Common Interests for Required Strong Sustainable Development Coalitions and Cooperation in the Mexico/US - San Diego/Tijuana Border Region

Abstract

This paper presents an analytical framework on: (a) globalization and free market macroeconomic trends that affect sustainable development; (b) common elements between environmental and economic development theories; and, (c) criteria to detect convergent interests among progressive groups aimed at bridging the gap between North and South perceptions and encouraging stronger sustainable development coalitions. The paper; recommends a comprehensive strategy for sustainable development and examines NAFTA and transborder Mexico/U.S. cooperation experiences and perspectives within the proposed analytical framework,

Resumen

Este art culo presenta un marco anal tico sobre: *a)* efectos de la globalizaci n y de las tendencias macroecon micas del libre mercado en el desarrollo sustentable; *b)* elementos comunes de las teor as de desarrollo econ mico y de preservaci n del medio ambiente, y *c)* criterios para detectar intereses convergentes entre grupos progresistas, con objeto de reducir la brecha entre las percepciones del Norte y del Sur, as como de alentar la formaci n de coaliciones mÆs fuertes en tomo al desarrollo sustentable. El art culo recomienda una estrategia integral para el desarrollo sustentable y examina las experiencias y perspectivas del TLC y de la cooperaci n fronteriza MØxico/EU dentro del marco anal tico propuesto.

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It seems that we live in two different distant worlds: the world of optimist rhetoric, inflated discourse, promises and commitments for solving social and environmental problems, presented by the main international organizations; and the crude world of reality showing us ever growing inequity, poverty and environmental degradation.

Promises for supporting equality, solutions to the basic needs of the poor and environmentally sustainable development have become politically convenient cliches, embraced by all governments and entrepreneurial organizations, by major powerful institutions like the Organization of Economic Cooperation and Development (OECD) and the World Bank, and by spectacular and well publicized events such as the UN Conference on Environment and Development (UNCED), or Earth Summit, held in 1992, in Rio de Janeiro, Brazil; even the International Monetary Fund (IMF) and the World Trade Organization (WTO) have expressed support for equality.[1]

Despite the intentions of those who have the means to promote change, we are facing ever growing environmental and social problems. Environmental studies show increasing problems such as growing appropriation of the limited biomass by humans; depletion of nonrenewable natural resources, global warming; ozone shield rupture; land degradation, including soil erosion, decreased productivity, salination, desertification and deforestation; decrease in biodiversity, air pollution; water shortages; industrial and toxic wastes; radioactive danger; water pollution in lakes and rivers; add rain; and recent symptoms like El Niæo storms, floods, drought and forest fires. The human toll has been substantial, including skin cancer rates rising at higher rates than AIDS, victims of poison, radioactivity (such as in Chemobyl), droughts, floods, etc.

Scientific and economic studies are using risk analysis to deal with environmental problems; we are entering a world of great uncertainty. Will climate change result in food shortages for the growing world population causing socioeconomic and political crises? Can natural disruptions reach irreversible levels with

1 On recent commitments and concerns about inequality see: UN General Assembly s, the WTO and PAHO at http://www.iisd.ca/linkages/joumal/ 10/28/98, http://www.un.org/esa/analysis/ffd.htm, http://www.wto.org/ and http://www.paho.org/; on surprising IMF calls for a policy of equity and elimination of unproductive spending, see http://wwwjmf.org/extemal/np/fad/equity/index.htm.

our growing inertia? Can science s excessive pride understand and control the powers of spiritual nature, or will it destroy mankind?

Socially, increasing poverty is deteriorating the human capabilities of millions of people in despair; it may also add to the present social conflicts and devastating struggles. International redistribution mechanisms, including debt relief, stabilization of world prices of primary products, preferential access of products from developing countries to markets of developed countries, transfer of technology, additional financing and greater representation in international organizations have been unsuccessful, producing very little results.[2] While there are continuous commitments for greater financial aid to developing countries, by powerful governments and international organizations, the UN General Assembly (18-19 March 1998) addressed the decline in official development assistance (ODA), the limited foreign direct investment in poor countries and their heavy external debt burden. China s delegate said ODA was an early casualty of globalization exacting an enormous toll on social and economic development.[3]

The 1998 UNDP Report on Human Development indicates that globalization is increasing inequality and social exclusion, even in developed countries where between 7 and 17% of the population live in poverty, and the unemployment rates of young people have reached more than 30%.[4] The Economic Commission for Latin America and the Caribbean (ECLAC), recently warned that the region s public finances still exhibit a significant degree of fragility which is periodically brought to light by external turbulence or domestic shocks and that efforts to increase the efficiency and effectiveness of public expenditure have proven to be insufficient. [5]

We must act fast, otherwise environmental and/or social emergencies may cause a sudden economic collapse and world conflict, making things worse. By accelerating change, transition towards sustainable development may become manageable and smoother. While urgent change towards sustainable development is needed, it is hindered by powerful vested interest. Environmental and social development groups pressing for change do not have enough methodologies and information regarding their common interests; they often disagree on

2 See Dominique Salvatore, Econom a Internacional, Santa Fe de BogotÆ, McGraw-Hill, 1995, pp. 372-379.

3 See UN General Assembly, http://www.iisd.ca/linkages/journal/10/28/98, and http://www.un.org/esa/analysis/ffd.htm.

4 See PNUD, Informe Sobre Desarrollo Humano 1998, Madrid, Mundiprensa, pp. 2 and 27.

5 See http://www.iisd.ca/linkages/journal/10/28/98

issues and strategies, thereby entering into a self defeating conflict specially among North-South groups that obstructs the countervailing coalition power required to push a progressive agenda fairly and efficiently.

This paper analyses key elements of the relationship between environment and social development, highlighting criteria to detect fundamental common interests among progressive groups which should be further studied and publicized, thereby spreading awareness and encouraging wider participation for stronger coalition power ties among civil society and nongovernmental organizations. It focuses on how inequality, between and within nations, encourages excessive superfluous consumption patterns of the rich which damage the environment;

precludes development; impedes the satisfaction of basic needs of millions of poor people; and reduces the availability of investment, technological, human and financial resources needed for social and environmental purposes. It recommends some measures aiming to obtain needed resources for developing and spreading social and environment friendly technology and investments.

The paper also studies the case of the Mexico/U.S. borderland and the San Diego/Tijuana area, a region with the highest development asymmetry where the natural presence of regional common interests and high media exposure -given its international nature- could become a successful example of transborder cooperation on sustainable development.

A FRAMEWORK FOR SUSTAINABLE DEVELOPMENT COOPERATION THROUGH STRONG COALITIONS

Using Herman Daly concepts, for the purpose of this paper, sustainable development signifies: *a)* efficient allocation of resources: *b)* equitable distribution of income and wealth: and *c)* environmental sustainability of the production scale.[6] However, there is divergence, confusion and lack of consensus on the meaning and approach to the analysis of sustainable development. Ideological interests divide sustainable development theories in two broad groups: those defending the free market system, by all means, and those that wish to change or adapt the system forcing it to follow certain rules. While the WTO, a key institution supporting the free market system, has expressed deep concerns over the marginali-

6 See Herman E. Daly, Allocation, Distribution, and Scale: Towards an Economics That is Efficient, Just and Sustainable , in Ecological Economics, No. 6, December 1992, pp. 185-187.

zation and the foreign debt problem of developing countries,7 many authors consider that the free market policies of that organization are the main cause of inequality and foreign debt. While several environmentalists think the free market system is unsuited for sustainable development, Daly, an environmental cride of conventional thinking, defends the free market ideology.8

Sustainable development literature is afflicted by vagueness, inconsistencies and oversimplification.[9] Proliferation of environmental protection institutions and groups with different goals and approaches, and conference fatigue may diminish effectiveness, so there is a need for an evaluation and consensus reinforcement summit to re-direct resources towards effective actions.[10] Theoretical confusion and ideological divisions among progressive groups can only favor the status quo.

