

# Understanding Sustainability

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A Brief Explanation of Sustainable Development  
and the Need for Smart Growth Strategies

By

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For many REALTORS® and REALTOR Association staff the term sustainable development is just beginning to emerge in their vocabulary, though in many professional circles the term sustainable development or in some cases sustainable growth have become a bit cliché. Sustainable Development is often used to describe certain ideals that we all wish were true but sadly are not. These ideals address the equitable and responsible distribution of resources among all living things in our biosphere with an emphasis on creating a healthy continuum of the same.

In his book Beyond Growth: the Economics of Sustainable Growth author Herman Daly suggests that there needs to be a “clarification of terms” between sustainable growth and sustainable development. Growth should refer to quantitative expansion in the physical dimensions of the economic system, while development should be thought of as the qualitative change of a physically non-growing economic system in equilibrium with the environment.

Interestingly, most of the discussions conducted by those in the global populace concerned with the idea of sustainability often confuse the two terms. This would seem to indicate that we do not have a clear understanding of the extensive social and economic obligations that would have to be met as a part of any shift to this rather fundamental lifestyle change. Many would argue that the terms have been relegated to little more than buzzwords that are too broad based. Some would also contend that the axiom “Anything that becomes all things to all people is of no value to anyone,” resonates here very well.

In its current context and form, sustainable development, as described publicly by the 1987 Bruntland Report, seems to reflect a common sensibility that so far remains unattainable and some may argue unrealistic. This is especially true if one subscribes to the notion that, when viewed through the lens of our capitalistic society, there is a determined focus in this country toward maintaining a degree of individualism and unrestrained consumption. This prevailing attitude that “more is better” runs counter to the sustainable development philosophy.

Permaculture a book authored by David Holmgren suggests that “The process of providing for people’s needs within ecological limits requires a cultural revolution”. The volumes of research published on the subject of sustainability have shown that there exists a direct correlation between economics (especially poverty), commerce, society and the concept of sustainable development. There also exist several dilemmas that are related to the concept, including the role of growth as the unquestioned objective of economic policy, techniques for measuring sustainable development, the trade-offs between conflicting environmental goals and the limited time and distance horizons of elected politicians. However, the idea of creating a sustainable society that can address the issue of an equitable distribution of resources among that society is not necessarily all that new of a proposition.

In order for humanity to communicate and create a new understanding among the global community participants in the discussion must first agree on definitions. “The word sustainable implies such concepts as forever, perpetuity, constant rebirth and renewal and an inexhaustible supply. The term development connotes change, growth, expansion, production and movement. Both terms speak of time, evolutionary processes and constructive adaptation” according to Douglas Porter in his book The

Practice of Sustainable Development published by the Urban Land Institute. The two terms (sustainable and development), when used together, would appear at first to be contradictory in nature but in truth they really express a symbiosis. Many experts working in the fields of environmentalism and economics believe however that this popular term, sustainable development is too vague, in fact dangerously so.

As previously indicated there is a distinct link between the between the world of economics (human) and the world of ecology (nature) that must be at the core of the discussion of sustainability. One world is a uniquely human concept (economics) and one is physical (nature), yet only human beings live in both realms simultaneously unlike any other species on the planet. Plants and animals do not convert raw materials into substantive wealth; this is strictly a human condition. Therefore, material poverty is a realm that exists only to humans.

Community plays an integral part in the daily chores of individuals and families. There has been a significant decline in the informal institutions that once existed between the individual, family and community for many decades. This disconnect has fueled the rapid expansion of real estate development outward leaving many city and town centers abandoned and blighted. Since the 1940's half of all U.S. metropolitan population has occurred in suburban jurisdictions, much of it in low density development that depends on resource depleting automobiles for mobility. "Questions of ecological sustainability are fundamentally and inextricably tied to patterns of human settlement to metropolitan regions, cities, towns and villages" claims Porter. Geographer John R. Borchert describes the incredible extent of urban disinvestment occurring in the nations cites in Porter's book claiming, "By the end of the 1920's boom the country had built enough housing to replace all of the stock that had been built before 1830...By the 1970's Americans were in a position to abandon the equivalent of all housing built before 1880 and...By the turn of the next (21<sup>st</sup>) century we could be abandoning most housing built before the rise of the automobile epoch in the 1920s". Case in point: the real estate markets in Detroit and some of the other highly industrialized cities in Michigan over the course of the last few years as an example of this 21<sup>st</sup> century migration.

With the proliferation of the automobiles and the infrastructure that accompanied them came the forces responsible for the explosive growth outward into what was a largely agricultural and unpopulated area. With this expansion came increased pollution at all levels and an American lifestyle based on consumerism at rampant rates. Before the industrialization of America, agriculture drove the economy according to a recent report of the Urban Land Institute. During the early 19<sup>th</sup> century over seventy-five percent of the workforce was employed on farms. Today agriculture accounts for less than three percent of the workforce as it was displaced by the manufacturing sector and now, in the early 21<sup>st</sup> century by the knowledge worker.

