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Sustainable Development and Social Development: Necessary Partners for the Future

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This paper highlights the finite limits of global resources, the rapid global changes that are occurring, and the authors' concerns about the failure of the world community to come to grips with global problems. Major impediments to achieving global sustainability and social development are discussed and suggestions are presented for remedial strategies to redirect society along a more equitable and sustainable future path.

The deteriorating state of the Earth is a serious concern. Environmental abuse resulting from uncontrolled consumerism is prevalent. Presently, 20% of the world's population, living in the world's urban industrialized nations, consume 80% of the resources (Harmony Foundation of Canada, 1989, p. 52) and control 82.7% of the global wealth (UNDP, 1992, p. 35). Between 20 and 35% of the global population now live in poverty (Pimentel et al., 1994a, p. 347), and the number is growing. With such gross inequities, it is understandable why people in the third world are aspiring to achieve the high standard of living enjoyed by the privileged few. Some third world nations with strong emerging economies are just beginning to access their fair share of global resources. Although this is definitely a positive trend, the reality is that if the majority of the world's population begins to consume resources at the gluttonous rate of the privileged few, global resources will quickly be depleted and the global environment could collapse.

World Population, Consumption, Resources and Wealth

The world's population is increasing at 250,000 people per day. At this rate, the present population of 5.6 billion is expected to double in 41 years (Pimentel et al., 1994a, p. 349). Americans (and Canadians) consume 23 times the amount of goods and services consumed by third world citizens and 53 times the amount of Chinese citizens (Population Reference Bureau, 1991). North Americans also consume energy at 14 times the rate of Chinese citizens (Pimentel et al. 1994a, p. 350). In 80 countries, consisting of 40% of the global population, industry, agriculture, and health are threatened by fresh water shortage problems (World Bank warns of looming water crisis, 1995), and in others, supplies are being depleted. For example, aquifers in the U.S. are being pumped, on the average, at a rate of 25% above replacement (U.S. Water Resources Council, 1979); the large Ogallala aquifer underlying the midwestern U.S. is likely to be depleted in about 40 years (Soule & Piper, 1992). Besides, many fresh water resources, including aquifers, are now becoming seriously polluted.

Most of the fertile land available on the planet is already in use, and irrigated land on a global per capita basis is now decreasing due to waterlogging, salination, and population increases (Postel, 1989). At the present rate of consumption, both known and discoverable, coal reserves are expected to last for about 100 years, but oil and natural gas may only last for another 30 to 50 years (Hubbert, 1972; Matare, 1989, BP, 1991; Davis, 1991; Gever et al., 1991; Worldwatch, 1992). The urban-industrial nations of the world consume 80% of the fossil fuels used annually; 25% is consumed by the U.S. alone despite having only 4.7% of the world's population (UN Environment Program, 1985; DOE, 1991). The U.S. now imports over 50% of its petroleum and will have to import nearly 100% within the next 10 to 15 years (DOE, 1991).

Many people advocate switching to alternative energy sources. Although a number have potential, many introduce new conflicts for land usage and have practical limitations due to social, environmental, and economic consequences. For example, the large land usage problems associated with hydroelectric reservoir development introduce both environmental and social problems. The recent shelving of the \$13 million Great Whale

hydroelectric project in Northern Quebec as a result of the intensive lobbying by the indigenous peoples of the area to protect their land and "way of life" is illustrative of the inter-related problems involved (Seguin et al., 1995). Solar energy is another alternative with potential; however, it has been estimated, for example, that to substitute 40% of the current U.S. energy consumption with solar technologies would require using 20% of the U.S. land area for this purpose (Pimentel, 1994b, p. 201). This land would then not be available for agriculture or forestry. Windpower development has similar negative land use and social side effects, and of course, development can only occur where there is sufficient wind. The production of ethanol from corn biomass is an extremely inefficient process requiring 72% more energy than the ethanol itself produces (Pimentel, 1991, pp. 1–13). At the present, geothermal energy extraction, although promising, is considered uneconomical (Pimentel et al., 1994b, pp. 209–210). Considering current nuclear energy technology, known uranium reserves are only expected to last for another 100 years (Hafele, 1991). Furthermore, there are still serious unsolved nuclear waste disposal problems and the very real threat of future nuclear accidents. One area that offers some promise as an alternative to gasoline is hydrogen fuel produced using solar electric technologies (Pimentel et al., 1994a, p. 539).