M. Meister and P.M. Japp believe that the discourse of sustainable development represents a consensus between environmental conservation and industrial use. According to them. Agenda 21 (the key proposal document that resulted from the Earth Summit) uses throughout the text the quality-of-life phrase to promote consumerism and consumption, and neglects to provide serious environmental protection.[11]

Divergence between environmentalists and developmental groups was initially reduced through consensus attempts emphasizing equity and social justice as fundamental objectives. But later, this emphasis was diverted twice: toward local participation, a less provocative concept, and then to the involvement of NGO s, which cannot guarantee just and equitable outcomes since it leaves the distribution of power unchanged. This has lead to conceptual confusion and policy contradictions such as: *a)* the international monetary and trade system and the IMF-World Bank adjustment free trade programs which promote patterns of unequal exchange, international inequality as well as exploitation and environmental pollution in the south; *b)* sustainable agriculture, low-input agriculture

7 See the Second Session of the Ministerial Conference of the World Trade Organization http://www.iisd.ca/linkages/journal/10/28/98, and http://www.wto.org/

8 See David Barkin, Wealth, Poverty and Sustainable Development, Mexico, Editorial Jus, 1998, p. 45, quoting Herman, E. Daly and John B. Cobb Jr., For the Common Good; Redirecting the Economy Toward Community, the Environment and a Sustainable future, Boston, Beacon Press, 1989, p. 19.

9 See Sharachchandra M. Lflf,, World Development, No. 19, June 1991, pp. 607-621.

10 See The Wilton Park Conference Protecting the Environment and Sustaining Development: Towards A Green Millennium? , at http://www.iisd.ca/linkages/journal/ 10/28/98.

11 Se: M. Meister and P.M. Japp, Sustainable Development and the Global Economy-Rhetorical Implications for Improving the Quality of Life , in Communication Research, No. 4,1998, pp. 399-421, http://www.ox.ac.uk/

and organic farming programs ignore social conditions and a fair return to the rural population; and c) the major international institutions consider poverty, overpopulation, and ignorance as major causes of deforestation, but fail to consider the ultimate causes of poverty and population growth and large scale commercial logging.12

Unnecessary North-South controversy has been inflated by offensive remarks: Larry Summers, when he was chief economist of the World Bank said that the institution should not discourage the migration of dirty industries to developing countries where social costs measured by lower wages is lower than in rich countries. He claimed that, since in poor countries there is a high infant mortality rate, people need not worry about diseases caused by pollution.13

There is the need to analyze the complex causes and consequences of poverty and environmental degradation as well as patterns and levels of resources demand that are ecologically and socially Sustainable.14 Latin-Americans recognize the need for concerted actions to reduce environmental conflicts and to define concepts of integrated policy and management that would be socially equitable and environmentally Sustainable. Governmental plans are required to implement such policies.15 Resources for Sustainable development cannot be generated without powerful political support. This means that we need to find ways to harness public opinion and the support of finance ministries for good ideas currently promoted by relatively weak environment ministries .16 Effective direct democratic participation must involve an active role entailing the need to integrate people into real power structures and to redistribute both political and economic power.17 Albert Hirschman offers countless examples of the ways in which the NGO s and other grassroots groups have been successful in exerting pressure to modify development projects.18

Thus, there is an urgent need to find a sound theoretical synthesis capable of convincing divergent progressive groups and providing a common framework

12 See LØlØ, 1991, pp. 607-621.
13 See The Economist, February 8, 1992, taken from Barkin, 1998, pp. 43-44.
14See LØlØ, 1991, pp. 607-621.
15 See CEPAL, El Desarrollo Sustentable: Transformaci n Productiva y Medio Ambiente, CEPAL, Santiago de Chile, 1991, p.107.
16 See The Wilton Park Conference.
17See Barkin, 1998, pp. 56-57.
18See Barkin, 1998, p. 5, quoting Lloyd Rodwin and Donald A. Schon (eds,), Rethinking the Development Experience:
Essays Provoked by the Work of Albert O. Hirshcman, Washington, Brookins and Lincoln, 1994.

to be used for building required strong Sustainable development coalitions. To this end, we will analyze five areas of unnecessary divergence among Sustainable development groups, mainly among North-South groups.

1. National, Elite and People s Interests. A first source of unnecessary divergence results from generalizations used to blame nations for environmental problems, instead of blaming certain minority powerful groups within all nations, which are responsible for the main causes of problems. In the economic development discipline, the dependency theory has long explained a convergence of interests between the elite of developing nations with international big business, and a divergence of interests between the lower classes of developing countries and large firms. In the disciplines of political science and international relations, group analysis and the Interdependence School also focus on groups rather than on nations.[19] Poor people and progressive groups of all countries should avoid focusing on countries, blaming each other, and should find common grounds to build powerful coalitions needed to face powerful vested interests.

Some claim that most northern countries see major benefits in globalization, but in the South, opinion remains divided largely according to income. For the richer South, trade liberalization offers opportunities for enhanced economic growth through increased foreign investment. Poorer neighbors, however, may regard it as a potential destroyer of local industries, encouraging unnecessary consumerism and spreading western values which lead communities and particularly the young, to reject traditional beliefs .[20] These kinds of thoughts can only divide the common interests of all developing countries, and the common interests of the poor and of the progressive groups from all over the world. Trade liberalization affects all of them in the same way. Multinational corporations and elite groups of developing countries support free trade because they are the ones who benefit from it; the poor of all countries loose and should oppose free trade.[21]

2. Superfluous Consumption in the North. A good example of unnecessary North-South progressive group divergence is blaming Sustainable development problems on high levels of consumption in the North: superfluous consumption by the South elite may cause even greater problems. Rather, overconsumption

19 See Eduardo M itgnin, El TLC y la Crisis del Neoliberalismo Mexicans, MØxico, UNAM, 1995, pp. 27, 28 and 39.

20 See The Wilton Park Conference.

21 See James Goldsmith, La Trampa, MØxico, Plaza & Janes, 1995, pp. 38-39.

by the rich from all over the world should be disapprovedt. Economics is defined as the science that studies the alternative use of scarce resources among competing purposes; when a certain resource is used for one purpose, it will not be available for another, except when it is used for producing a means of production, such as machinery, which can serve another end in the future.

Superfluous consumption represents unnecessary use, or waste, of financial and environmental resources which could be used for better purposes. According to Nicholas Georgescu-Roegen any use of natural resources for the satisfaction of non-vital needs means a smaller quantity of life in the future.[22] Mainstream conceptualization of Sustainable development has failed to acknowledge or to place sufficient emphasis on the fact that poverty and environmental deterioration are both caused by overconsumption.[23]

Daly points out that the GNP growth at high income levels may signify the satisfaction of ever more trivial wants while simultaneously destroying ever more important environmental resources. Keynes said that there are those wants that meet absolute needs, and those that make us feel superior to other humans. The steady-state economy environmentalists focus on the satisfaction of essential rather than superfluous needs.[24] Even neoliberal economic theory claims income and consumption growth is subject to decreasing marginal consumer satisfaction, a law of decreasing marginal utility, implying higher utility for the consumption of basic and urgent needs from the poor and lower utility for the satisfaction of superfluous needs of the rich. Growth in developing countries may signify greater satisfaction of basic needs, whereas in developed countries it may signify higher superfluous consumption.[25]

But the current system uses publicity, planned obsolescence and the demonstration effect to raise the demand of artificial needs. And arguments from defenders of superfluous consumption are not as convincing as arguments that defend the survival needs of the poor; they highlight consumer rights and consumption social benefits such as allowing societies to fulfill their basic need to reproduce social meanings, solidarity and systems of communication, and ex-

22 See Nicholas Georgescu-Roegen, The Entropy Law and the Economic Process, Cambridge, Harvard university Press, 1971, p. 21 cited in Herman V.. Daly, Introduction to the Steady-State Economy Valuing the Earth: Economic, Ecology, Ethics, Cambridge and London, The MIT Press, 1993, p. 7-

23 See LØlØ, 1991, pp. 607-621.

24 See Daly and Towsend (eds.), 1993, pp. 25-28.

25 See Herman E. Daly, Econom a, ecolog a Øtica, MØxico, FCE, 1989, pp. 25-26.

panding the scope for people to define themselves, express who they are, and modify how others perceive them.26

Agenda 21 identified unsustainable patterns of production and consumption, particularly in the industrialized countries, as the major cause of the continued deterioration of the global environment.[27] Along those lines, many authors highlight that consumption in rich countries places an excessive burden on the environment.[28] Rich countries of the world, with 20% of the world population, consume 80% of the world s yearly output.[29] The U.S., with only 5.6% of the world population, uses close to 40% of the world production of raw materials, many of which are non renewable.[30]

But again, blaming countries instead of groups, diverts the attention. It is inconvenient to blame overconsumption in rich countries for environmental damage; it is not a correct or complete measurement and it may create a sterile controversy between Northern and Southern groups. Rather, the common enemy of the environment and of progressive Northern and Southern groups is superfluous consumption by high income groups from all over the world.

