Development in California's Communities: Assessing the Value of Sustainable Practices

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My research focuses on sustainability as a basis for community practices that foster a greater balance between society, business and the environment. Sustainability refers to a way of using resources for current benefit that protects future access to those resources. By contrasting communities that use sustainable practices with those that do not, my research seeks to determine if sustainability is more beneficial to business, society and the environment than methods that do not incorporate sustainability into their plans.

The human relationship to the natural world has changed immensely over time. In the course of our development, we have become a dominant force upon the planet, especially with respect to our ability to change the environment around us to fit our needs. But sometimes the way this is accomplished destroys the resources the human population will need at a later time. Indeed, as our population grows, even more of our already strained resources will be in higher demand. It is time for us to take a closer look at the way we use our limited resources, and to ask ourselves if the way we use them now will allow them to still be available to serve the needs of the future generations.

The concept of living so as not to deplete the resources of the land, while at the same time, meeting the needs of the people, is known as sustainability. But more importantly, sustainability is a special way of relating to the world around us, and sustainability practices can be implemented in many areas of our life.

One of the leading proponents of the concept of sustainability is Dr. Karl-Henrik Robert. One of his achievements was to created an organization called "The Natural Step," a system designed in Sweden in the 1990's to outline some criteria for determining if a community is sustainable. Here are his proposed measures of a sustainable society:

> In a sustainable society, nature is not subject to systematically increasing of: (1) concentrations of substances extracted from the earth's crust; (2) concentrations of substances produced by society; (3) degradation by physical means; and (4) in that society ... human needs are met worldwide. (TNS, 2004)

His system focuses primarily on maintaining the environment, as can be seen by his first three rules, because physically, we rely almost completely on the natural world for our survival. Because of this, it is imperative that the ecosystems continue to function if we are to maintain the health of a population.

Systems work within a given time frame. Unfortunately, some human time frames are much shorter than the ones followed in nature. Sustainability forces us to see the world and its resources in a timeframe of generations rather than years. Of course, this concept of sustainability is by no means a modern idea. Native Americans had a system for determining whether or not their decisions were sustainable. They emphasized that "all major decisions of a nation must be based on how those decisions will affect at least the next seven generations (Morris, 1996)." We could stand to revisit this approach to life.

Because it is a human concept, sustainability should be assessed upon a human scale within the fundamental unit of human organization: the community. Throughout time, humans have organized themselves into social groups in order to benefit from the collective yield of their community achievements. Initially, groups consisted mainly of families, but over time, small villages grew out of the congregation of these groups, and social community was born (Sale, 1980). However, over the past few centuries, the community model has changed drastically primarily due to population growth and the way we use natural resources to fuel this growth. Today, a crisis is looming that requires a new way of dealing with the environment in which human communities exist.

The goal of my research is to explore various methods used to achieve sustainability in a system

and to compare cities and communities that use sustainable practices with those that do not, focusing primarily on cities and communities in California.

Where best to find a wide range of sustainable practices than in one of the most diverse ecological places. California is an excellent place to begin looking at the way sustainable practices can affect communities. There is a wide range of peoples, ecosystems, and problems caused by its growing population and the disparity of resources within its population. The cities of California are more diverse than you might think, and exhibit a variety of ways of relating to the world around them, including some practices that are sustainable, and many that are unsustainable. I want to begin with a general description of what a community striving to achieve sustainable practices is working towards, and what such a community is attempting to eliminate, namely the impact of unsustainable practices within their community.

A community exhibiting sustainable practices often generates its own power and food sources without depleting of its resources or extending its ecological footprint so as to take away from other communities the resources they need to sustain themselves. (Both human and natural communities can be depleted). An ecological footprint is the area within and around a community from which it draws its resources. A sustainable community puts people and their needs alongside the need to keep the surrounding ecosystems healthy. Human beings, like all living creatures, need services and resources provided by the surrounding environment, such as fresh air, clean water, food, supplies for building, and pretty much everything else too.