It seems that there are not many options that will produce the high level of energy to which much of the world has grown accustomed. To expect a technological "quick fix" to the fossil fuel depletion problem is simply unrealistic. It is imperative that the industrialized world drastically downsize its energy demands.

One area where energy demands need to be drastically reduced is in the North American food system. Fossil energy is being used as a substitute for labour, making the system extremely inefficient from a sustainability perspective. For example, only four hours of labour are expended per acre of land in U.S. agriculture, while China uses 500 hours per acre. In the U.S., it now takes 3 kcal of fossil energy to produce 1 kcal of human food (Pimentel & Pimentel, 1992, pp. 23–24), and for beef production, the ratio is 35 to 1 (Pimentel, et al., 1994b, p. 212). But agriculture only accounts for 33% of the total energy used in the U.S. food production system; the other 67%, mostly coming from fossil

energy, is required to process, package, and transport food all over North America (Pimentel, 1994b, p. 212). Although the system is convenient, it is excessive, highly dependent on fossil energy and non-sustainable. It is imperative that steps be taken immediately to change this; consumers must provide the needed leadership.

The Duality: Social Development and Sustainable Development

The above statistics leave little doubt that the conditions in the world facing the human race are both real and critical. They also clearly point to the multi-faceted and interrelated aspects of problems. It is obvious that long term solutions must consider the economic, environmental, and social dimensions of problems in an integrated fashion. Combining Sustainable Development and Social Development offers a better approach for solving some of the world's most pressing problems.

In 1987, the Brundtland Commission presented the concept of sustainable development which they defined as: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 43). Sustainable development involves the following:

- *Anticipation and Prevention* which involves the avoidance of environmental degradation at all planning and developmental stages including conservation considerations.
- *Full Cost Accounting* which reflects the environmental and social costs as well as the regular market costs.
- *Informed Decision Making* which considers long term planning and gains, instead of the more usual biased short term planning returns; this must include effective public participation.
- *Living Off the Interest* which treats natural resources as natural capital; it must be replaced as it is depleted, reused or recycled to reflect the principle of sustainability.
- *Quality of Development Over Quantity* which reflects a change of focus to stress product durability, energy efficiency and recycling.
- *Respect for Nature and the Rights of Future Generations* which is a recognition that quality of life considerations, both now and in the future, must be included in all decision making

processes, including the knowledge that all flora and fauna not only have the right to exist, but are vital to the health and well-being of humans. (Adapted from Ontario Round Table on Environment and Economy, 1990).

“Sustainable development does not mean sustained economic growth. It is not just ‘business as usual.’ To have sustainable development, there must be a shift in priorities and values from the prevailing growth-centred, consumer driven philosophy to one which values nature, promotes conservation, minimizes waste, reduces consumption and protects the environment” (Johnson et al., 1994, p. 5).

There is considerable overlap between the concepts of Sustainable Development and Social Development. Social development is “a process of planned social change designed to promote people’s welfare within the context of a comprehensive process of economic development” (Midgley, 1994, p. 3). A basic element of this widely accepted definition is its ecological systems oriented approach to planning and promoting social welfare at all levels of social organization from the individual to the societal (Lowe, 1995). Abrahams et al.’s (1994) elaboration of the concept of social development reflects the historic influences of community development theory and practices. “Social Development is based on positive, humane, people oriented development in society. . . . The basic principles . . . are human dignity, equality, social justice, and equitable distribution of resources. . . . People’s participation and empowerment are necessary conditions . . .” (pp. 2–4).

It is of interest to note with respect to the integration of social development and sustainable development that the policy statements on Environmental Issues of the (U.S.) National Association of Social Workers (NASW, 1994, pp. 104–107), directly support both. The following is a short concluding excerpt from the statement: “NASW encourages social workers to use their community organization and advocacy skills to empower people to work collectively for sustainable earth goals. NASW encourages social workers to join with organizations whose primary function is environmental advocacy in this effort. We must recognize our personal responsibility for the conservation and preservation of existing resources and demonstrate leadership in these areas.”