The UNDP recently stated that globalization is encouraging superfluous consumption patterns worldwide. It points out that the general consumption of the richest 20% of the world population is 60 times larger than the consumption of the poorest 20%, including 15 and 40 times more consumption in energy and paper, respectively; and it says that the 20% richest have 50 times more telephone lines and 43 times more automobiles than the poor.[31] International forums are calling for concrete actions oriented to change current world excessive consumption patterns toward Sustainable patterns.[32]

Emphasis on overconsumption in rich countries diverts attention from over-consumption by the middle and upper classes of developing countries, which may be more important since, as it will be explained, it represents the principal cause hindering Sustainable development in the South and great economic and

26 See The Oxford Center for the Environment, http://users.ox.ac.uk/~ocees/consumption.htm

27 See The Oxford Center for the Environment.

28 See LØlØ, 1991, pp. 607-621.

2() See F. E. Trainer, Environmental Significance of Development Theory**, in Ecological Economics, No. 2, December 1990, pp.277-286.

30 See E. F. Schumacher, La Edad de la Abundancia: una concepci n cristiana , in Daly, 1989, p. 140.

31 See PNUD, 1998, pp. 2, 6,42 and 47.

32 See, for example: UN General Assembly at http://users.ox.ac.uk/~ocees/consumption.htm; and Consumption in a Sustainable World workshop, at http://www.iisd.ca/linkages/journal/ 10/28/98 and http://www.iisd.ca/sd/norway/sdvol16no1e.html

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26 See The Oxford Center for the Environment, http://users.ox.ac.uk/~ocees/consumption.htm 27 See The Oxford Center for the Environment.

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29 See F. E. Trainer, Environmental Significance of Development Theory , in Ecological Economics, No. 2, December 1990, pp. 277-286.

30 See E. F. Schumacher, La Edad de la Abundancia; una concepci n cristiana , in Daly, 1989, p. 140.

31 See PNUD, 1998, pp. 2, 6, 42 and 47.

32 See, for example: UN General Assembly at http://users.ox.ac.uk/~ocees/consumption.htm; and Consumption in a Sustainable World workshop, at http://www.iisd.ca/linkages/journal/ 10/28/98 and http://www.iisd.ca/sd/norway/sdvol16no1e.html

social development damage in Third World countries. Studies further explaining the causes and the negative consequences of superfluous consumption in all countries present a golden opportunity for reaching a synthesis between economic development and the environment.

Superfluous consumption by the rich in developing countries not only causes ecological damage, but also constrains economic and social development by depriving those countries from needed savings and investments. Orthodox economists such as Rostow and Chenery claim that poor countries cannot have enough domestic savings because they do not have enough income to raise them, and need foreign capital inflows to promote their development. Their foreign debt, they say, will automatically be paid off assuming that borrowed capital is allocated to productive investment, thereby increasing their efficiency, development, and foreign exchange earnings through increased net exports.[33] However, several authors have noticed that foreign capital inflows cause, in many cases, a rise of current consumption by the rich, rather than investment, and higher inflation, real exchange rate appreciation, and lower competitiveness, thereby constraining their exports, promoting their imports and increasing foreign debt, which, in turn, stops economic development.[34] Vijay Joshi and Ronald Findlay explain that domestic savings and foreign exchange shortages can be lowered or eliminated if consumption of luxury goods is reduced.[35]

Historians point out that since Mexico s independence (1821), superfluous consumption by the rich has reduced needed savings, causing financial dependence which exacerbates inequality and impedes development.[36] Since 1963, Rail Prebisch pointed out that superfluous consumption by the La-

33 See Michael Henri Bouchet, The Political Economy of International Debt, New York, Quorum Books, 1987, pp. 126-129.

34 See Bouchet: 120 and the following studies quoted in Bouchet: 137-38 notes 5,7 and 8: T. Haavelmo, The Rates of Long-Run Economic Growth and Capital Transfer from Developed to Underdeveloped Areas , in Study Week on the Econometric Approach to Development Planning, October 7-13,1963; Ponlificae Academiae Scientarum Scripts Varia, Amsterdam, North-Holland Publishing, 1965; Keith Griffin, The Role of Foreign Capital , in Financing Development in Latin America, Keith Griffin (ed.). New York, Macmillan, 1971; Inter-American Committee for the Alliance for Progress, O.A.S., La Brecha Extema en America Latina, 1968-1973, Washington, December 1968; R. Dornbusch, External Debt, Budget Deficits and Disequilibrium Exchange Rates , unpublished paper, April 1984; and Ernesto Zedillo, Algunos aspectos del endeudamiento pœblico externo en MØxico , Serie de Documentos de Investigaci n, Banco de MØxico, No. 3, 1978.

3ci See Vijay Joshi, Two-Gap Analysis , in Gerald M. Meier, leading issues in Economic Development, New York, Oxford University Press, 1976, pp. 336-344; and Ronald Findlay, The Foreign Exchange Gap* and Growth in Developing Economies , in Trade Salome of Payments and Growth: Papers in International Economics in Honor of Charles P. Kindleberger, Jagdish N. Bhagwati, Ronald W, Jones, Robert A. Mundell, and Jaroslav Vanee, Amsterdam and London, North Holland, 1971, pp. 68-82.

36 See Leopoldo Sol s, La realidad econ mica mexicana: retrovisi n y perspectivas, MØxico, Siglo XXI, 1970, pp. 41,45 and 85.

tin-American elite, has not only signified a considerable waste of the savings potential, but has also stimulated investments to produce luxury goods, resulting in the waste of potential human and financial capital, land and other resources and hindering truly productive activities. Prebisch adds that a reduction of superfluous consumption by the rich would solve both savings and foreign exchange shortages, allowing better growth and income distribution.37

Developing countries need to import huge quantities of goods, machinery and inputs from industrial countries to produce for their rich, thereby exporting their natural resources to pay for such imports. Market forces benefit the rich and impoverish the poor; they inappropriately allocate resources to produce for the relatively rich, especially for those abroad, deviating resources from the needs of the majority of people.38

3. Growth in the South. Some authors think that growth is inconsistent with Sustainable development39 and that present levels of percapita resource consumption in the richer countries cannot possibly be generalized to people of the rest of the world. Others say that present levels of consumption cannot be maintained for those groups that have them.40 This is another source of unnecessary North-South controversy, since a proper technology used for the satisfaction of basic needs while reducing superfluous consumption, may make growth and Sustainable development compatible. Scholars claim traditional development objectives such as meeting basic needs and improving factor productivity need not conflict and actually are necessary for improving ecological sustainability by enhancing resources and capabilities; they say environmentally sound methods may be profitable in the short and in the long run. However, the relationship between economic growth and both poverty reduction and better environmental sustainability need to be further studied. LELE points out that, if this approach is further analyzed and proved, it has the potential to unite a broad spectrum of actors and interests. There is a need to further study the links between growth and meeting basic needs, reduction of inequality and building indigenous capacity at a community level.41

37 Raœl Prebisch, Hac a una dinÆmica del desarrollo latinoamericano, MØxico, FCE, 1972, pp 4-6, 37-38 and 53.
38 See Trainer, 1990, pp. 277-286.
39 See Trainer, 1990, pp. 277-286; and LØlØ, 1991, pp. 607-621.
40 See Barkin, 1998, p.50.
41 See LØlØ, 1991, pp. 607-621.

Currently, instead of working to alleviate poverty as promised, economic growth and commercialization through a market economy has actually undermined ecological stability, destroying people s resources and causing further poverty. The market system views nature as a resource to be exploited in order to obtain profits.[42] But rather than using market forces alone through a Sustainable distribution of wealth and resources, employing direct or induced mechanisms aimed at diverting resources from superfluous consumption toward an environmentally and socially friendly satisfaction of basic needs, both growth and environmental improvements can be achieved.

Ecoproductive technology that implies an integrated and Sustainable use of productive resources, necessarily differs from traditional economic efficiency, which does not account for ecological damage, but reflects only market prices.[43] Literature on Sustainable development distinguishes case studies of environmental friendly economic development, highlighting environmental problems caused by lack of resources, whereby greater availability of financial, technological and human resources lead to better environmental management and outcomes;[44] and cases of environmental unfriendly economic development, whereby greater resources lead to greater environmental damage as a result of higher levels of consumption and production.[45]

4. Population Growth, Inequality and Migration. Population growth in the South has been pointed out as a fundamental cause of environmental damage;

some Northern groups believe population growth is caused by the irresponsibility of people from the South. This argument represents another unnecessary source of friction between North-South progressive groups which could be eliminated by emphasizing studies that demonstrate that poverty and inequality, rather than irresponsibility, are the sources of population problems in the South.

