

THE MEANING OF "SUSTAINABLE DEVELOPMENT" FOR KENT AND THE KENT BIO-REGION

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WORKING
PAPER

Introduction

In its 1987 report, Our Common Future, the U.N. Committee on Environment and Development (the "Brundtland Committee") challenged the world to wrestle with three key principles:

1. That the needs of the future must not be sacrificed to the wants of the present;
2. That humanity's future is linked to the integrity of natural systems;
3. That protecting the environment (i.e. natural systems) is impossible unless we improve the prospects of the earth's poorest people.

(advances in technology and pop. growth have combined to change humanity's relationship w/ nature)

The report was an attempt to integrate environmental concerns with concerns for economic justice. It lifted up the idea of "sustainability", and defined this as "development that meets the needs of the present generation without compromising the ability of future generations to meet their needs."

The challenge of Our Common Future has prompted a widening discussion among environmentalists and advocates of economic justice, alike, and the goal of "sustainable development" has become the watchword of a movement for political, economic, and cultural reconstruction.

The call for "sustainable development" was heard at the Earth Summit in Rio de Janeiro (1992) and initial steps were taken to flesh-out the concept in terms of its applicability to global/strategic issues. (Critics also exposed the tendency to use the rhetoric of sustainability as a cover-up of various modes of domination and exploitation by "First World" economies, and their institutions such as the World Bank!)

While we acknowledge the tendency of human self-interest to corrupt any rhetoric and to use it as an excuse for evasion of concrete action for change, we of the Kent Environmental Council propose that the principles highlighted by the Brundtland Committee can be sound and helpful guides for inquiry into our common future, either at the global/strategic, or at the local/bioregional level.

We have experienced the conflicts between prevailing modes of economic development, and efforts to protect the integrity of the ecosystem. We have experienced the erosion of community life, and are acutely aware that all sectors of our population do not have access to the benefits and challenges of a vibrant economy. We see signs that the strategies and decisions of the present threaten to limit rather than to enrich the choices available to the citizens of coming generations.

Thus, we have undertaken to examine the meaning of sustainable development as this would apply to our own local community, our habitat, and to challenge our community to explore the vital signs and indicators of sustainability in this particular bioregion.

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ENVIRONMENTAL PRINCIPLES AND GUIDELINES
(Report of the KEC Agenda Committee)

CHARGE: To examine the components of sustainable development, and explore their application to the Kent community and its immediate region: to identify the vital signs and indicators of sustainability as they apply to our local situation; to report our findings to the KEC, and to other community groups as a basis for shaping an action agenda for the remainder of the decade.

Definition: "Sustainable development" is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. (From the U.N. Commission on Environment and Development.)

PRINCIPLES:

A. We are, individually and socially, part of an eco-system which is:

1. an interrelated, interdependent whole;
2. dynamic, integrative, adaptive, each entity in the eco-system understood to be embodied energy, and affected by the dynamics of other entities;
3. inclusive of interacting components of air, water, land, living organisms (plants, animals, and humans in both biological and cultural dimensions.)

B. Human activity, while it is rooted in the physical and biological processes shared by all other beings, has a unique influence on the ecosystem. The human mind, through the cultural products of science and technology, has increasing effects, ~~which~~ *enhance or to destroy -*

1. The acceleration of human influence is brought about by
 - a) continuing population increase;
 - b) increase in throughput use of resources.
(Def: "Throughput" measures the flow of energy and materials from original sources through a system, and out to ultimate "sinks.")
2. Human population numbers, and the volume of throughput activity tend to increase exponentially. (i.e. Population numbers and impact increase as a proportion of what already exists.)
3. Growth threatens to overshoot the carrying capacity of the ecosystem. (Def: "Overshoot" means to go beyond limits unintentionally.)
4. Human activity is resulting in damage to the ecosystem both globally and locally. (E.g. Increase in greenhouse gases in the atmosphere; decimation of rainforests; reduction in numbers of birds, fish, and other species; overtaxing of water and other resources; etc.)

C. Qualitative development - i.e. the unfolding and realization of potentialities through enriched relationships - may be seen as distinguished from physical, quantitative growth resulting from throughput activity. Qualitative development seeks to build a sustainable society.

or "Human
personality"
"finite-freedom"
? "Human initiative"

(Def: "A sustainable society is one that can persist over many generations; one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support."