Economic Impediments to Global Sustainability and Social Development

Economic decisions in the name of so called "progress," under both market economies and centrally controlled economies, have dealt severe blows to nature and the environment. To briefly summarize the history of the expansion of the Modern World Economic System, tremendous wealth has been generated through the extraction of natural resources and the exploitation of cheap labour resulting in colossal economic disparities between the rich and the poor. In conjunction with this globalization, national and local governments are losing control of their domestic and even international affairs. Multinational corporations with loyalties and responsibilities to no country are increasingly manipulating the global economy, finance, and trade. These companies do their utmost to disregard national borders so as to maximize trade.

At the same time revolutionary communications technology, in the form of globally networked computers, facilitates around-the-clock global financial trading. "Daily foreign exchange flows amount to around one trillion dollars, and far outweigh the sums employed for the international purchase of goods and services or investments in overseas plants. Indeed, by the late 1980s, more than 90 percent of this trading in the world's foreign exchanges was unrelated to trade and capital investment" (Bergsten, 1993, pp. 59–60). Most financial transactions now occur because investors are speculating in currencies and other financial instruments.

Investors consist of mutual funds, banks, corporations, and individuals, mainly from the urban-industrialized world. These investors are now in the powerful position of being able to manipulate global finances; indirectly, they can even control the financial decisions of countries. Consequently, nations are finding it increasingly difficult to implement financial actions which they judge to be in the national interest.

Paul Kennedy, in his book *Preparing for the Twenty-First Century*, points out that "nobody is in control—except, perhaps, the managers of multinational corporations, whose responsibility is to their shareholders. Financiers, one might argue, have become the new sovereigns, investing in whatever company gives the

highest return" (1993, p. 55). Most ordinary people in the urban-industrialized world are not big money dealers, so we might personally feel removed from this scene and therefore not responsible for the present state of global affairs and finance. In actuality, however, this is not the case. Any person who has investments in mutual funds, banks or companies, or who is part of a pension plan that invests in mutual funds and stockmarkets is very much a part of the system.

From a sustainability perspective, the short term gains of economic globalization and free trade promise disastrous long term consequences. The transportation of raw materials and manufactured items around the globe requires enormous amounts of energy in the form of fossil fuels. This is clearly not sustainable. Also, there is a tremendous toll with respect to the welfare of peasants and labourers. For example, the North American Free Trade Agreement (NAFTA) has resulted in many manufacturing jobs from the U.S. and Canada being displaced to Mexico, and more are expected to follow. However:

No group has been hit as hard by the lifting of import barriers as small farmers [in Mexico]. . . . they are incapable of competing with the world's most efficient [but unsustainable] farmers just to their north. . . . The ranks of displaced peasants forced into urban under-employment, migratory labor, or poverty of genuine subsistence farming will swell by the millions. . . . Mexico's undersecretary for agriculture sees up to thirteen million peasants forced to abandon the countryside by the year 2010. . . . [Mexico's] exports are up, but imports have gone up more. Even if Mexico succeeds in regaining a surplus, however, its economic policies mean that the beneficiaries of this success will be Mexican and foreign agribusinesses and not the rural poor. . . . In some areas of the country the changing agricultural panorama includes a proliferation of foreign-owned facilities, as transnational agribusinesses follow manufacturing counterparts by adopting global production, processing, and marketing strategies. . . . [For example,] cattle may soon cross the border three times before reaching consumers, as calves born in Mexico are shipped for feeding to the United States, returned to Mexico for slaughter and packing, and then sent back to the United States for distribution. (Browne et al., 1994, pp. 24-25)

Because of their demands to buy products at the lowest cost regardless of the negative impacts on other people's welfare, depletion of natural resources, and environmental degradation, consumers share responsibility with corporations and governments for these undesirable non-sustainable economic and social outcomes.

"Many of the multi-national corporations are far more wealthy than nation states, and mechanisms for assuring their accountability are almost non-existent. The outcome is that wage labourers, peasant farmers, and tribal peoples have even less control than previously over the conditions affecting their lives," (Johnson & Kramer, 1995).