42 See Vandana Shiva, Recovering the Real Meaning of Sustainability. The Environment in Question, David Cooper and Joy S. Palmer (eds.). New York, Routledge, 1992, pp. 187-197.

43 See Enrique Leff, Ecolog a y capital, MØxico, Siglo XXI, 1994, p. 105.

44 For example, the UN Economic Commission for Latin America and the Caribbean, ECLAC, points out the cases of Corporaci n Nacional del Cobre de Chile, and Pertrobras in Brazil, where environmental friendly technologies, implying very large investments, could substantially reduce the production environmental damage. In both cases, lack of financial resources have slowed the implementation of cleaner technology. See CEPAL, 1991, pp. 30-33.

45 For example, huge investments for increasing economic efficient production of cotton that damaged the environment through intensive use of chemicals and defoliation of land took place in Central America, particularly in Nicaragua, El Salvador and Guatemala. This resulted in only temporary export boom that ended due to new plagues, falling world prices and the political turbulence of the region. Short term economic gains resulted in long term economic and ecological losses. See CEPAL, 1991, pp. 37-38.

Studies show that population growth is reduced when income grows and people have steady remunerative activities. There are indicators of a relationship between income levels and population growth: the rich have less children than the poor.[46] The poor have several children not because they are irresponsible, but because families act as a support network for survival and children are considered a means to help the family s economy, or a means to support the elders,[47] especially in periods of extreme hardship.

Inequality, poverty and the use of capital intensive technology can be considered as the fundamental causes of population problems and environmental damage. Higher poverty and lower available resources for the poor make peasants migrate to overcrowded cities and overexploit marginal land for survival, depleting their environment and causing further poverty.[48] In several Latin-American countries, subsidy, price, tax and credit policies have discriminated against rural areas and peasant agriculture, favoring urbanization, and encouraging extensive capital intensive large commercial farming, even in fragile marginal lands, thereby causing rural unemployment and poverty, migration towards cities and environmental degradation.[49] The need to export agricultural products through extensive commercial agriculture in order to get needed foreign exchange to pay for the superfluous consumption by high income groups, has damaged rural environment.

While population growth has been slowed in Latin America, rapid urban concentration and expansion resulting mainly from rural poverty keeps increasing, further causing severe ecological damage, including air pollution, toxic industrial emissions and waste, reduction of arable land, strain on regional water resources in metropolitan areas, and appropriation of water resources previously used in nearby and even distant rural regions.[50]

Research and development of large firms is oriented at finding capital intensive technology which increases labor productivity and profits, but reduces the

46 See CEPAL, 1991, p. 67.

47 See Barkin, 1998, p. 45. He quotes United Nations Fund for Population Activities UNFPA, Population, Resources and the Environment: The Critical Challenges, 1991, NY-UN.

48 See Trainer, 1990, pp. 277-286.

w See CEPAL, 1991, pp. 23-24; on impoverishment, social disintegration, large-scale emigration, environmental devastation and urban problems in developing countries see also Barkin, 1998, pp. 13 and 21, and Jorge Herdoy, Diana Martlin and David Satterthwaite, Environmental Problems in Third World Cities, London, Earthscan Publications, 1992, quoted in Barkin, p. 31.

50 See examples of these arguments relating to the cides of Lima, MØxico, and Santiago in CEPAL, 1991 pp. 36, 43-44, and 49-54.

creation of jobs per unit of capital invested. Capital intensive technology with economies of scale of large firms has increased unemployment, damaged small businesses, caused inequality and social polarization, and promoted higher superfluous consumption that takes resources away from the satisfaction of the basic needs of large segments of the majority of poor people. Such a pattern has particularly affected rural areas, causing migration to cities, urban ecological damage and a reduction of the quality of life. Internal savings used for superfluous consumption investment has diverted resources away from education, R&D for needed technology and from Sustainable development that would raise productivity of socially desirable activities; it has also increased export production needed to pay for imports resulting in ecological damage.51

The use of the wrong technology may have substantial consequences. James Goldsmith warns us that world wide trade liberalization of highly efficient commercial agricultural products could displace 2,000 million unemployed peasants who will be looking for jobs in cities.[52] Thus, promoting competitive social friendly technology (labor intensive and intermediate technology, rather than capital intensive technology) that provides greater employment rates, thereby decreasing unemployment problems, should have greater priority in **R&D** resource allocation and in technology transfer programs.

5. Resources for Sustainable Development Vs. Inequality of The Free Trade System and Environmental Trade Sanctions to Developing Countries. Another unnecessary and self defeating controversy that reduces convergence of interests among progressive groups is related to environmental trade sanctions to developing countries. While these countries are starving for resources needed for Sustainable development, the international system and environmental trade sanctions deprive them from such resources. When Northern environmental groups support trade sanctions, groups in the South perceive them as disguised protectionism of the North that worsens inequality and hinders Sustainable development by lowering availability of needed resources. Trade sanctions are considered as effective incentives to improve inconvenient environmental practices, but they are destructive. Negative incentives should be replaced by positive incentives consisting on providing developing countries greater access to international markets and to financial and technological concessionary resources strictly conditioned to be channeled to effective ecological and social improve-

51 See Leff, 1994, pp. 162-167.

52 See Goldsmith, 1995, pp. 37, 38 and 184.

ments, bypassing excessive and expensive bureaucracies and making sure that they do not end up in increasing superfluous consumption.

Rural poverty and unequal distribution of land have been associated with the use of marginal low efficient land for survival, causing serious deforestation and land deterioration problems. Many scholars have emphasized a circular process in which impoverishment and environmental degradation cause and reinforce one another.[53] Ecological deterioration further reduces resource availability and efficiency, particularly of natural resources, thereby having an economic cost.[54]

Economists say that economic growth will provide resources and reduce the tendency of the poor people towards environmental degradation caused by lack of resources and their need for survival. Some highlight that there is a tendency whereby, as income increases, society uses greater resources for improving the environment, as has happened in developed countries (Environmental Kuznets Curve) .[55] But market forces alone do not do the job: they are not increasing income levels enough in developing countries, many of which are stagnant with tendencies towards increasing inequality, while there are not enough policies to make sure resources are channeled into Sustainable development. Redistribution mechanisms are required: research shows that when given the chance and resources, the poor are more likely than other groups to engage in direct actions to protect and improve the environment .[56]

Developing countries have a great shortage of financial and fiscal resources needed for investment activities to improve the environment; needed resources have been limited by macroeconomic adjustment programs and the debt burden. They need justifiable concessionary special funds to meet environmental requirements.[57]

The international trade system has been regarded as a source of inequality. More than 150 years ago, Friedrich List and John Stuart Mill analyzed international inequality caused by commercial losses and deteriorating terms of trade. About 40 years ago, Emmanuel and Myrdal, economists from the UN ECLAC

53 See LØlØ, pp. 607-621.

54 See CEPAL, 1991, pp. 14-44, and 73.

55 See Gene Grossman and Alan B. Kruger, Economic Growth and the Environment , in (Quarterly Joumal of Economics, vol. 110, pp. 353-377; Barkin, 1998, pp. 42-44; and Richard T. Carson and Donald R. McCubbin, Policy Paper 32, University of California Institute on Global Conflict and Cooperation Emissions and Development in the United States: International Implications, at http://www-igcc.ucsd.edu/igcc2/PolicyPapers/pp32.html

56 See Barkin, 1998, pp. 15-16.

57 See CEPAL, 1991, pp. 30, 34, 40, 42, 45 and 111.

and many others studied international inequality affecting developing countries. During the 1980 s the study of international inequality centered on high international interest rates without precedent, causing the debt crisis and the lost decade. Recently, the IMF adjustment programs have seriously constrained internal redistribution policies stimulating superfluous consumption.58 Furthermore, the system promotes low wages in poor countries which are used to attract foreign investment or to reach comparative advantages in world markets. Sustainability is not possible in Latin America as long as the expansion of capital enlarges the ranks of the poor and impedes their access to the resources needed for mere survival.59

The UNDP recently stated that globalization is increasing inequality and social exclusion, even in developed countries where more than 100 million people live in poverty and the unemployment rates of young people have reached more than 30%.[60] James Goldsmith says that the free trade system will hurt the working class as competition for jobs will drastically increase through the incorporation to the world economy of 4,000 million low paid workers of China, India, Bangladesh, the Philippines, Vietnam, and other countries which have wages that can be up to 47 times lower than those in France.[61]

While developing countries require resources for environmental protection and there are claims that the international free market system deprives them from those resources, international organizations such as the WTO and the British Council are promoting environmental trade sanctions which take further resources from the poor. 62 Jagdish Bhagwati, while defending free trade opposes environmental sanctions by governments and proposes organizing consumer private boycotts of commodities from developing countries, by environmentalist groups. This not only works against free trade, but also increases potential conflict between North-South progressive groups.[63] These negative arguments as well as eco-labeling practices discriminating against developing countries should be avoided and replaced by positive incentives which provide poor countries with additional resources to solve environmental problems.

