



17

Climate Change, Environment, and Development

CHAPTER SUMMARY

Illustrated by case studies from around the world, this chapter introduced some of the debates surrounding the impact of formal development efforts on the environment and ecology, the relationship between environmental degradation and poverty, changing policies to reconcile the need to protect the productive capacity of the environment with people's livelihood needs. Attempts to raise standards of living through large-scale economic development projects often have exacerbated human misery and environmental degradation, and concepts such as the Club of Rome's "limits to growth" and the Brundtland Commission's "sustainable development" have sought to highlight the relationship between poverty and environmental degradation. Debates concerning the role of property rights and the participation of local resource users in resource management in some cases have led to positive change, while post-development critiques contend that the notion of development itself is to blame for both poverty and environmental degradation and that the real problems lie with global capitalism. Finally, the chapter examined the concepts of ecological footprints and environmental justice and the disparity in consumption rates between the North and the South. As the relationship between human development and climate change becomes urgently more clear, the world community struggles with the contentious process of finding effective and fair mechanisms for mitigating climate change, in particular how to deal with the disproportionate impact of climate change on the poor of the developing world.

VIDEO RESOURCES

Climate Change: Where We Are Now and Where We Are Going?

<https://www.youtube.com/watch?v=N2vWNDNW4BA>

Time 1:20

Professor James White reviews the basic science behind the Earth's climate system and discusses how humans are impacting it and put the current climate situation into the context of natural variability. White is director of the Institute of Arctic and Alpine Research.

* * *

Sustainable development and the tragedy of the commons: Elinor Ostrom

<http://lowres.stockholmresilience.org/newsandvideos/generalvideos/whiteboardseminarwithelinorostromgoingbeyondthetragedyofcommons.5.3fb1a3bd12062103674800010173.html>

Time 8:26

Elinor Ostrom describes the original tragedy of the commons theory, but provides examples to challenge the idea that the tragedy of the commons model applies universally. Common property rights can support sustainable use and resilient systems, without requiring state intervention, through the development of trust and mutually accepted rules. Complex evolution of social rules to address complex challenges of managing common resources. Rich local knowledge of ecologies; diverse local institutions matched to ecological complexity.

* * *

Protecting Rivers and Rights 10 Years Later: The Promise of the World Commission on Dams

<http://www.internationalrivers.org/social-and-environmental-standards/protecting-rivers-and-rights-10-years-later-promise-wcd>

Time 7:30

Ten years after the World Commission on Dams (WCD) report, the video looks at whether the WCD is still our best roadmap towards ensuring that future dams minimize social and environmental impacts. The legacy of existing dams is addressed, and affected people directly benefit from the projects. This video, produced by International Rivers and EcoDoc Africa, helps to learn more about the promise of the WCD.

* * *

Paul Collier: The quest for prosperity versus an ethical approach to nature. IDRC webcast.

http://web.idrc.ca/en/ev-154988-201-1-DO_TOPIC.html

Time 1:18:21

Restoring environmental order and eradicating global poverty have become the two defining challenges of our era. A number of environmentalists in the developed world are wary of the spread of global prosperity, arguing that it would wreck the planet. Conversely, in the poorer countries of the world—the bottom billion—many people are wary of environmentalism, seeing it as an attempt by the richer countries to haul up the ladder. So the dilemma is framed, by renowned British economist Paul Collier, in his new book, *The Plundered Planet: Why We Must—and How We Can—Manage Nature for Global Prosperity*. In a public lecture organized by IDRC, Collier explored the tension between the restoration of the natural order and the fight against poverty, in particular, how the outcome may affect people in the developing world.

* * *

The Great Debate: Climate Change—Surviving The Future

<https://www.youtube.com/watch?v=aR95nSsbPZs>

Time 2:24:52

Are we beyond the tipping point for survivable climate change? How will our nation thrive the coming food?

* * *

Focus City: Dakar, Senegal / Ville ciblée : Dakar, Sénégal

<https://www.youtube.com/watch?v=By92jFEWzsU&list=PLhbb-JA5bQ7Ma9zVBdhUwyWhkYXAPYPD>

Time 9:41

This short video introduces the Dakar Focus City project by giving an overview of the main environmental and social challenges faced by poor urban dwellers. Through the testimonies of community members and researchers, we learn about the research and action strategies deployed by each city team to find solutions to improve environmental conditions while helping to reduce poverty.

