

# The Promise and Pitfalls of Sustainable Development

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Stephen C. Trumbulak

Every few decades an environmental concept captures the public's attention, dominating how we think, how we act, and how we plan for the future. Such concepts as nature preserves, wilderness areas separate from human disturbance, and the right not to be sprayed with pesticides all played an important role in shaping the environmental agenda of today.

Another such concept has recently evolved and has pushed itself to the forefront of international environmental and political action. It goes by many names: sustainable development, sustainable economic development, and sustainable growth. But whatever the name, it generally means the same thing: The way we live and meet our needs today should be based on strategies that can be practiced by future generations as well. In other words, human cultures should inhabit their places in ways that can be sustained indefinitely.

Although the idea that human needs must not be met at the cost of ecological integrity or future human generations has been around for several years, it was championed and introduced to a wider audience by the United Nations Commission on Environmental and Development (UNCED) in their 1987 report *Our Common Future*. They made a connection that few had made

as explicitly before. They said that the central threat to the global environment was human poverty. People trying to meet their basic needs of food, shelter, and the money to acquire minimal standards of education and health care were the driving force behind the increased trends in deforestation, desertification, species extinction, erosion, and a host of other environmental threats.

UNCED drew connections that literally made environmental degradation another symptom of the failure of social systems, and argued that social disruption was unavoidable in the face of environmental degradation. For example, deforestation in Central America was a direct result of an expanding human population, a growing external debt, and a decline in human standards of living. Further, the region's governments would never be able to provide decent conditions for the people if the natural resources upon which the acquisition of food, shelter, and market goods were depleted. In other words, nobody has just one problem.

The feeling then was that the solution to our social and environmental problems were clear. We must base our societies on behaviors and policies that do not degrade the environment. The logic is inescapable. Since the environment is the basis for all life

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Stephen C. Trumbulak  
is a faculty member  
in the  
Department of Biology  
and Program in  
Environmental Studies at  
Middlebury College

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and economic production, the environment must be protected. Since the threats to the environment come from social failures, dealing with poverty and social development are the first steps in environmental protection.

In many ways this view was radically different from the dominant environmental philosophies of the past, which focused on alienating humans from natural systems. The traditional thinking went that environmental degradation occurs because of the existence of humans, therefore environmental protection requires locking humans away from nature. The concept of sustainable development could not be more different.

But as the concept spread through the accelerating efforts of the United Nations, discouraging second thoughts about its usefulness grew. Can it be precisely defined? How can you tell if something represents sustainable development? How can you measure the sustainability of development? These questions were not heard only by isolated critics. As preparations progressed for the Earth Summit in Rio de Janeiro in June 1992, many people challenged whether the emphasis on sustainable development as the solution to our multiple crises was not yet another case of the Emperor's new clothes: it looked great only if

nobody mentioned that there wasn't anything there.

The promise and pitfalls of sustainable development as a concept weren't restricted just to the developing countries of Latin America, Africa, and Asia, either. The Centennial Celebration of the Adirondack Park held at Silver Bay May 1992 focused on the issue of sustainable development of the Park and its next 100 years. The basis for linking the future of the Park with sustainability was sound—the people who live there have needs that need to be met, much of the livelihoods of the people there are based on natural resources, and social/political/environmental problems abound. Yet speaker after speaker raised the same question: how can we use this concept to take us into the next century if we can't agree on a definition?

These challenges to the idea of sustainable development are raised so frequently now that I think it is important to take a fresh look at the concept to avoid falling into the trap of finding worthless anything that isn't everything. I approach this issue as someone who firmly believes that the concept of sustainable development has something useful to offer environmentalists and that the main criticisms raised are without merit and deflect from the real issues. I believe that there are some serious concerns, but these are more in the

nature of cautionary points rather than fatal flaws.

First, can it be defined? I find this question surprising. A definition of sustainable development exists and has been commonly reported in the environmental literature so often that anyone who asks this question is surely not seriously involved in exploring the issue. Sustainable development is a strategy of human culture that allows the needs of the current generation to be met without jeopardizing the ability of future generations to meet their own needs. No more and no less.

Admittedly, this definition is a little vague. What constitutes "needs" and "jeopardizing the ability"? Can the concept be defined precisely? Of course not. Neither can most concepts that drive most national and international policies: democracy, national security, standard of living, economic health. But do we let the lack of precise definitions agreed upon by all to stop us from pursuing these ideals? Has dissension among Americans over the precise definition of "national security" prevented us from engaging in wars and military build-ups? Has the clear recognition that the Gross National Product is a meaningless measure of economic stability prevented us from using it as the main yardstick of economic conditions?



Again, of course not. What's needed is not a better definition of sustainable development. What's needed is a clearer understanding of its limitations and strengths.