Many third world nations are extremely vulnerable to this system of global trade and finance. They lack the power to influence the outcome, and they are therefore very vulnerable to manipulation and exploitation. "During the 1970s, when interest rates were low and credit was freely available, the governments of many developing countries borrowed heavily to fund a variety of economic and social development projects. As Radical Right governments in the industrial countries raised interest rates to deflate their economies, many developing countries were faced with a huge burden of debt. Many were forced to borrow from the International Monetary Fund [IMF] and the World Bank to finance their debt repayments, and most have been compelled to adopt stringent 'structural adjustment' policies and impose severe cuts to social programs" (Midgley, 1994, p. 10). Such "structural adjustment" policies require that the borrowing nation promote a market economy, and pay off the loans and interest on the loans in hard currency or through export crops (Chomsky, 1993, p. 25) or with resources such as oil. During the 1980s, these loans doubled and even tripled with the result that many nations of the third world cannot even pay the interest on their loans from first world investors.

"The policies imposed by the World Bank and the IMF are designed to facilitate the repayment of debt; that is, the steady transfer of wealth out of third world countries to the bankers of the industrial countries. This transfer of wealth has had devastating consequences for the poor majority. . . . Third World countries under IMF/World Bank tutelage have seen infant mortality rates

increase, schools and housing deteriorate, unemployment skyrocket and the general health of the people decline" (Danaher, 1994, p. 2). It should also be clearly understood that the World Bank and the IMF lend money from banks which have investors and stockholders who expect to be paid back and to make a profit. As a result of this, there has been a net flow of capital out of the third world since the mid 1980s (WCED, 1987, p. 68). In effect, the major industrialized nations no longer need to invade another country to acquire its resources, they simply get the other nation so far into debt that the industrial powers basically own the resources and dictate policies anyway.

The 1995 State of the World's Children report of the United Nations Children's Fund is very critical of the present economic trends which have not made even a dent in global poverty. "Whenever it is obvious that free market economic systems are more capable of generating growth, it is far from obvious that they are capable of creating just, civilized and sustainable human societies." In this report, the development policies of the World Bank and the IMF are particularly targeted because 800 million people in 40 third world countries were poorer in 1994 than in 1984. (Stackhouse, 1994)

As pointed out by Danaher (1994, pp. 1-2), "The unwritten goal of the World Bank and the IMF—one that has been enforced with a vengeance—has been to integrate countries into the capitalist world economy. Despite all the rhetoric about development and the alleviation of poverty, the central function of these multilateral lending institutions has been to draw the rulers of governments of weaker states more tightly into a world economy dominated by large, transnational corporations."

It is little wonder that the World Bank is under such criticism if the vision and understanding of its leadership is reflected in the memorandum written by Lawrence Summers, the World Bank's chief economist, "calling the low pollution in Africa uneconomical: 'Underpopulated countries in Africa are vastly underpolluted, their air quality is probably vastly inefficiently low (in pollutants) compared to Los Angeles or Mexico City'" (Hawken, 1993, p. 174, quoting from *The Ecologist*, 1992). This is, of course, a dismayingly ignorant statement from a sustainability perspective.

Remedial Strategies

On the 50th anniversary of the World Bank and the IMF, the authors wish to echo the call made by many others for the reorganization, redirection, and restructuring of these two global institutions, as well as the need to establish some controls on multinational corporations and global currency speculation.

Another recommendation is to focus social development strategies on empowering the poor, which we believe is critical if significant change is to occur in the way that the world does business. The world's poor understand scarcity, and most live "closer to nature;" consequently they have a better understanding than the world's powerful and affluent elite of the finite character of natural resources. Also, they are closer to the pollution. They have a much greater immediate and vested interest in promoting change in the global economy. They must be empowered with enough clout to have a voice in setting economic policies, rather than having to simply react to conditions which are outside of their control.