58 See Margain, 1995, pp. 18-19, 121, 134-35 and 150-152.
59 See Barkin, 1998, p. 17; and LØlØ, 1991, pp. 607-621.
60 See PNUD, 1998, 2, 6, 27, 29, and 47.
61 See Goldsmith, 1995, pp. 27-28.
62 On the WTO see http://www.iisd.ca/linkages/journal, 10/28/98, and http://www.wto.org/wto/dispute/distab.htm#shrimp; on the British Council see, http://www.iisd.ca/linkages/journal, 10/28/ and http://www.britcoun.org/seminars/erwt/index.htm
63 See Jagdish Bhagwati, The Case for Free Trade , in Scientific American, No, 269, November 1993, pp. 42-49.

A wide range of solutions to promote Sustainable development in poor countries is proposed and includes taxes on contaminating agents; subsidies and financial aid channeled to develop and use ecoefficient technology, to enhance scientific, technological and educational capabilities, and to transfer technology;

controls to limit overuse of fragile land; environmental education and advertising; more ecoefficiency and Sustainable development investment programs and projects; technical assistance and information about sound environmental technologies for small enterprises; and measures to reduce technological dependence on environmental technologies, to increase the value added to export of primary goods, to improve access to market of developed countries and to avoid environmental criteria used as a pretext for trade barriers for their exports.[64]

In the above context, we believe that efforts to promote Sustainable development should be placed in the following priority areas:

1. Building a Strong Progressive Compensating Coalition. There are significant obstacles to change towards Sustainable development. Overcoming these obstacles requires more than well-intentioned policies, it requires a new correlation of social forces, a move toward broad- based democratic participation in all aspects of life within each country and in the concert of nations.[65]

According to the UNDP there are strong areas of convergence of interests between progressive groups including environmentalists, developmentalists, human rights, women and children rights, responsible consumer groups and NGO s. It highlights the need and real possibilities that exist to form stronger alliances of such groups with the purpose of supporting a real change towards production and consumption patterns with social and environmental responsibility.[66] Broad-based democratic participation of several different groups can be especially effective, such as the NGO Working Group that aims at coordinating the efforts of a wide variety of national and local organizations, and developing a convergence of vision and collaboration between development and environment NGO s.[67]

2. Awareness and Information to Channel the Purchasing Power of the Res-

64 See CEPAL, 1991, pp. 29-30 and 136-140; on extraction of natural resources taxes, see Tablot Page, El Impuesto a la Extracci n como un instrumento de la equidad intratemporal , in Daly, 1989, pp. 316-333.

65 See Barkin, 1998, p. 16.

66 See PNUD, 6-7, pp. 101-106.

67 See Barkin, 1998, p. 47.

ponsible Consumer. More than 40 years ago, in American Capitalism, Kenneth Galbraith introduced the concept of compensating power formed by labor unions, consumer organizations, cooperatives etc., which could act together, through their combined purchasing power, as a viable and necessary mechanism to balance the unmatched power of big corporations. Later, in his book The Opulent Society (1968), Galbraith noted serious difficulties in forming the compensating power due to political conservatism and publicity manipulation of the consumer manifested by a growing lack of solidarity of the upper and middle classes worried only with satisfying superfluous needs through high levels of consumption.68 However, current ecological and social contradictions caused by neoliberal excesses have awakened tendencies of awareness and organization of responsible consumers. There are more than 100 organizations, mainly in Europe and in the U.S., that promote equitable trade by selling directly, in 45,000 specialized stores, the products of small producers thus benefiting 800,000 households or around 5 million people. Benefits are frequently amplified since, through cooperatives, profits are invested in community development projects. Ecolabeling and equitable trade labeling is being promoted to offer information and awareness for responsible consumers.69 The use of social labeling and marketing networks should be strongly encouraged, covering products of many other small businesses, peasants, fishermen, craftsmen, etc., as well as products of developing countries that by being commercialized would provide resources for Sustainable development.

3. Intellectual Activism. There is a need for more studies, information and advertising on the causes of inequality, its links to environmental protection, and on ways to correct current practices that damage Sustainable development. This is required to compensate and counterbalance commercial publicity biased against Sustainable development. Such studies should include strategies and institutions oriented toward the agglutination of convergent interests of progressive groups and analysis aimed at reducing unnecessary conflict, such as the ones presented in this paper.

4. Promoting Sustainable Distribution of Resources. This implies the reduction of superfluous consumption patterns by the rich in the North and, especially in the South, in order to increase availability of resources to be allocated to priority Sustainable development investment programs. Raising funds could be

68 See Kenneth Galbraith, La sociedad opulenta, MØxico, Planeta, 1992, II, III and 139-149.

69 See PNUD, pp. 87 and 90.

accomplished through taxes (on international trade, international financing, extraction of nonrenewable products, contamination levels, consumption, etc.) particularly on superfluous goods and highly contaminating activities. Priority programs should include those aimed at reversing inflicted damage and those supporting international Sustainable development cooperation.

5. Education, Outreach and Awareness Programs to Promote Sustainable Development Values. Overconsumption is caused by advertising- induced egocentric cultural values that emphasize the achievement of satisfaction and happiness through material means, frequently at high social and environmental costs, rather than through spiritual development and solidarity with mankind. A modern economist measures the standard of living by the amount of consumption; his objective is to get satisfaction through the highest consumption. For a Buddhist economist this is highly irrational since it considers consumption only as a means to achieve human satisfaction; his objective is to achieve the maximum satisfaction with the minimum consumption.[70] Awareness activism should be encouraged to provide responsible consumers with enough information about the ecological and social consequences of superfluous consumption, thereby allowing them to make better and more responsible consumption choices.

6. Research, Development and Dissemination of Free Socially and Environmentally Friendly Technology. Efforts have been made to develop environmental friendly indicators. The UN is working on improving indicators of performance, productivity, environmental impact, and changes in consumption and production patterns to be used voluntarily by governments. But the UN thinks more work is needed for the development of operational definitions and methodological descriptions of the indicators.[71] The UNCTAD recently published a comprehensive guidance for best practice standard green accounting and reporting (environmental costs and liabilities in financial statements) to be used by enterprises, managers, regulators and standard-setting bodies. These standards introduced the concept of corporate equitable obligations, beyond purely legal ones, and closes a loophole that is particularly important to developing countries where transitional corporations account for, and report on their environmental

70 E. F. Schumacher, La economa budista , in Daly, 1989, p. 150.

71 See http://www.iisd.ca/linkages/journal/10/28/98, and http://www.eclac.cl/english/aruba/lcg2024/summ.htm; for details about the indicators on UN Consumption and Production Patterns see:
http//www.iisd.ca/linkages/journal/ 10/28/98; for Measurement of ecological impact in investment projects and in national accounting, See, CEPAL, 1991, pp. 38-48.

liabilities arising from legal obligations, but are silent about such liabilities elsewhere due to the absence of legislation.72

However, social impact indicators have been relegated in the UN indicators and their inclusion should become an urgent priority. Social indicators should include the amount of jobs created and maintained (capital and labor intensity) to deal with widespread unemployment problems, and whether the destination of externalities and profits goes to Sustainable development activities, or to promoting income concentration and superfluous consumption. To identify and assign (Internalize) prices to resources and waste flows is required for environmental purposes, but the question remains who would capture financial resources from new adjusted prices and how they may be distributed. If Sustainable development is to be successful such resources should be oriented to reverse inflicted damage;

to compensate communities for the mining of their resources; to invest for replacing those resources with new production activities or for community development programs; to develop free and friendly technology, or to channel resources for other international, national or local income redistribution purposes.[73] International negotiations should aim at demanding obligatory Sustainable distribution measures and not merely green indicators to be used voluntarily by governments.