REVIEW QUESTIONS

1. Define “environmental and climate justice” as it relates to development.
2. What did the “limits to growth” view argue in the 1970s?
3. In recent years, the place of the environment in economic development has become a matter of intense academic and public policy debate. Explain briefly the elements of this debate. What problems have been associated with the “participatory” approach?
4. What is the central paradox of the environment–development relationship?
5. Briefly explain the costs of climate change.
6. What does the “Collective Action Problem” and “Tragedy of the Commons” mean?

ANSWER KEY: REVIEW QUESTIONS

1. Environmental justice is concerned with the unequal burdens of environmental degradation, in particular its disproportionate impacts on the poor. This includes the way in which the poor are often blamed for environmental degradation when they contribute the least to it. It also includes expectations placed on the poor and marginalized to pay the costs of environmental conservation (particularly the poor in rural areas with subsistence livelihoods), while people in urban areas and in the industrialized world benefit from these conservation measures. Thus, an environmental justice perspective argues that those who benefit from environmental services should compensate those who provide those environmental services. (p. 334)
2. The Club of Rome's *Limits to Growth* (1972) argued that unless population rates, production, and consumption were quickly constrained, the carrying capacity of the earth and its resources would be exceeded by mid-twenty-first century, yielding crisis and catastrophe. Developing countries argued that this call for change overlooked inequalities where developed countries had used the majority of the resources and developing countries deserved the right to develop. Critics also note that the sequence predicted in the limits to growth report has not come to pass, and that technologies and price mechanisms have minimized the impacts of production and consumption. (pp. 325–326)
3. The rise of environment as a key issue in international development is rooted in three facts. First is the extensive and increasing impact of humans on all aspects of the environment. Second, advances in science and technology have afforded not only better understanding of the extent of the environmental damage being caused by humans, but also the tools to communicate and disseminate this information more widely. Third, there has been a greater realization of the propensity of environmental degradation to undermine the very basis of economic development and human well-being, for example, air pollution in rapidly developing China. (p. 321) One shortcoming of the participatory approaches has been the assumption that there is a common, universal understanding of what “development” is and what levels of resource use are “sustainable.” The views of indigenous groups and governmental officials, for instance, are often quite different on these issues. The latter may prioritize protecting biodiversity, while the former may value economic security and intensive use of resources more highly. Other issues include debates on the boundaries and memberships of “local” communities and what constitutes participation. Finally, there is the problem of representation, that is, the risk of replicating broader societal inequalities in participatory decision-making structures (e.g., marginalizing the poor, women, and/or ethnic minorities). (pp. 322–323)
4. The main paradox is that whereas economic development is needed to achieve well-being, the process of economic growth often leads to environmental degradation, which in turn reduces well-being. Differences in understanding the exact nature of this relationship and how to resolve the complex interactions constitute the central challenge of environment–development politics across different scales of governance, from local through national to international levels. In addition, or rather in close relation to this paradox, environmental problems also exhibit two other defining characteristics—the tragedy of commons and the collective action problem. (pp. 321–322)
5. A number of recent reports draw attention to the intricate links between the projected climate risks in developing countries and the future state of the global economy. One example is the link between global economic growth and climate change. The second example is related to countries recording “high” or “extreme risks” from the impacts of climate change. Some of the countries such as China will be hit extremely hard by climate change if present-day development practices in the public and private sectors go unchanged. Recently released climate projections from the

Intergovernmental Panel on Climate Change for the period up to 2040 clearly indicate that a significant warming of about 20C is projected for West Africa, which indicates an increase in rainfall and humidity and severe consequences for communities, governments, and businesses. In the case of Nigeria, which in 2013 was ranked the sixth most climate-vulnerable country in the world, climate change will mainly affect the oil sector and surrounding communities through erosion and sea level rise. (p. 331)

6. Collective action problem describes the situation in which multiple individuals, communities or countries would all benefit from a certain action. For example, reducing greenhouse gas emissions that cause climate change, but the associated cost of taking action makes it highly unlikely that any individual can or will undertake and solve the problem alone. The tragedy of the commons describes an economic problem in which individual users of a commonly owned resource (say, land for grazing or the atmosphere) each continues to try to reap the greatest benefit from exploiting the resource even when it is apparent that the demand for the resource has overwhelmed the supply. The tragedy is that every individual who consumes an additional unit directly harms others who can no longer enjoy the benefits. Furthermore, the overexploitation, driven by individual gain, Hardin argues will ultimately result in the degradation of the common resource (p. 322)