

CONSUMPTION AND THE ENVIRONMENT

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Summary

Modern consumption patterns pose a series of challenges for sustainable development. Consumption patterns are inequitable, and many of the world's most intractable environmental problems can be traced back to trends in consumption. Ethical critiques of consumption have deep roots in religion. Consumption to satisfy fundamental human needs is generally recognized as good, while consumption in excess of need is seen as greed. Consumption may serve different social purposes depending on the setting. Social structures allow some individuals to influence the consumption patterns of others. Economic development since the Industrial Revolution has involved massive changes in consumption patterns which both stimulated and were stimulated by changes in technology and culture. Globalization and increasing interconnectedness are also contributing to consumption trends. Many important recent changes in environmentally significant consumption have been the result of grassroots movements and popular politics, rather than government action or explicit consumption policy. The result is that theories and policies towards sustainable consumption rest on poor empirical foundations.

1. Introduction

Modern consumption patterns pose a series of challenges for sustainable development. First, consumption patterns are inequitable. The richest 20% of the world's population consume 11 times as much meat as the poorest 20%. They consume 17 times as much energy, 77 times as much paper, and 145 times as many cars. Second, rising levels of

consumption by the growing middle class do not seem to be enhancing individual or collective welfare or reported happiness. Third, many of the world's most intractable environmental problems can be traced back to trends in consumption.

Human consumption affects the natural environment both directly and indirectly. Direct impacts include the use of renewable natural resources in the form of grains, seafood and meat, wood products, water, and other goods used as food, for energy, or as other consumable materials. Indirect consumption affects the environment through extracting, producing, processing, transporting, and disposing of goods that are directly consumed. These include, for example, the wastes and emissions from the production and transportation of the fertilizers used to grow food crops, and the environmental damage to waterways that results from agricultural runoff. The World Wildlife Fund estimated in 1999 that globally the consumption of resources and pollution of the natural environment are increasing, on average, by around 2% per year since 1970.

As the world economy and population continue to grow through much of the twenty-first century, they are expected to put increasing pressure on the environment. With growing portions of the world moving towards economies based on knowledge and services, those environmental pressures are changing in character.

In traditional agrarian societies, some of the greatest environmental problems are those posed by rising population densities with inadequate infrastructure, and by the unregulated activities of international corporations. These impacts include water contamination by untreated sewage, air pollution from biomass combustion, and habitat destruction through deforestation or mining.

In industrializing economies, some types of pollution are brought under control through the development of infrastructure for water and electricity supply and sewage management, and through the shift towards modern technology for cooking and heating. Some of the worst immediate environmental problems in such societies are those associated with habitat disruption and generation of pollution and waste by industry. Unregulated and unplanned urban growth continues to be a problem in some areas, and on a global level, the industrializing economies are now major contributors of greenhouse gasses, persistent atmospheric pollutants that cross national boundaries, and ozone-depleting chlorofluorocarbons.

In mature industrial and postindustrial economies, large pollution sources are generally brought under control. The greatest environmental challenges are associated with diffuse sources, and with the sheer volume of resource extraction and use to supply three main areas of consumption: food, housing, and transport. The associated greenhouse gas emissions continue to rise despite recent efforts to bring them under control. The consumption by industrialized countries of large amounts of products and fuels imported from developing countries also causes indirect environmental impacts that are often difficult to trace.

The most effective government environmental policies to date have taken the form of controls on large stationary sources of air and water pollution, and standards controlling the environmental performance of mass-produced technology, especially cars. While governments find it relatively easy to legislate on the environmental performance of

large companies, they have been less effective in addressing pollution by small firms, households, and individuals. They have had relatively little interest in limiting resource depletion, except in the case of energy and marine fisheries. Even in these two cases, government policies and increasing public concern as stocks are destroyed have not stemmed rising demand.

As attention begins to shift from the problems of local air pollution to the more difficult question of long-term sustainability, governments in industrialized countries are reconsidering their attitudes to resource depletion. They are realizing that, while industry has made considerable improvements in its resource efficiency in the last 20 years, consumption of the goods produced by industry has continued to soar; and consumption is driving growth in resource depletion and pollution. In the last 20 years, there has been a two-thirds increase in global household energy use, road vehicle fleets have doubled and air traffic has quadrupled. Meat and fish consumption in the industrialized countries alone has increased by a quarter. Yet for many kinds of goods, the basic rates of change in consumption in different countries are not known with any accuracy. Data on consumption is highly fragmented, and much is proprietary.

These trends can be contrasted with the scenarios that have been painted of “sustainable development” presented, for example, by Raskin et al. in 1998. Such scenarios typically involve reductions in greenhouse gas emissions and mineral resource extraction by a factor of ten or more by 2050, stabilization or improvement of habitats and biodiversity, and a shift to a cleaner system of production and consumption based on renewable resources. Conventional policy approaches such as “cleaner production” and “eco-efficiency,” involving technological and market-based solutions to environmental challenges, subsidies, taxes, and incentives, seem unlikely to suffice to achieve such a transition. Recognition is growing in policy circles that changes in consumption patterns will also be needed. However, policy discussions have faced a number of conceptual obstacles, not least overcoming differences in moral attitudes to consumption; and understanding the many processes and forces that shape consumption patterns.

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Biographical Sketches

Laurie Michaelis is the Director of Research for the Oxford Commission on Sustainable Consumption, based at the Oxford Centre for the Environment, Ethics and Society at Mansfield College, Oxford University. From 1992 to 1999 he was based in Paris, working first for the International Energy Agency and then for the Organization for Economic Cooperation and Development. Dr. Michaelis has published several books and reports on environment policy issues, with a particular focus on the transport sector and greenhouse gas mitigation. At the OECD he initiated interdisciplinary work bringing the social sciences to bear in areas that had mainly been the preserve of engineers and economists. His recent research interests include the contribution of technical and social innovation to environment policy aims, leading to a report to OECD Environment Ministers in 1998 entitled *Eco-Efficiency*. Dr. Michaelis has been a lead author for several reports of the Intergovernmental Panel on Climate Change, most recently the Special Report on Emission Scenarios and the Third Assessment Report.

Richard R. Wilk, is professor of anthropology at Indiana University, Bloomington, Indiana, USA, where he has been teaching since 1988. He holds an MA and a Ph.D. in anthropology from University of Arizona. His research interests are in economic anthropology, globalization and environmental change, consumer behavior, households, media and global culture, development anthropology, archaeology and social context, Mesoamerica and Belize. He has published very widely. His recent publications include, *Household Ecology: Economic Change and Domestic Life Among the Kekchi Maya of Belize*, *Economies and Cultures: Foundations of Economic Anthropology*; *Economie e culture: Introduzione all'antropologia economica*; *A Very Human Ecology: Special Issue of Human Ecology in Memory of Robert M. Netting*; *Beauty on the Global Stage: Pageants and Powe*., *the Household Economy: Reconsidering the Domestic Mode of Production*; *Household and Community in the Mesoamerican Past*; *Households: Comparative and Historical Studies of the Domestic Group*; and *Archaeology of the Household: Building a Prehistory of Domestic Life*.

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