7. Support of Small Firms. E. F. Schumacher points out that current technological trends based on economies of scale introduce greater specialization and division of labor, enabling firms to become bigger, more complex and expensive, and in a certain sense more violent, thereby enslaving man. We should move in the opposite direction: developing technology towards the small, the simple, the inexpensive and the non-violent which would serve mankind. Small firms with a human scale, he says, have several advantages, they can function with little resources, which is particularly relevant given the scarcity of resources in our time; they are ecologically cleaner and have fewer possibilities of causing damage within the tolerance margins of nature; they could descentralize production allowing for better population distribution, better use of space, and eliminating conglomerated and monstrous transportation; and they can employ more people that would live in their communities thereby enhancing local culture.[74] Greater efforts are needed to induce support by Sustainable distribution responsible consumers to buy small firms products.

72 See http://www.iisd.ca/linkages/journal/ 10/28/98, and http://www.unicc.org/unctad/

73 See Barkin, 1998, p.46.

74 See E. F. Schumacher, La Edad de la Abundancia: una concepci n cristiana , in Daly, 1989, pp. 141-143.

8. Efforts for Progressive Entrepreneurship. Raising economic efficiency of ecological and socially desirable activities is possible and urgently required. Henry Ford is an example of pioneer progressive entrepreneurship that combined chain production efficiency, austerity of his Model T, and social benefits by making the price of cars affordable for workers. Sam Walton, founder of WalMart, who started building small stores in small towns, combined efficiency and austerity for his enterprise capitalization, and was able to build a powerful commercial chain, using it to support small businesses.[75]

Other current examples of efficient and competitive progressive entrepreneurship are: *a)* the Italian consortiums which organize the activities of thousands of small businesses through chain production, flexible specialization and outsourcing, enabling the whole system to enjoy benefits of economies of scale; *b)* the Japanese system of financial, fiscal, technological and marketing support to small businesses using strategies of outsourcing through multiple chains, which may include up to 30,000 firms; (c) the case of substantial financial and technical support of the U.S. Small Business Administration; *d)* the case of the Structural Policies of the European Community aimed at developing industrial cooperation networks for small businesses;

and *e)* the cases of aid to small businesses through support networks, associations, strengthening of production chains and linking universities and research centers, with small businesses, including the Programa Bolivar for Latin-America.[76]

Progressive groups should intensify efforts to develop studies, programs and institutions aimed at organizing a strong convergent interests coalition with participation of governments, NGO s, labor unions, groups of consumers, human and minority rights, cooperatives, small businesses, peasants, etc. Sustainable development groups should form globalized and efficient cooperation networks capable of matching monopolies within their own rules of the game: through efficiency, competitiveness, and an aggressive international system of information and marketing. Only this way we can recover the negotiating power needed to save the world from an ecological and social collapse and to reach social justice.

75 Sam Walton and John Huey, Sam Walton, Made in America. My Sfoy, Toronto, Sidney, Auckland, Doubleday, 1992.

76 See Secretaria General del Programa Bolivar. Foro Bolivar de la Empresa Latinoamericana, Venezuela, ENEDE C.A., 1996, and, Oscar Espinosa Villarreal, El impulso a la pequeæa y mediana empresa, MØxico, FCE, 1993.

THE M XICO / US BORDER AND THE SAN DIEGO-TIJUANA REGION

The Mexico/US border and the San Diego-Tijuana region represent a perfect example of economic growth without Sustainable development: a region with impressive urban and industrial expansion that has suffered severe consequences due to free market globalization and federal macroeconomic policies that neglect ecological and social priorities. Free market forces have promoted extremely high GNP growth rates as the border cides combine the most effective comparative advantages: financial, technological, marketing and entrepreneurial resources from the U.S., inexpensive Mexican labor force, and proximity to the U.S. and the California huge markets. The region has become a golden land of business opportunities that has attracted workers from all over Mexico and from other countries. But opportunities have not been equally shared and the border region has also become a land of huge asymmetries, and perhaps the region were social inequality is the highest in the world.

Economic conditions in the Mexico/U.S. border region are highly asymmetrical: the U.S. GDP is close to 18 times that of Mexico; income produced by the greater Los Angeles area exceeds the GDP of the entire country of Mexico; and wealth created by the County of San Diego is close to 23 times larger than that of the Municipality of Tijuana. These enormous differences in availability of resources make government transborder cooperation difficult.[77]

Migration to the northern Mexican border area caused by laissez-faire macroeconomic trends puts enormous pressures on the social and environmental conditions of the region. Mexican policies supporting capital intensive industries, thereby causing unemployment in the rural areas and impoverishing the peasants, have resulted in rural-urban migration, particularly from the poorer South to the northern border area.

Unlike conditions in the European Union and recommendations of liberal economic theory, the U.S. did not allow NAFTA to include free international movements of workers.[78] In addition, the U.S. migratory policy against Mexican

77 Paul Ganster, The U.S.-Mexican Border Region, Border PACT Report, http://www.borderpact.org/ 29/9/1998.

78 Liberal theory points out that welfare benefits are maximized with freedom in all markets, including not only free trade of goods and services, but also free capital and labor markets. On welfare gains to the U.S. and Mexico that could be obtained through free migration, and problems caused by migration restrictions see dark W. Reynolds, Economic Outlook in the 1990 s: The United States , in U.S. -Mexican Industrial Integration. The Road to Free Trade, Sidney Weintraub, Luis Rubio y Alan Jones (eds.). Boulder, Westview Press, 1991, pp. 38-40; Sidney Weintraub, Free Trade in North

workers has been hardened. Under such conditions, many Mexican workers seeking jobs in the U.S. cannot cross the border and stay in the northern border region putting further pressure on urban growth.

TABLE 1. *Population in México and its Northern Border Cities.*

	(000)	(000)	(000)	1980/95 Growth%		1990/95 Growth%	
Border Cities	*1980*	*1990*	*1995*	*Period*	*Annual*	*Period*	*Annual*
(1)	*(2)*	*(3)*	*(4)*	*(5*	*(6)*	*(7)*	*(8)*
Tijuana	428	747	989	131.1	5.6	32.4	5.7
Tecate	31	52	62	100.0	4.7	19.2	3.6
Nogales, Sonora	68	107	134	97.1	4.6	25.2	4.6
Ciudad Acuña	42	57	82	95.2	4.6	43.9	7.5
Ciudad Juárez	567	850	1010	78.1	4.0	18.8	3.5
Agua Prieta	34	39	56	64.7	3.3	43.6	7.5
Reynosa	213	283	337	58.2	3.1	19.1	3.6
Matamoros	239	303	363	51.9	2.8	19.8	3.7
Piedras Negras	80	98	116	45.0	2.5	18.4	3.3
San Luis Río Colorado	93	112	133	43.0	2.4	18.8	3.5
Mexicali	511	602	696	36.2	2.1	15.6	3.0
Nuevo Laredo	203	220	275	35.5	2.0	25.0	4.6
Cities' Total	2 509	3 470	4 253	69.5	3.6	22.6	4.2
MEXCO TOTAL	69 660	86 150	94 780	36.1	2.1	10.0	1.9

SOURCE: For Cities: US Environment Protection Agency EPA 160-R-96-003, US-México Border XXI Program Framework Document October 1996; for Total México, IMF, Estadísticas Financieras Internacionales Anuario 1996.

As shown in Table 1, population growth in Mexican border Cities has been impressive. While Mexican population growth averaged 36.1% (col. 5) from 1980 to 1995 (2.1% annual growth, (col. 6), the average growth of the border cities considered in this study was 69.5% (3.6% a year), almost twice Mexico s average. As shown in column 1, cities were ranked according to their population growth in that period (cols. 5 and 6). There we can see that Tijuana showed the

America: Has its Time Come? , in The World Economy, No. 14, March 1991, p. 63; and Guillermo Aramburo Vizcarra, Economic Integration and Job Markets on the Mexican-United States Border , in The Mexican-U.S. Border Region and The Free Trade Agreement, Paul Ganster and Eugenio O. Valenciano (eds.). Institute for Regional Studies of the Californias de San Diego State University, 1992, pp. 62-65.

greatest increase: 131.1% in those 15 years with a 5.6% yearly growth, around three times Mexico s average. The same trends are observed in the period 1990/1995 (cols. 7 and 8) where the population growth of Tijuana and some smaller cities was around three times larger than Mexico s average.