One exemplary way that this can be done is provided by Grameen Bank whose policies and practices are in marked contrast to those of the World Bank and IMF. Grameen Bank operates in half the villages in Bangladesh, lending over \$30 million monthly to 1.7 million borrowers, most of whom are women. The borrowers own the bank, and the repayment rate is over 98 percent. Studies indicate "that the borrowers have improved their income, widened their asset base and moved steadily toward crossing the poverty line and toward a life of dignity and honor. Studies also tell us that in Grameen families the nutrition level is better than in non-Grameen families, child mortality is lower and adoption of family-planning practices is higher. All studies confirm the visible empowerment of women" (Yunus, 1994, p. ix).

Estes (1993) recommends targeting social development strategies at all levels of social organization to attain a sustainable future. Adaptations of his proposed strategies to focus particularly on economic justice follow: At the individual and small group levels, he suggests that we should promote economic and social self-determination of oppressed individuals and groups. At the community level, we should mobilize the populace and

community leaders to develop localized institutional responses to problems (e.g. environmentally friendly industries in response to unemployment) and promote dialogue among local interest groups regarding sustainable development issues. At the national level, we should encourage governments to actively cooperate in international efforts to promote sustainable development and to control the excesses of multi-national corporations. And at the global level, Estes says that we must work "toward the establishment of a new system of international social, political, economic, and ecological relationships guided by the quest for world peace, increased social justice, the universal satisfaction of basic human needs, and protection of the planet's fragile ecosystem," (Estes, 1993, p. 17).

Proposals have recently been made to initiate a system of international taxation for sustainable development (UNDP, 1992, p. 84). The objective would be to provide incentives to reduce pollution and to better manage the uses of natural resources. Some of the tax proposals made in the *Human Development Report 1992* include a fossil fuel consumption tax, pollution taxes on emission such as carbon dioxide, "allowable" greenhouse gas emission permits, a global commons tax for the use of oceans or outer space, a tax on international trade for environmentally sensitive or scarce products, and taxes on weapons and other consumer items (UNDP, p. 84). Poor countries would be exempt from many of the taxes and would receive a significant portion of the revenues for financing development of a sustainable nature.

Paul Hawken in his 1993 book, *The Ecology of Commerce*, maintains that our present system of business and economics, including national systems of taxation, are in direct conflict with the aims of promoting conservation and minimizing environmental degradation. "The existing tax system [of the Western World] places levies on incomes, profits, sales, payrolls and savings. In doing so it discourages, or at least suppresses, the very elements we claim to value in a healthy economy: jobs, savings, new investment, and entrepreneurial activity. . . . Combined payroll and income taxes increase the cost of labor to business, giving companies strong incentives to move manufacturing offshore, to import from countries with lower labor costs, and to reduce the number of workers wherever possible, or to replace them with machines," (p. 170).

Hawken contends that through changes in taxation policies people's labour can become cheaper and goods more expensive, so that we can begin making a shift towards conserving resources and protecting the environment. In addition, "competition in the marketplace should not be between a company wasting the environment versus one that is trying to save it. Competition should be between companies which do the best job in restoring and preserving the environment . . ." (Hawken, 1993, p. 90).

To accomplish sustainable cost/price integration, Hawken proposes a system of restoration economics. "The restorative economy would invert many fundamentals of the present system. In such an economy, there is the prospect that restoring the environment and making money would be the same process. As in nature, business and restoration should be part of a seamless web. . . . Environmental protection should not be carried out at the behest of charity, altruism, or legislative fiats. As long as it is done so, it will remain a decorous subordinate to finance, growth and technology," (1993, pp. 11–17).

In contrast to Hawken's proposals, economic planning is generally short term, whether based on a yearly budget cycle or a "five year plan". Most economic theories and indicators, such as the Gross Domestic Product (GDP), do not consider the depletion of the world's natural resources nor the destructive impact of economic activities on the environment. Economist, Herman E. Daly, and Environmentalist, David Suzuki, along with others, are promoting alternate indicators (Daly and Cobb, 1994; Newman, 1995) for assessing economic well-being which incorporate the effects of environmental degradation and resources depletion. As Suzuki points out, in calculating the GDP, everything adds but nothing subtracts. "If, for example, you have a factory that's polluting a river, that adds to the GDP; if people downstream start getting sick and require doctors, lawyers and hospitals, that adds to the GDP as well, as does the amount of money spent by the company to eventually clean up its act." Using an alternate indicator, called the "Genuine Progress Indicator" (GPI), the GPI for the U.S. fell 42% between 1969 and 1992, while during the same period, the GDP increased by 38%. If nations were embarrassed by having to report negative economic health indicators every year, they might reassess their policies and make changes towards more sustainable options.