-from Meadows, et al. Beyond the Limits)

1. A physically sustainable society will use land, energy, and resources at a rate not to exceed the regeneration of renewable resources, or the substitution of renewable resources for non-renewables; and its rates of pollution will not exceed the assimilative capacity of the environment. (from Herman Daly)
2. A socially sustainable society will combine population, wealth, and technology so that the material and cultural living standard is adequate and secure for everyone.
3. A sustainable society will strive to be equitable - respecting the real needs of all, living and yet to be born.
4. Thus, communities committed to qualitative, equitable, sustainable development will:
 - a) seek humane ways of reducing the rate of population growth, toward the goal of stabilization at a level which allows sustainability;
 - b) distinguish real needs (including needs for biological health and communal well-being) from market-stimulated wants and desires;
 - c) recognize the legitimate use of natural resources for economic activity, but will be cognizant of limits, and will utilize resources to the extent that the integrity of the ecosystem is maintained;
 - d) distinguish non-renewable resources from renewable resources, and wherever possible shift to the use of renewables;
 - e) recognize the need to reduce rates of consumption, especially among the affluent;
 - f) seek means of reducing at the source the use of materials, and recycle and reuse materials to the fullest extent possible;
 - g) monitor and scrupulously control the emission of wastes in all forms: solid wastes; toxic and radioactive wastes; water-polluting wastes; gaseous emissions into the atmosphere.
5. Sustainable development applies to all spheres of life --social, political, economic, as well as physical--and, to be achieved, will require changes in all areas:
 - a) Technology: the most advanced technology must be employed to achieve greater efficiency in resource use; but the elaboration of technology must be seen not as an end in itself, but as a tool for service of community needs.
 - b) Information, communication: "Information is the key to transformation....not necessarily more information, better statistics, bigger databasesbut information flowing in new ways, giving new signals, to new recipients, suggesting new rules and goals." (Meadows) e.g. new economic

Near and far
(see 1 below)

indicators are needed, new ways of taking into account real costs, public goods, limits of scale, etc.

- c) Life-style, value systems: De-emphasis on goods-accumulation and consumption. "People don't need enormous cars; they need respect.....they need excitement, and variety, and beauty.....they need something worthwhile to do with their lives. To try to fill these needs with material things is to set up an unquenchable appetite for false solutions....." (Meadows)
- d) World view: a new understanding of "human being", "human freedom", and life in community.
- e) Politics, governance: new patterns of ownership and accountability; new patterns of shared governance; a new sense of stewardship. (We are borrowing the eco-system from our children, and are accountable to them for the condition in which we leave it!)

"Freedom" redefined
as personhood in
community, rather than
individual autonomy

New ways of
thinking have
to be adopted
by gov't -

- D. Understanding ourselves as part of an eco-system requires that we think globally, and consider the consequences of our acts for the planet as a whole.
 1. Evidence is strong that individual choices as well as industrial and trade practices in the "developed" world are contributing to the "greenhouse effect", damaging the ozone layer, contributing to rain-forest depletion, polluting the oceans, etc. The impending exhaustion of petroleum reserves, and the polluting effects of fossil fuels generally, increase the urgency of shifting to alternative renewable energy sources.
 2. The global economy is already a reality, with high mobility of capital, markets becoming more extensive in scope and influence, and goods and raw materials shipped greater and greater distances.
 3. Masses of people have been uprooted from their traditional economies and communities, without being integrated into the global economy. This includes not only people in poorer nations, but also large numbers of people in our own cities and rural areas. It has not been demonstrated that "aggregate growth" in the global economy necessarily benefits these masses of poor, and it is highly questionable whether the economic models of the "developed" nations are viable and appropriate for the poorer nations, or for the disadvantaged enclaves in the more affluent nations.
 4. Mass poverty has its own characteristic effects on environmental stress: as in runaway population growth, deforestation, over-demand on water supplies, desertification, massive influx upon urban areas and shanty towns, poor sanitary conditions with negative health effects, etc.
 5. As de-facto participants in a nation with disproportionate economic and military power, as well as

asymmetrically high levels of resource consumption, we share a special responsibility for policies and practices affecting the planetary ecosystem.

- 6. As individuals we may have little influence on planetary matters, or even on state and national policies, but we can enhance this influence through networks of persons who share concerns for the global ecological crisis.

E. Perhaps most critical for understanding ourselves as part of an ecosystem, is a renewed and intensified sense of the locale in which we are situated. Attention to place -- bio-region, watershed, neighborhood and family, the concrete relationships of inter-woven communities -- is essential to the nurture of sustainable development.

