

Appendix: President's Council on Sustainable Development: Fifteen Principles (1992) (with Herman Daly's Comments) and the United Nations Sustainable Development Goals (2015)

This original initiative was developed under President Bill Clinton in 1992 but is still relevant in 2016. In 2015 the United Nations created a set of Sustainable Development Goals (SDGs), a new, universal set of goals, targets and indicators that UN member states will be expected to use to frame their agendas and political policies over the next 15 years.

Below Daly [1] quotes each of the fifteen original principles, and adds a brief comment aimed at moving the principle toward more specificity and clarity. In most cases his comments would not receive the consensus accorded the original principle precisely because of the added specificity. Although it would be possible to impose a stricter order on the discussion than the one inherent in these fifteen principles, Daly thinks it is important to accept them as our framework, even if a loose one, in order to see the extent of present consensus and understanding in all its incompleteness, and to avoid any possible misrepresentation by paraphrase or summary.

The UN SDGs are listed after this commentary.

1. We must preserve and, where possible, restore the integrity of natural systems - soils, water, air and biological diversity - which sustain both economic prosperity and life itself.

Yes, indeed. Restoring natural systems requires reducing our physical demands on those systems (as sources and sinks for the economy) in order to allow them to recuperate. Continuing expansion of the scale of the human economy will require the takeover of ever more of the habitat of other species and is inconsistent with maintaining biodiversity and ecological life-support systems.

2. Economic growth, environmental protection, and social equity should be interdependent, mutually reinforcing national goals, and policies to achieve these goals should be integrated.

Maybe these goals should be mutually reinforcing, but frequently they conflict. To sort out conflicts and harmonies we must distinguish growth (quantitative increase by assimilation or accretion of materials) from development (qualitative improvement, realization of potential). The construct "gross national product" conflates these two totally different things, as does the usual concept of economic growth, thought of as growth in GNP. Quantitative increase of the scale of the economy by assimilation or accretion of material from the finite environment is not sustainable. Qualitative improvement and realization of potential may well continue forever - at least we cannot specify any obvious limits to its sustainability. Sustainable development therefore is development without growth-that is without throughput growth beyond the regeneration and absorption capacities of the environment. The path of future progress is development, not growth. This distinction must be made or confusion is inevitable.

3. Along with appropriate protective measures, market strategies should be used to harness private energies and capital to protect and improve the environment

Yes, the market should certainly be the main mechanism for solving the problem of efficient allocation of resources. There are two prior problems that have to be solved politically as the precondition for the market to work in this way. We must politically and socially limit the total scale of resource throughput for key resources to a level that is sustainable. This provides a sustainable scale. Second, the rights to deplete or pollute up to the scale limit are no longer free goods, but valuable assets. Who owns them? The just

distribution of initial ownership has to be settled socially. Only after these context questions of a sustainable scale and a just distribution have been settled socially can the individualistic market solve the question of efficient allocation. We must use the market to solve the allocation question, but we cannot expect it to solve the scale and distribution questions.

4. Population must be stabilized at a level consistent with the capacity of the earth to support its inhabitants.

This is crucial. For clarity we should add, ". . . support its inhabitants at a level of per capita wealth sufficient for a good life." We cannot precisely define "a good life," but most would agree with Malthus that it should be such as to permit one to have a glass of wine and a piece of meat with one's dinner. Even if one is a teetotaler or a vegetarian that level of affluence is desirable, and would serve by it-self to rule out populations at or above today's level. What really must be stabilized is total consumption, which of course is population times per capita consumption. Both of the latter factors must be reduced.

The nation, not the earth, will be the effective unit in which population and consumption are controlled. Different nations will make different choices: some will not control either population or consumption, others will. Of those that do control total consumption, some will choose high per capita consumption and low population, others will choose the reverse. Free migration, or even free trade with free capital mobility, will undercut any national policies of self-discipline and restraint in consumption and population growth. The current thrust toward economic globalization is, short of the unappealing prospect of world government, likely to be contrary to sustainable development. Setting a successful national example for possible emulation may be the best contribution our own nation can make toward global sustainable development.

5. Protection of natural systems requires changed patterns of consumption consistent with a steady improvement in the efficiency with which society uses natural resources.

What is needed in the first instance are reduced levels of consumption, not just changed patterns. We certainly must improve the efficiency with which society uses resources (development), but the best way to do that is to limit the level of resource throughput (growth), thereby forcing progress onto the path of development rather than growth, as suggested in comment on point 2.