Its limitations come less from the concept and more from its actual name and the attempt by some to make it the answer to all our problems. The name is unfortunate because it implies that both environmental and social problems can be solved through "development." However, I think that it is unlikely that any form of development can be sustained without jeopardizing the future. The human race, currently at 5.4 billion and doubling again in the next 35 years, may already have exceeded the capacity of the Earth to provide a life for all people that is sustainable. How can more development, more extraction of natural resources, make this situation any better?

I don't believe that we are really looking for strategies of sustainable development but rather of sustainable inhabitation. This may mean development for some cultures, restructuring for others, and a downsizing of population for all. The term sustainable development implies that environmentalists and developers can both achieve their goals without limit, which cannot be.

The approach taken by the UN and others also leaves the mistaken impression that sustainable development is the answer to all of our problems and that the needs of humans lies at the heart of all environmental concerns. Sadly, there are some issues that cannot be solved by meeting the needs of

humans. As the human race increases in size, the pressures placed on the Earth's other life forms will increase due to habitat destruction. Meeting the needs of humans will mean clearing land for agriculture and settlements. Meeting the needs of the biosphere will mean setting areas away from such activities. As time goes on, we will have less and less ability to do both.

What then are its strengths? I believe that if the limitations are recognized, the concept of sustainable development offers us our first yardstick to measure the magnitude of our environmental impacts. Prior to the advancement of this idea, the effect of some human activity could be described in only one of two ways: it had a measurable impact or it did not. There really wasn't anything in between. But now, by forcing us to look into the future, we have a way of assessing the impact. For how many years can this activity be sustained? Does it affect the ability of future generations to meet their needs?

The concept of sustainable development allows us to assess the desirability of human policies and behaviors. No, it does not mean that we can look at a proposed plan and assign it some kind of sustainable development index; the search for this kind of measure will always be futile. But it does allow us to compare a proposal for something new with our current policies, or if current policies are not meeting the needs of the people to compare a set of alternatives and decide what we should do. The strategies that can be sustained the

longest are better than those that can only be used for a short time. Low-input agriculture is better than intensive industrial agriculture because the latter is dependent on inorganic fertilizers and pesticides, both of which are based on exhaustible resources. Selective timber harvesting is better than large-scale clearcutting because in the former the forest is better able to regenerate and continue producing timber over the long term.

Strategies that meet the needs of today without depletion of resources or the degradation of conditions are the ideal. In reality, few policies being proposed today achieve this ideal of sustainability because our society is based on the use of large amounts of energy. But most of our current forms of energy generation cannot be sustained. The world's supply of oil will almost certainly be exhausted in 80 to 100 years. Nuclear fission produces waste products that have already exceeded our capacity to store. Hydroelectric power depends on dams, which due to siltation have finite lifetimes. The reality of our energy problems alone indicates that no plan for sustainable development will be truly sustainable unless it includes development of energy sources that are indefinitely renewable, and energy consumption is reduced to match availability.

It was with all of this in mind that a group of students at Middlebury College and I began a project in 1991 to look at approaches to sustainable inhabitation in the Adirondack Park. Our



aim was definitely not to develop some plan for how people in the Park ought to live and work. Rather it was to look for strategies already implemented by people in the Park—individuals, groups, or entire communities—that better meet the goals of sustainability than do existing strategies. We hoped that by documenting and highlighting efforts by residents of the Adirondacks to meet their needs without impacting future generations it would encourage others to do so as well and to give them ideas for what some of their neighbors have already put into place.

The manual we developed from this project, *Working Toward Sustainable Economic Development and Resource Conservation in the Adirondack Park*, highlights case studies in the areas of economics, environmental protection, and social concerns. The economic case studies span the range of the economic sectors of the region, including tourism, agriculture, forestry, mining, and light industry. In each of these sectors, we document examples of groups that are working to better the economic security of those involved, protect the environment, and set the stage for the continuation of these activities into future generations. Case studies in environmental protection focus on strategies for the maintenance of water and air quality, dealing with issues of solid waste and public lands, and protecting critical ecosystems like wetlands. Many case studies address the needs of the present and the future through social action, such as strategies for health care, education, and gov-

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Almost 30 case studies in all are described. I'm sure that there are many more out there that we did not discover and will be added as we become aware of them. The manual is still in a draft form as we collect more information and weed out errors in reporting. However, copies are available for review and additions just by writing to me. It is our hope, however, that this manual of success stories can eventually provide a starting point for any person or community who wants to develop better ways of inhabiting the Adirondacks, ways that better guarantee that future generations will be able to do the same.

What does all this mean? First, sustainable development won't be the answer to all of our troubles. Clashes between the needs of humans and the needs of other species will be inevitable, and in those cases one or the other must inevitably give way. Humans must also face up to some tough choices, such as reducing energy consumption, acquisition of capital, and population size—choices that the current United Nations rhetoric does not hint at.

But secondly it means that we now have a philosophy that asks us to look beyond our own noses in our own time. To ask how our actions impact the future. To challenge us to do better for those that are to come. And to compare alternatives based not on what they yield for us in the present, but what they allow for others in the future. Anything that does all that has to be worth considering.