- 1. Whereas emphasis on aggregate, quantitative growth (measured in terms of abstract "money" relations) tends to ignore place and concrete relationships, a renewed emphasis on qualitative development will be firmly rooted in the uniqueness of persons and communities.
- 2. Relative self-sufficiency in basic needs (food, shelter, energy, transportation, health care) is an appropriate goal for a bio-region.
- 3. Industrial development and trading avenues should include the goal of relative self-sufficiency for regions.
- 4. Stewardship of natural resources in all systems should seek to maintain the integrity of the regional ecosystem.
- 5. The integration of human resources, full participation in meaningful work, and life-long education should be matters of uncompromised priority.
- 6. Attention to the integrity of locale and bio-region must be clearly distinguished from regional chauvinism in all forms!

DEFINITION OF
"Bio-REGION" in
relation to Cleveland
Akron metropolitan
area, urban poverty,
racial division, etc.
??

Local Goals for Sustainability

DEVELOPMENT

"indicators" will be reserved for more and locally measurable items.)

- A. Access to sustainable livelihood and life-quality for all citizens.
 - 1. Income adequate for modest, simple prosperity;
 - 2. Decent, affordable and energy-efficient housing;
 - 3. Wholesome nutrition, emphasizing vegetables and fruits, locally grown;
 - 4. Health care focussed on wellness maintenance, beginning with prenatal care, including healthy ways of life, exercise, habits, diet, etc.
 - 5. Quality transportation choices for all citizens with a balance between pedestrian, bicycle, automobile, and public transit;
 - 6. Life-long education, community based;
 - 7. Productive employment, opportunity to contribute to community life in accordance with abilities, either for wages or voluntarily;
 - 8. Leisure-time opportunities oriented toward creative

← VITAL SIGNS OF SUSTAINABLE
(Note: The term specific)

expression, development of talents, conviviality, etc. with de-emphasis on consumption;

9. Safety from physical or social harm;
10. Freedom from race, class, gender, etc. discrimination;
12. Wide participation in community governance;
13. Fair distribution of wealth.

B. Population

"Tolerance of other views"

1. Attainment of a population level commensurate with food and energy resources developed in the region, watershed tolerance, etc.
2. Birth rate managed by education, intentional personal limitation of family size, and responsible parenthood;
3. Movement into and out of the region in balance with optimum population goals.

C. Land-use and management of settlements

1. Compatibility of human habitat with geography and geology of the place;
2. Integration of commercial development with habitat, pedestrian and public transit; patterned clustering of residential housing; reduction of "sprawl" and areas paved for roadways and parking;
3. Industrial development configured in keeping with the integrity of the ecosystem, and the health and safety of human, animal, and plant populations;
4. Development of parklands and recreational spaces which maintain the quality of habitats, and the ecosystem;
5. Dedication of permanent greenbelts, wild lands, wetlands and wildlife sanctuaries;
6. Survey of abandoned and under-used lands; emphasis on re-use of used lands ("brownfield development") rather than spoilage of unused lands ("greenfield development").
7. Comprehensive planning to achieve these objectives; regional planning, supported by local planning on the part of ~~townships~~ and municipalities.

counties

D. Agricultural land-use and cultivation practices

1. Dedication of prime agricultural land for that use only;
2. Emphasis on "organic" farming methods;
3. Emphasis on long-term soil conservation rather than exploitation for near-term returns;
4. Responsible use of pesticides and chemical fertilizers;
5. Monitoring of agricultural sector for non-point-source pollution.
6. Development of regional markets for agricultural products.

E. Food processing and marketing

1. Development of regional markets for agricultural products;
2. Development of regional processing facilities for agricultural products;
3. Maintain market options for unprocessed, and moderately processed foods;
4. Emphasis on environmentally friendly food packaging practices;
5. Explore aquaculture, and other innovative options for

food production and processing in the region.

F. Trees and wooded lands

1. Dedication of greenbelts, and wooded lands for preservation against urban sprawl and inappropriate agricultural use;
2. Encourage popular commitment to tree-planting;
3. Give attention to the preservation of diversity among woodland flora and fauna;
4. Monitor effects of acid rain, blight, and contaminants on trees and woodland growth

G. Animals and wildlife

1. Conserve open space, green corridors and linkages between wooded areas, natural areas along waterways, fencerows and wooded lots as habitat and cover for animals and wildlife;
2. Seek to restore a balance among animal populations, reintroducing indigenous predators, and natural methods of animal population control;
3. Monitor the occurrence of disease among animals, and take appropriate steps to prevent spread of disease;
4. Enforce codes concerning the management and control of domestic animals;
5. Balance narrow conceptions of wildlife management as a function of sports (hunting and fishing) with a whole-ecosystem approach to encourage a wide variety of flora and fauna.