TABLE 2. *Population in México and its Northern Border Zones (200Km from the border).*

	(000)	*(000)*	*1990/95 Growth%*	
Border Zone	1990	1995	Periodo	Annual
Baja California	1410	2108	49.5	8.4
Chihuahua	870	1085	24.7	4.6
Coahuila	191	230	20.4	3.8
Tamaulipas	1015	1194	17.6	3.3
Sonora	395	440	11.4	2.2
Nuevo León	17	18	5.9	1.2
Border zone total	3 898	5 075	30.2	5.4
México TOTAL	86 150	94 780	10.0	1.9

SOURCE: same as in table 1.

As shown in Table 2, from 1990 to 1995, population in the Mexican border area, covering 200 kilometers from the border, increased 30.2% (5.4% a year), almost three times more than the Mexican average. Baja California and Chihuahua experienced the highest population growth in that period. Considering that many economists believe that a yearly population growth over 2% places excessive burdens on the economic and social development of poor countries, we can see in both tables that demographic growth in the border region is an enormous challenge to Sustainable development.

As shown in Table 3, a similar but more manageable situation occurred in the U.S. border cities where, from 1990 to 1995, population growth was 12%, around twice that of the U.S. average. In both countries, migration was a key factor of population growth. In 1980, 48.9% of the population of the border counties of the Californias were migrants: 31.8% in the Mexican Municipios and 58.2% in the U.S. counties. From Tijuanas 6.9% population growth between

1987 and 1988, only 1.9% was by natural increase and 5% was caused by immigration.79

TABLE 3. *U.S. Population and its South Border Area.*

	Population1990	*Population 1996*	*% Incr. 90/96*
Zone 1	2 990 612	3 340 406	12%
Zone 2	8 668 923	9 637 747	11%
Zone 3	5 563 403	6 298 510	13%
TOTAL	17 222 938	19 276 663	12%
Border States	51 926 828	57 140 931	10%
National	262 755 000	277 469 280	6%

Source: U.S. Census Bureau. (1991) (1996).
http://www.borderpact.org/ 29/9/1998.
Zone 1 = Border Cities
Zone 2 = Border Region closer to the border
Zone 3 = Border Region further from the border

The impressive urban and industrial growth, as well as the scarcity of resources for public services are the two main causes of deterioration of the social and environmental conditions of the border region. The US-Mexico Border XXI Program points out that population growth and industrialization in the border has exceeded the infrastructure capabilities of the region, resulting in shortages of public services and environmental degradation. It also highlights the fact that, although Mexican wages are higher in the border region than in the rest of the country, border communities have more unmet needs than the national average.[80]

Paul Ganster indicates that the rapid population growth of border cities, driven by the expanding border economy, has created a continuing infrastructure and urban services crisis in border cides, particularly in the Mexican cities that have fewer resources and less ability to cope with the burgeoning demand. Typically, Mexican border towns have grown at about twice the rate of their U.S. counterparts. This creates an impossible task for city planners and social service agencies.[81] The impressive urban growth has strained rela-

79 See Ganster, 1998.

80 See US Environment Protection Agency EPA 160-R-96-003, US-Mexico Border XXI Program Framework Document, October 1996: III.2-III.3 y appendix 8.2.

81 See Ganster, 1998. On migration and population trends in the Mexico/US border see also Francisco Marmolejo

tions particularly in Tijuana and Ciudad JuÆrez that show housing, sewage, water, pavement, roads, and communication problems and environmental damage.82

There are other examples of substantial shortages of resources for Sustainable development purposes in the Mexican side of the border. Lack of financial resources and of access to clean technologies increase the environmental degradation of small Mexican businesses.[83] Financial and technological shortages are also endangering valuable maritime species in the Northern Sea of Cortez.[84] And lack of proper infrastructure precludes the establishment of several feasible aquaculture and ecoturism small projects that have been identified as being able to help the environmental and social conditions of the upper Sea of Cortez.[85]

Worker Migration has distorted the regional labor market producing an over-supply of workers in relation to existing job opportunities and new jobs created by economic expansion. This situation lowers wages and attracts more businesses; however, it reduces the workers living standards and increases poverty among the unemployed, thereby deteriorating social conditions and increasing social pressures, even on the U.S. side of the border.[86] In addition Mexico s IMF adjustment programs have lowered the wages and living conditions of workers. John Sharp, The Texas Comptroller of Public Accounts, claims that labor over-supply caused by migration has lowered wages on both sides of the Texas border. He points out that if there is an economic decline in Mexico, migration from the poorer South to the border region may increase social pressures to critical levels on the Mexican side and would wash out the modest wage gains on the Te-

and Fernando Le n-Garc a, Higher Education in the U.S.-Mexico Borderlands: A Profile. Border PACT report, http://www.borderpact.org/ 29/9/1998.

82 See Eduardo Zepeda Miramontes, El TLC y la industrializaci n en la frontera norte de MØxico , in Investigaci n Econ mica, No. 208, April-June 1994, p. 47.

83 See Alfonso Mercado Garc a, and Oscar Fernandez Constantino, La contaminaci n y las pequeæas industrias en MØxico , in Comercio Exterior, Vol. 48, No. 212, December 1998, pp. 960-965.

84 See Mar a de Lourdes Blanco Orozco, Pobreza y explotaci n y recursos pesqueros en el Alto Golfo de California , in Comercio Exterior, Vol. 48, No. 212, December 1998, pp. 1002-10011.

85 See NoØ Ar n Fuentes Flores and Carlos Israel VÆzquez Le n, Proyectos sustentables en la Reserva de la Biosfera del Alto Golfo de California , in Comercio Exterior, Vol. 48, No. 212, December 1998, pp. 1012-1020.

86 On effects of migration on poverty, scarcity of public services, unemployment and social tensions in the northern Mexican border see Beatriz Calvo Pont n, The Border: An Approach Through History and Culture, Border PACT Report, http://www.borderpact.org/ 29/9/1998; and, on its effects in the U.S. side of the border see Jeannette Money, The Management of International Migration: Short-Term Dislocations versus Long-Term Benefits , in Policy Paper 34, University of California Institute on Global Conflict and Cooperation, 1998 http://www-igcc.ucsd.edu/igcc2/PolicyPapers/pp34.html.

xas side. Sharp explains that such a fragile situation can only be stabilized with a permanent growth of job opportunities in northern Mexico and with better education and training to improve skills and productivity.87 Otherwise, Texas border workers could face a continued cycle of poverty and eventually a no-win race to the bottom against workers in northern Mexico .88

Thus, development of human resources is required and it has been promoted in the Mexico/U.S. border region through education and training programs with participating important universities.[89] On a trilateral NAFTA level there are also important efforts of research, education and training efforts for cooperation with universities.[90]

Along with Sharp s argument, we believe that successful Sustainable development in the Mexican northern border requires an effective national policy of balanced regional development covering all of Mexico, with special priority to encourage growth in the poorer central and southern regions, particularly in the rural areas; it also calls for training and education programs aimed at increasing the skills and wages of workers. Successful Sustainable development also requires the development of efficient intermediate environmental friendly technologies that will provide more job opportunities per unit of capital invested, and support for small businesses which are more labor intensive than large firms.

Mexico s northern border region, particularly in the North- West area, is very far away from the country s main production centers and has underdeveloped transportation links with the rest of the nation. Given their isolation from the rest of Mexico, their relatively small economic size, and their narrow production diversification, northern border cities import a large amount of their inputs and consumer goods requirements. Therefore, a great proportion of wealth created in Mexico s northern border does not remain in Mexico, but goes to the US, a fact which also constitutes another source of asymmetry and poverty on the Mexican side of the border. Maquiladora industries use only 2% of Mexican inputs and import the remaining 98%, leaving little added value on the Mexican side in the form of low wages and subsidized public services, with little benefits for the rest of the country.[91]

87 John Sharp, Bordering the future, Challenge and Opportunity in the Texas Border Region, Austin, Texas Controller of Public Accounts Publication, No. 96-599, 1998, pp. 13-15.

88 See Sharp, p. 14.

89 See http://www.borderpact.org/ 29/9/1998.

90 See Eds. Norris C. Clement and Glen Sparrow, inlegrating Higher Education in North America: From Wingspread to San Diego, IRSC, San Diego State University, 1998.