Since knowledge based business does not necessarily need to be located near deposits of natural resources or large labor markets for their success, the decision to locate firm's falls primarily to upper level managers and executives who are looking for a particular quality of life. These locations generally do not favor current urban areas instead they look for environmentally appealing and pollution free

areas with good real estate markets to build their executive housing. They want easy access to the freeway systems that continually get improved to move more commuters to other client markets. What then follows this migratory pattern are box stores, services, shopping and entertainment venues and most of the infrastructure and development dollars and in doing so abandoning older urban and suburban areas and leaving behind urban blight in the wake.

In The Consumers Guide to Effective Environmental Choices published in 1999 by Three Rivers Press, Michael Brower and Warren Leon published a list of development related priorities for consumer actions recommended by the Union of Concerned Scientists. This list bears some practical consideration as individuals and communities consider sustainable policies.

1. Choose a place to live that reduces the need to drive.
2. Think twice before purchasing another car.
3. Choose a fuel-efficient, low polluting car.
4. Set concrete goals, for reducing your travel.
5. Whenever practical, walk, bicycle, or take public transportation.
6. Choose your home carefully.
7. Reduce the environmental costs of heating and hot water.
8. Install efficient lighting and appliances.

In addition to this list one might add choosing a water and earth-friendly landscaping plan, consider surface water run-off strategies to prevent erosion of soils and contamination of waterways, using “green building” materials and passive solar heating and cooling plans. Also build a responsible home that is sized to fit your needs and not to impress the friends and neighbors.

### **Resource Allocation**

At the global level, the “triangular paradigm” is massively out of balance. Current figures cited by the United Nations suggest that 20% of the population accounts for more than 80% of the global income, over half of the energy consumption and over 60% of consumable goods. Natural renewable resources have an intrinsic value and not just an influential significance. These resources have values when they are protected and when utilized within production processes, in the long term. “Fundamental changes in the way societies produce and consume are indispensable for achieving global sustainable development. According to the United Nations, all countries should promote sustainable consumption and production patterns, with the developed countries taking the lead and with all countries benefiting from the process. For example, the United States has the highest fuel consumption, highest goods per capita,

highest waste stream per capita and the highest expectation for “quality of life” of and nation on the planet. With one-twentieth of the world’s population, we own over one-third of the motor vehicles and drive almost twice the distance per year (12,500 miles on average) as residents of other industrialized countries. At one point the number of motor vehicles was growing at a rate faster than the nation’s population. Yet there is little or no emphasis on a program to teach our citizens to reduce their consumption in an effort to achieve a more equitable global distribution of goods and services. In fact our runaway consumable Western lifestyle is the model for most of the developing countries such as India and China and as such threatens to strain future resource limits beyond the point of recovery.

Beyond the negative impacts on natural systems and resource exploitation, our contemporary American lifestyle generates impacts on human ecosystems promoting hunger and disease brought about by poverty. This lifestyle also creates political discord with the rest of the world, especially those living in undeveloped and under-developed nations who are competing for goods and services to meet survival requirements. With the advent of television and now the internet more people around the globe can witness first hand the blatant consumption, the stark inequities and waste of the most developed nations. It could be suggested that this knowledge and sense of exclusion is what has spawned the current terrorist activities and generally negative views of the United States. If one studies world history, the idea of class wars between the “haves” and “have-nots” is not a new development. In fact the economic trends of the last five decades have deepened the divide resulting in higher incidences of poverty, social unrest and political instability. Education will play a major role in helping people understand the impact that our rampant consumerism cannot continue unabated. Starting in K through 12 and continuing education as adults in a lifelong learning continuum will be required to help the people of the world comprehend the impact that their lifestyle choices have on the biosphere that is common to us all.

### **Waste Stream Reduction**

Creating a composite definition of waste from various English dictionaries K. A. Gourlay author of World of Waste: Dilemmas of Industrial Development arrived at the following. That “...waste is the unusable material from manufacturing, useless byproducts of industry, raw materials or products so damaged as to be useless or worthless, excess raw materials not used in production, and the refuse created from places of human or animal habitation”. Sustainability of the planet as a whole must be built on an environmental foundation that takes a systemic view. Some have adopted the 1979 Gaia hypothesis of James Lovelock and Lynn Margulis that views the planet as a living organism and concludes that the Earth a self-regulating system. This living foundation has a common planetary constituency that is affected by the health of the biosphere. This includes the air we all must breathe, the water we require, the soil we cultivate and all facets of our biodiversity. This concern for the biosphere’s health was the approach used to gain consensus and build the base for understanding sustainability. In Permaculture, David Holmgren suggests that simple earth-friendly strategies such as the renewal of humus (soil) as a carbon sink can reverse the current greenhouse gases build up. Caused by the waste byproducts created through burning fossil fuels, Holmgren claims by replacing those naturally occurring materials (humus)

wasted due to erosion and poor land use practices of our agrarian and industrial ages we can reverse the trend and correct the problem.