These communities put their energy into cultivating long-term prosperity as well as prosperity in the here and now, and find the strength to do this by emphasizing diversity. This can be seen in agriculture, where a field filled with a variety of different crops is much more productive in terms of yield per unit because diseases and pests are dealing with broken up patches of crops—they can't just go from one to the next, destroying the whole field, as can happen in monoculture fields. Sustainable agricultural practices aim to achieve a cyclical pattern of production, where inputs in the system are put to use, and then the by-products go back into the system to help make more products.

A community with unsustainable practices depletes its natural resources and must go outside its boundaries to exploit other areas for resources. Such communities have an extensive ecological footprint, one which pulls resources from an area greatly extending beyond their borders, and they often degrade the surrounding area or stretch into the domain of other communities, often impoverishing them. Many of the communities and cities in California today draw from other areas of the world for supplies and resources. This is not a problem in the case of trade; but it often becomes problematic if a community has depleted its own resources, and then brings those attitudes about resource use to new areas and depletes those reserves as well. Some examples of this are oil, lumber and labor; these are resources that California cannot supply on its own, has depleted, or chooses to protect, and then must rely on other areas to provide, often at an ecological cost invisible to us here. Perhaps we could find a better way of utilizing the many resources we have here, instead of constantly needing to find new resources elsewhere to replace what we once had enough of.

The desire for economic gain without factoring in the cost of societal or environmental impact often drives the desecration of the environment surrounding our cities. Another effect of these practices is the tendency to create monoculture. However, if everything is uniform, then if a key design fails, all of the linked elements can fail because they all have the same weaknesses. This is particularly evident in farming techniques. Monocultural crops may be easier to farm with large machinery and uniform pesticide or fertilizer inputs, but they are also more susceptible to unanticipated diseases and pests, which can easily cause the entire crop to be lost. This idea can also be applied to the way people build, think, and live.

It is important to note that these ideas of "sustainable" and "unsustainable" practices lie on opposite ends of a continuum. No community will be completely sustainable or unsustainable in its practices. In my research project, I am focusing on those practices that a community uses to further itself along the path of sustainability. My hypothesis is that the cities that incorporate sustainability into their

city operations will be more successful in the long run than cities that do not. They will be more successful in measures of social, economic and environmental conditions. Examples of these include percentages of suicides, life span of an average business or air quality levels in the city.

How should we go about measuring the success or failure of a city? In order to best measure the success of a community, there are three aspects of a community which must be considered for their importance to community vitality, and also, very importantly, for their relationship to one another. These are: society, economy and the environment. Why these aspects? The Natural Step provides a good mission statement reflecting these priorities: "Our principles of sustainability drive path-breaking models and tools that pass these three tests: Is it good for business, good for society and good for the environment (2004)?" This particular set of considerations encompasses nearly all the major spheres of city life.

These factors are also essential because their relationships to each other are integral, and if one is healthy, the others are likely to be healthy too. By using these three indicators for measuring the health of a community, a more complete picture of the situation I am studying can be achieved, and hence, measuring the success of a community based on these factors should give a fair representation of success or failure within a community.

The relationships between these three factors are very important to the sustainability of each. Society needs the environment for its essential resources, and the economy relies on the environment for raw materials. Without the integrity of the ecosystem, our economic services would be very limited.

The environment near a society is maintained by the people, or damaged by them, and often its health is dependent on the practices of humans. The economy needs a healthy society to sustain its practices, to buy its products and support its consumer base. The health of the society can have an enormous impact on the health of the environment and the economy.

Society in turn also needs the economy to promote specialization and easy access to the necessities of life that are now produced mostly along the pathways of business. The environment depends upon the vitality of the economy because if the economy is doing poorly, the result is often further degradation of the environment, whereas if the economy is healthy, there stands a chance that the benefits of its success will go to ensuring practices that will maintain the environment for future economic use.

What is really good for one of these elements is in the long run good for all three. By understanding how a sustainable environment, society, and business are each necessary in order to ensure the health of the others, the different value systems these three arenas effect can be brought into harmony.

References

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