91 See MargÆin, 1995, pp. 13, 15,182,192,234-235 y 240-242.

Mexico s dependence upon imported inputs has been pointed out as the main constraint to development, and its liberalization policy has lowered its national economic integration and increased such a dependence. Small businesses which provide several social benefits are relatively less prepared for international competition than large firms. Mexico s abrupt trade liberalization since 1987 and its overvalued currency that subsidized imports, particularly from 1992 to 1994, bankrupted many Mexican firms, mainly small ones. Bankruptcy of Mexican firms that provided inputs to other firms made the country more dependent upon imported inputs, disintegrated production chains and lowered the national value added to production and national income, producing greater poverty and inequality.

It is important to point out that Mexico s import dependence upon the U.S., particularly in its northern border region, if properly understood by progressive groups, can become a key element to foster a win- win situation of border cooperation: given Mexico s high propensity to import, income gains on the Mexican side of the border would immediately return to the U.S. side through higher U.S. exports. Income gains on the Mexican side would also restrain migration towards the U.S. and provide more resources for Sustainable development. Thus, distributive policies that reduce asymmetry in the border can benefit both sides of the border.

Successful Sustainable development also requires that Mexico pursue macroeconomic and trade policies that promote, or at least do not disintegrate production chains; an industrial policy that supports the establishment of small business and agribusiness networks, and the improvement of economic links between the northern border and the rest of the country, thereby increasing national income and promoting a balanced growth capable of lowering migration pressures, and the development of a better transportation infrastructure that will end the isolation of the Tijuana region, particularly through maritime transportation that could link the Sea of Cortez region.

Social and ecological pressures caused by migration and inequality are generating tensions between and within the bordering countries. Migration has become one of the biggest sources of bilateral conflict, and it has increased levels of extreme poverty and misery in the border region with great shortages of public services. In this context, uncoordinated groups, guided by their own interests, produce unequal results favoring the most powerful and causing, in many cases,

tension and polarization among regional groups and subjects. This has become a source of local, national, and cross-border conflicts which is expected to intensify over time if immigration to the U.S. and to the border zone keeps growing. Estimates indicate that during the 1990 s between 4 and 5 million Mexicans entered the U.S.92

There is controversy within the U.S. over the distribution of the costs and benefits of immigration. Mexican migrants contribute to the local and national economy of the U.S.; however, they stay mainly in the U.S. border region straining public services and causing social problems through job and wage competition with U.S. area workers. Studies show that the allocation benefits of migration to the U.S. economy are not equitably distributed, since the social costs are paid, in much greater proportion, within the border region.[93]

As has been shown, there are substantial challenges to Sustainable development in the border region which should be properly and urgently addressed in order to reduce self defeating potential conflict. In this context, it becomes necessary to further analyze macroeconomic forces and convergence of interests by finding ways to bridge the gap between the North and South perspectives.

There is some evidence of North-South perception differences and common grounds for cooperation. A 1997 survey responded by 11 Mexican and 27 U.S. universities of the border region was conducted to determine the activities, perceptions and attitudes of institutional leaders toward the border zone. When asked which border issues require attention, US institutions gave more priority to immigration while Mexican institutions gave more priority to economic development and/or trade, and both gave substantial priority to education. Their current involvement showed consistency with the priorities expressed. The important activities of all education institutions and Mexican universities had no involvement with immigration issues, but it also showed inconsistencies in a small number of Mexican institutions involved on economic development and trade (27% of the institutions) and in a greater number of US institutions involved more on economic development and trade (52%) than on immigration

(26%).94

92 See Calvo, Border PACT Report, http://www.borderpact.org/29/9/1998.

93 See Jeannette Money, The Management of International Migration: Short-Term Dislocations versus Long-Term Benefits , in Policy Paper 34, University of California Institute on Global Conflict and Cooperation, 1998 http://www-igcc.ucsd.edu/igcc2/PolicyPapers/pp34.html.

94 See Fernando Le n Garc a and Francisco Marmolejo, The Border Pad Survey, http://www.borderpact.org/, Revised 29 September 1998.

Although there are great challenges, the Mexico/U.S. border and the San Diego/Tijuana region may have substantial opportunities to find answers to Sustainable development problems through effective transborder cooperation:[95] (a) there are important common transborder environmental and social problems that spread though large areas on both sides of the border; (b) the Mexico/U.S. border has become a region of economic and cultural integration with increasing political autonomy which allows effective levels of local transborder cooperation; (c) NAFTA has made border issues a high priority on the bilateral policy agenda; (d) important cooperation networks have been established involving universities, NGO s, local governments, private foundations and large business organizations; (e) given their bilateral nature, border problems usually have important media exposure (as in the recent case of the Sierra Blanca nuclear waste disposal) which promote awareness; (f) there is a convergence of regional vs. national interests; and (g) there are high levels of growth, cultural synergy and substantial combined resources for international comparative advantages. However, cooperation results could be hindered by conflict, by lack of coordination among progressive groups, and by negative social and environmental impacts of macroeconomic policies promoted at the national and international levels.

Perspectives of Sustainable development in the border region will not depend only on local efforts, but also on federal policies and macroeconomic trends which may be more important. The Mexican border region had an exclusive bilateral preferential tariff system which enabled the spectacular growth of the maquiladora industry, or in- bond industries. However, NAFTA, by spreading free trade throughout Mexico, will nullify the relative legal advantages of the border area enabling maquiladora growth in the rest of the country.[96] Paradoxically, this may help Sustainable development in Mexico s northern border since it will keep its comparative advantage of proximity to the U.S. market and resources, while the development of maquiladoras in central and southern Mexico, with greater possibilities of spreading externalities through wider use of Mexican inputs from large and small Mexican firms, may lower migration pressures to the border. But this will depend on the federal policy at the macro level. The use of the wrong technology and wrong trade policies may have substantial negative consequences for the border region. James Goldsmith warns that, as a result of NAFTA

95 See Ganster, 1998.

96 See Zepeda, 1994, pp. 40,48-49.

and trade liberalization of highly efficient commercial agricultural products coming to Mexico, 10 million relatively inefficient Mexican peasants could be displaced, loose their jobs and migrate to cides.97

Current cooperation in the border region has shown important achievements, but it should go beyond immediate regional and local problems, and address a wider range of macro aspects as those explained in this paper.

The US-Mexico Border **XXI** Program, headed by Mexico s Secretariat of the Environment, Natural Resources and Fisheries (SEMARNAP) and the U.S. Environmental Protection Agency (EPA), seeks to consider a balance among social and economic factors to Sustainable development. However, although it considers programs to improve environmental health with social impact, it fails to consider a comprehensive approach to social development; it has no programs or projects to improve employment conditions and opportunities, to fight poverty, or to help rural activities and small businesses. It says the Program will work in coordination with other Mexican programs oriented towards social development and derived from the National Development Plan, such as those for poverty eradication, rural development and industrial policy, but it does not explain the nature of such coordination, and most of the relevant Mexican institutions are notoriously absent in its organization chart. Something similar happens with key U.S. institutions.98

The strategy expressed by the bilateral border program of the decentralization of environmental management through state and local capacity building is very important for improving the execution of projects. But It seems that its strategic planning lacks a broader framework, which would include a comprehensive social and economic development approach along the lines explained in this paper, with participation of Mexican development banks, such as Nacional Financiera and Banco de Comercio Exterior, the Secretariat of Trade and Industry (SECOFI) and research institutions needed to develop social and environment friendly technologies. On the U.S. side, the Small Business Administration, Small Business Development Centers, research institutes and other relevant institutions also need to be incorporated.

Other public and private programs in the border region consider a series of important concrete actions to help the environment. However, they do not in-

97 See Goldsmith, 1995, pp. 37, 38 and 184; Mexican figures were taken from: Alianza por un Comercio Responsable, NAFTA s First Year Lessons for the Hemisphere, Washington, December 1994.

98 See US-Mexico Border XXI Program Framework Document, October 1996.

dude the study and correction of economic and social imbalances caused by macroeconomic policies and globalization that have been analyzed in this paper. It seems that Sustainable development programs of the border region deal with environmental enforcement and solution of symptoms instead of focusing on the prevention of the causes that damage social and environmental development.

Comprehensive Sustainable development programs in the border area should be conceived within a broader national and bilateral framework that considers the macroeconomic problems that affect the region, as well as a strategy of balanced development throughout Mexico, otherwise, border programs will have limited results.

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