Until governments, banking interests, and the multi-national corporations respond to the critical need to achieve global sustainability, one of the best hopes for promoting significant change is through people's organizations. The United Nations *Human Development Report 1993* (UNDP, pp. 84–99) devotes considerable attention to the importance of Non-Governmental Organizations (NGOs) which can directly and indirectly influence governments and corporations while simultaneously fostering the participation and empowerment of the people affected.

For example, NGOs can successfully organize consumer boycotts of products. They also can help keep governments honest and accountable, thereby lessening corruption of politicians and their secret collusion with financial interests.

The Commission on Global Governance (1995) puts it this way:

A social responsibility devolves on the non-governmental sector. . . . We call on international civil society, NGOs, the business sector, academia, the professions, and especially young people to join in a drive for change in the international system.

Governments can be made to initiate change if people demand it. That has been the story of major change in our time; the liberation of women and the environmental movement provide examples. If people are to live in a global neighbourhood and live by neighbourhood values, they have to prepare the ground. We believe that they are ready to do so. (p. 18)

Each of us must push for change continually so that our "leaders" as well as the people who put them into office get the message. One way that this is being accomplished in Canada is by the establishment of public forums in the form of National, Provincial, and Community-based "Round Tables on the Environment and the Economy." Canada now has hundreds operating. Each round table is purpose-driven, with a specific task or problem to deliberate and solve. They are composed of representatives from all sectors that have a stake in the problem; therefore, the participants are referred to as "multistakeholders." Governments are not represented at round tables but can attend and observe. Round tables are modestly funded with seed money from public funds and funds from the business and corporate sectors involved; at the local level they are more voluntary in nature. The decision-

making members of the round table are not paid for their services, although consultants may be used in the process.

The purpose of a round table is to consider specific ecological issues and the related economic and social factors involved and to arrive at recommendations for future directions and policy changes. "While diverse in make-up and function, round tables share certain basic characteristics. They attempt to bring together a broad range of competing interests to work together toward a solution beneficial to all. They often use neutral chairs and usually rely on consensus for decision making" (Doering, 1995, p. 1). The requirement that a full consensus be reached on every recommendation is critical to the success, as all the participating multistakeholders share "ownership" and commitment to the final document. This innovative round table approach to addressing sustainability has multiple benefits. The final documents are extremely important in guiding and informing public policy. The results of a round table's deliberations are taken seriously by politicians, in part because of the diverse nature of the multistakeholders who participate as well as the careful research which informs their deliberations.

One place where the round table process is being successfully applied is in the Regional Municipality of Hamilton-Wentworth, Ontario. Under a project known as "Vision 2020: the Sustainable Region," this community has made major strides towards developing a sustainable community for the future (Hamilton-Wentworth Planning and Development Department, 1995). It is making the round table process work and setting an example for others to follow. The accomplishments are commendable considering that Hamilton-Wentworth is known to many in Canada as the "Steel City" which had one of the most contaminated harbours on the Great Lakes system. This heavy industry community was hit hard by the recession of the 1980s; survival meant diversifying the local economy as well as rethinking and shoring up its ailing social and economic infrastructure. To do this, it took a sustainable development approach which seemed to offer an opportunity to solve the wide range of interconnected social and economic issues that confronted the region and its citizens. As a result of the progress made, in October 1993, the Region of Hamilton-Wentworth was selected as an Agenda 21 Model Community,

and in December, 1994, the Region received the Canadian Award for Environmental Achievement in the category of leadership.

The round table model is exemplary of the types of innovative approaches which integrate social development and sustainable development principles at multiple levels of social organization in addressing the serious challenges facing our globe. The authors strongly urge the adoption of the round table model for tackling many future social development and sustainable development problems. We also suggest that the integration of social development and sustainable development principles and practices should be the focus and strategy for future development.

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