous to its miners represents one case where political and corporate power suppressed the dangers (cancers and asbestosis) to mine workers for many years. Formby was ultimately successful in raising awareness for asbestos as a highly toxic and dangerous substance, which led to policies reducing risks, but production continued in Canada.

Not only are workers adversely affected by toxins produced in industry, but those living in the surrounding communities are also at risk. Most people who live near and are adversely affected by contaminants and poisons are also people who are already socially marginalized by "race" or poverty. Such residents disproportionately bear the brunt of poison in drinking water, food, air, and land, a claim demonstrated in the higher levels of cancers, brain tumors, miscarriages, birth defects, and death experienced by these populations. Huge multinational corporations such as Monsanto have tried various strategies to evade their responsibilities to their employees and people living in neighbourhoods polluted by their companies. Some people have been mildly successful in bringing class-action suits against Monsanto, for example, but rarely have gotten adequate, if any, compensation. Monsanto has also patented a number of life forms and successfully sued individual farmers. One such case is that of Saskatchewan farmer Percy Schmeiser. Schmeiser was sued for raising crops of Monsanto-patented canola, the seeds of which he had inadvertently harvested the year before from plants in his field. The problem was that the seeds had blown onto his property from neighbouring farms. **Organization culture** (the company and the work it dos becomes a part of the individual identity of the employees, especially those at the upper level) and the **moral community** (individuals have shared mutual identities and a commitment to a common purpose) help to explain how polluting industries operate

Pollution is racialized, also known as environmental racism. Many toxic dump sites and toxic industrial processing plants are located where non-whites live. For example, the City of Halifax located polluters and dumpsites near Africville. Similarly, oil companies observe different environmental guidelines in Africa than they do in Europe or North America. An example is the complicity between Royal Dutch Shell Oil and oil-friendly military dictatorships in Nigeria who brought about the execution of Ken Saro-Wiwa, who led the Ogoni people in non-violent protests against Shell. The Ogoni wanted a halt to oil exploration on the Niger Delta. The pollution of the oil industry differentially affects Nigeria's black and white populations and illustrates the effects of colonialism in Africa.

Another example is the case of the Anishinabe people of Grassy Narrows, Ontario, whose lands and rivers and fish (an important source of food and income) were polluted by mercury dumped into the English-Wabigoo river system upstream from Grassy Narrows by the Reed Pulp and Paper Company. The provincial government downplayed the issues as the industry was a major employer in Ontario. The people of Grassy Narrows, led by Chief Andy Keewatin, pursued the case against both company and province, contacting Japanese experts in mercury poisoning and taking their case to court. They eventually won an $8.7 million out-of-court settlement from Reed Pulp and Paper. Despite their activism, victory and their ongoing involvement in environmental issues, the people of Grassy Narrows have been painted as voiceless victims in the government issues report written by Shkilnyk (1985).

Just as environmental issues intersect with "race," so too do they intersect with social class. Lower class people are more likely to live and work in conditions characterized by high levels of pollution or environmental hazards. Groups marginalized by poverty are further victimized by relative powerlessness against environmental waste, pollution, and destruction of their land, air,

and drinking water. Poor people, who rarely have the luxury to move from polluted regions, are also less able to buy healthier and genetically unaltered foods. Class also relates to environmental problems in other ways. For example, the E. coli contamination of the water supply in Walkerton, Ontario—which killed seven people and made one-quarter of the population ill—raised questions regarding trust in the social management of pollution. The government's crisis management reflects the **rotten apple approach**, which means blame is placed on isolated individuals, not the system itself.

A second example is the true cost of the **China Price**. While Canadian and American people and corporations are able to buy cheap goods from China and the Chinese government earns enormous profits from these sales, Chinese people assume the ill effects of making small wages, working in toxic and dangerous conditions, and dying to win the "survival of the cheapest" contest. Chinese people work in some of the world's most polluted places, and the death toll is much higher than most westerners know, due to the state media's iron control over anything that may interfere with capitalist business relations with the West. Although the possibility of pollution control was demonstrated during the Beijing Summer Olympics in 2008, the enormous financial benefits that accrue to both the Chinese and westerners who profit from ignoring terrible working conditions keep this improvement from happening.

Study Questions

1. What are the main tenets of environmental sociology?

2. How can sociology help in the assessment of environmental research? Make reference to the issues of operational definitions and vested interests in your answer.

3. What is social ecology and how can it be used to understand environmental pollution? Make specific reference to one example discussed in your textbook.

4. How do "race" and class intersect with environmental issues? Use the example of Ken Saro-Wiwa or Grassy Narrows to illustrate your arguments.

5. In which ways was Anastasia Shkilnyk's investigation of mercury pollution in Grassy Narrows on behalf of the Department of Indian Affairs and Northern Development problematic?

6. How have the China Price and China's manufacturing success affected people in China and in Canada?

Exploration and Discussion Exercises

1. Research Monsanto Corporation's patenting of life forms and seed production. Use official materials obtained from Monsanto's website and materials as well as evidence from those opposed to Monsanto's practices, such as Vandana Shiva, as sources.

   What are the different sources' arguments? Are they equally convincing? Why or why not? Who do you believe and why? Has your own life been positively or negatively affected by Monsanto's practices? How have others' lives been affected?

2. Beginning with the stories of Fort Chipewyan and Grassy Narrows, investigate other claims of environmental pollution and degradation resulting in increased health problems and death rates for Indigenous communities.

   What do the stories have in common? Who are the vested interests in the cases? How were the cases resolved, if they were? Who, if anyone, was satisfied with the outcome? How did the media portray the issue, if they covered it? If not, why do you think they made this decision?

Further Readings

Peekhaus, W. (2010). Monsanto Discovers New Social Media. *International Journal of Communication 4*: 955–976.
This article examines how Monsanto, one of the companies mentioned in the textbook, uses new (social) media in their public relations strategies.

Stoddart, M.C.J. and L. MacDonald (2011). "Keep it Wild, Keep it Local": Comparing News Media and the Internet as Sites for Environmental Movement Activism for Jumbo Pass, British Columbia. *The Canadian Journal of Sociology 36*(4): 313–335.
This article looks at the relationship between environmental activism, media coverage, public support, and political decision-making.

Earth Day Network – Ecological Footprint Quiz:
http://www.earthday.org/take-action/footprint-calculator/
This website provides some valuable resources pertaining to the ecological footprint and a footprint calculator.

Environment and Climate Change Canada: http://www.ec.gc.ca
This Government of Canada website provides a hub of resources about environmental issues and climate change.

David Suzuki Foundation: http://www.davidsuzuki.org/
This website provides resources and information on one of the leading environmental activists.

***Beyond Pollution*:** https://www.nfb.ca/film/beyond_pollution/
This documentary examines the long-term economic, environmental, and health impact of the BP oil spill in the Gulf of Mexico.

Petropolis: Aerial Perspectives on the Alberta Tar Sands
https://www.nfb.ca/film/petropolis_aerial_perspectives_on_the_alberta/
This short film documents the impact of industrialization on the Athabasca tar sands oil reserve in Alberta.

***The Hole Story*:** https://www.nfb.ca/film/hole_story/
This documentary chronicles the impact of the Canadian mining industry on worker's health and the environment.

***Something in the Air*:** https://www.nfb.ca/film/something_in_the_air/
This documentary focuses on the effects of the use of pesticides on potato farms in Prince Edward Island on those most vulnerable to health problems.