H. Lakes, rivers, streams, and aquifers: Water Quality

1. Restoration and maintenance of the watershed and its related ecosystem;
2. Monitoring of the volume of water consumption and water conservation, with attention to the demands of residential and industrial expansion;
3. Protection of high-quality waters from degradation;
4. Protection of humans, wildlife, and aquatic life from the most dangerous toxic substances that bioaccumulate in the food chain;
5. Recycling of water where appropriate and possible;
6. Support of biological diversity so that viable populations of indigenous species may flourish in the aquatic habitat.

[See "Great Lakes Water Quality Initiative" and its objectives, and KEC Resolution on the Great Lakes Initiative, 8-4-93]

I. Atmosphere: Air Quality

1. Continue monitoring of hydrocarbon emissions and consequent ozone non-attainment problems for the region; ^
2. Continue measures to reduce automobile emissions;
3. Emphasize reduced burning of fossil fuels;
4. Support state and federal legislation which requires monitoring of toxic emissions, and extend range of toxic emissions requiring monitoring and control;
5. Emphasize source reduction of toxic emissions.
6. Support local and regional enforcement of state and

^ Continue monitoring "acid-rain" ... and funding of enforcement

federal law concerning toxic emissions.

J. Minerals and other resources/ natural gas and fossil fuels *and other resources*

Make use of inventories already available.

1. ~~Develop~~ inventories of mineral deposits, in the region, including sand and gravel. (Note that the extraction of peat is treated as agricultural, and unregulated.)
2. Encourage local governments to develop policies regarding extractive operations, with attention to environmental effects of extraction on adjacent properties, wetlands, streams and other environmentally sensitive areas;
3. Support state-supervised requirements for restoration of extractive sites, and plan for use of those sites after abandonment;
4. Encourage conservation of local deposits of minerals and other geologic resources.

K. Transportation

1. Public attention redirected to pedestrian, bicycle, and public transit as alternatives to private automobile;
2. Public investment redirected toward alternatives to streets, highways, and parking;
3. Reduction in vehicle miles traveled per capita and gasoline consumed per capita;
4. Planning of habitat to permit pedestrian access to shopping and routine trips;
5. Interactive "bio-regional" approach to employment and commerce, making possible reduction in commuting and haulage miles;
6. Accurate costing of fossil fuels, and reduction of public subsidy for private automobile transportation to remove non-market stimuli for that mode.

[See "Goals" of the Kent Intermodal Transportation Plan, adopted January 6, 1992]

L. Energy

1. Energy consumption follows from transportation, housing (heating and lighting), water consumption, industrial, commercial, and agricultural practices, and personal and institutional life-styles. Vital signs in each of these areas will be relevant to energy consumption and conservation.
2. Shift to energy efficiency, conservation, and renewable energy sources will make possible shift to sustainable local and regional production and use of energy.

[See Ohio Energy Strategy, publ. November 1992. also, critical comments submitted by KEC for Ohio Energy Strategy, Feb. 15, 1993]

M. Waste reduction and management

1. Solid wastes
 - a) Continue efforts to increase participation in recycling of paper, cardboard, glass, and metal cans;
 - b) Expand recycling programs to include plastics, tires, and other materials;
 - c) Expand programs which encourage reuse of furniture,

Develop plan for responsible and safe disposal of pharmaceuticals and toxic materials

- appliances, clothing and other items;
- d) Promote wider practice of composting on both private and community levels;
- e) Monitor management of trash disposal, haulage, and landfills;
- f) Work toward reduction of solid waste at the source: reduction of unnecessary packaging; discourage proliferation of "throw-away" items.

[See: Plan of the Portage County Solid Waste District]

- 2. Chemical wastes, toxic, and other hazardous wastes, including radioactive wastes.
 - a) Monitoring of emissions;
 - b) Reduction of emphasis on "lawn culture", pesticide and chemical fertilizer use;
 - c) Control of toxic pollution from point sources, such as municipal and industrial discharges, and from non-point sources, such as polluted run-off from urban and rural areas, leaking dump-sites, contaminated sediments and atmospheric deposition;
 - d) Support efforts to control and reduce toxic emissions at the source.
- N. Economy: employment, ownership, control and use of resources, commerce
 - 1. Increase the number of people employed by businesses which use renewable raw materials from the bio-region;
 - 2. Increase the percentage of businesses which are locally owned, employee owned, or cooperatives;
 - 3. Increase the percentage and volume of goods and services which are sold by locally owned businesses;
 - 4. Increase the percentage and volume of goods sold or exchanged which are derived from renewable raw materials;
 - 5. Increase and maintain a healthy balance of the economic wealth and dollars recirculating in the community;
 - 6. Plan for a measured economic use and extraction of local non-renewable raw materials and resources.
- O. Environmental/Ecological Education
(to be developed)