Waste stream reduction will become an even higher priority as we begin to run out of places to store our outputs. Awareness of our consumerism and its impact on the ecosystem needs to be brought before the populace in the same way alcohol, tobacco and drug addictions have within the last decade. Blatant consumption is a sickness that has effected entire populations in the developed Northern nations and now threatens to overtake those new developing Southern nations which includes China and India. Besides public awareness it may become necessary to apply economic sanctions to goods and services through even higher consumer user sales taxes in an effort to slow consumption and create a revenue stream to take care of the costs of disposal of goods and the depletion of labor and services.

Article 21 of the Plan of Implementation of the World Summit on Sustainable Development held in Rio de Janeiro states quite succinctly what needs to be done. The document asks that all governments and stakeholders prevent and minimize waste and maximize reuse, recycling and use environmentally friendly alternatives. The provision that developed countries leverage financial and technical assistance to help developing countries was also included. High priority was placed on environmentally sound disposal facilities, including the use of technology to recapture the energy contained in waste, and the encouragement of small-scale waste recycling initiatives for rural and urban communities. However, an important fact to note is that it is at the beginning of the waste stream where real change should take place. Encouragement and/ or incentives to reward efforts for the design and production by business and industry for reusable consumer goods and biodegradable products ranks high on the list of action items toward solving the waste stream crisis.

### **Waste Byproducts as Raw Materials**

The utilization of waste byproducts is also not a new concept. Visit any Amish farm and you will see the practice performed as part of a daily ritual. Yet one of the basic disciplines of sustainable development is the reuse of all waste thereby creating a zero sum output and negating the need for creation or enlargement of waste containment facilities. Producers and manufacturers are starting to understand that there is value in what they discard, if they can find another firm that sees the originators waste as a raw material. In fact sometimes the waste stream has more value than the product produced. One example of this is the plumbing fixtures industry. Fixtures such as faucets have become commodity items produced in high volumes and at low cost. This market has become so competitive due to global labor market forces that the only way to remain profitable is by reducing all forms of waste to absolute zero through process refinement. Even then pricing can mean that the product is produced at of slightly below net cost. The real profit for the firm is in the reclaimed brass swarf that is sold to scrap dealers at market prices that provide the company with a byproduct that is a result of the manufacturing process, one that they used to pay to have hauled away and disposed of.

The strategy to create channels by which similar activity can occur among public and private sectors and even individuals has not yet been developed. But there is a growing grass roots effort out in several

communities and organizations in developed nations that recognize the need and are willing to take action in a personal way to reuse products that are a result of someone else's waste. Studies have shown that waste stream byproducts as raw materials have a much more significant positive impact on the environment because they reduce the energy requirements needed to convert them instead of naturally occurring materials.

### **Recycling of Materials**

Since the 1970's there has been a growing movement among young people to promote the habit of recycling. Fueled by the passion of the early environmentalist to reclaim what was essentially trash it has been probably to date the most successful effort to raise awareness among the general population. School children from that era have now grown up to be more environmentally aware than those of previous post-industrial society generations. This practice has been passed on to subsequent generations and has yet to live up to the expectations of many who support the ecology movement in this country. Recycling programs have not yet been fully embraced by communities because they see the short term cost of such programs and not the long term benefit to the global society. Though there are successful programs in many communities these locations appear to be in areas where there is a high regard for the environment as a valuable local resource for the local economy and as a quality of life issue for the residents of that area.

### **Reduced Consumption**

Without a doubt this is the single most important contribution that we as individuals can make toward achieving a sustainable world. In their book *The Ecology of Hope*, Ted Bernard and Jora Young outlined eight characteristics that support sustainability:

- Good working knowledge of the ecosystem.
- A commitment to ecosystem health.
- A commitment to learning.
- Respect for all parts.
- A sense of place
- Acceptance of change
- A long-term investment horizon
- Ability to set limits

There is a distinct value to what Bernard and Young offer in this outline for it creates a plan that at the individual's level seems workable for making sustainable development a reality. Sustainable development is truly a grassroots movement that can be encouraged through good public/private governance. It requires activism at all levels of our society and offers pragmatic controls when promoted through effective domestic and international legislation and cooperation as a way to control and rebuke those that would violate good sustainability policy.

### **Conclusion**

In the words of Herman Daly: "Sustainable Development will require a change of heart, a renewal of the mind, and a healthy dose of repentance". There is little coincidence that these terms sound religious. Fundamental changes in our principles and value systems run deep just as our religious convictions do, even though many would prefer that we view this issue as a secular one. When we start to view our existence on this planet as merely a part of a much larger system, we can begin to understand that the preservation of the whole system impacts the well being of its many parts. Awareness of our place in time and the negative burden that human proliferation has created upon the planet in our comparative brief existence should emphasize that change is imminent or our world, as we know it, is destined to perish.