6. Progress toward elimination of poverty is essential for economic progress, equity, and environmental quality.

Elimination of poverty, in the absence of growth (which so far has failed to reduce poverty anyway), will have to come from greater sharing, more population control, and development in the sense of the term here defined. The political difficulty of facing up to sharing, population control, and qualitative development as the real cures to poverty will sorely tempt politicians to resurrect the impossible goal of growth - more for all with sacrifice by none, for ever and ever, world without end, amen. No doubt they will want to call it "sustainable growth"!

7. All segments of society should equitably share environmental costs and benefits.

Yes. This should be done through internalization of environmental costs into prices so that the polluter and the depleter pay. One powerful way to move in this direction is to shift the tax base from income (value added) to throughput (that to which value is added). Why tax what we want more of-employment and income? Why not tax what we want less of-depletion and pollution? This shift could be revenue neutral, and supplemented with a stiff income tax on very high incomes and a negative tax on very low incomes in order to maintain progressivity. Since we have to raise public revenue somehow, and since almost all taxes

are distortionary, why not induce the "distortions" we want instead of those we do not want? Equity is served because the polluter and the depleter pay, yet the inevitable regressivity of a consumption tax is countered by a negative income tax on very low incomes and a high tax on very high incomes.

8. All economic and environmental decision-making should consider the well-being of future generations, and preserve for them the widest possible range of choices.

The goal of preserving the range of choice of the present for future generations is certainly central to sustainable development, but it cannot be effected by piecemeal individualistic consideration of the effect of all micro economic and environmental decisions on the future. Protecting the range of options for the future has to be a macro, social decision, effected through a macro policy such as limiting the scale of throughput. Urging individuals to consider the future generations in their personal economic decisions is necessary but not sufficient.

9. Where public health may be adversely affected, or environmental damage may be serious or irreversible, prudent action is required in the face of scientific uncertainty.

Irreducible uncertainty about the environmental effects of new technologies or substances are real economic costs. Like other costs, they should be included in the price and paid for by the consumer of the commodity that has imposed the cost, rather than thrown on the general public. This could be better accomplished by requiring an assurance bond in the amount of possible damage, to be posted up front and then returned over time as experience reduces the uncertainty about damage. Currently the burden of uncertainty is too much borne by the public at large. Our liability laws operate only after the fact, and even then inability to pay is frequent.

10. Sustainable development requires fundamental changes in the conduct of government, private institutions, and individuals.

Yes. Some specific changes have been suggested in my comments here on these fifteen principles. While conduct or behavior needs to change, frequently the underlying principle remains the same. For example, it is an accepted principle in economics that in accounting income we must deduct for depreciation of capital in order to keep productive capacity intact. This principle remains, and only needs to be extended to natural capital as well as manmade. Depletion of natural capital is a cost and should be counted in the macro System of National Accounts, in micro project evaluation, and in the international balance of payments.

11. Environmental and economic concerns are central to our national and global security.

True, especially in the sense that countries that are living within a non-growing biophysical budget that is environmentally sustainable are much less likely to go to war with each other than countries that are expanding their consumption of and dependence upon resources belonging to other countries, or to mankind in general - petroleum in the Middle East, for example, or atmospheric capacity to absorb CO₂ or SO₂.

12. Sustainable development is best attained in a society in which free institutions flourish.

Yes. We must keep in mind that free institutions include not only the institution of individual freedom in the competitive marketplace (freedom from monopoly), but also the social, collective freedom to democratically enact rules for the common good. As emphasized above, the market solution to the efficient allocation problem presupposes a political solution to the problems of sustainable scale and just distribution.

13. Decisions affecting sustainable development should be open and permit informed participation by affected and interested parties, that requires a knowledgeable public, a free flow of information, and fair and equitable opportunities for review and redress.

In relation to the above, the old GATT (General Agreement on Tariffs and Trade) and the new WTO (World Trade Organization) are highly suspect, and require considerable changes to come into conformity with this requirement for transparency and other principles of sustainable development.

14. Advances in science and technology are beneficial increasing both our understanding and range of choices about how humanity and the environment relate. We must seek constant improvements in both science and technology in order to achieve eco-efficiency, protect and restore natural systems, and change consumption patterns.

No one can oppose the advancement of knowledge, but by now it should be clear that not every new technology that comes down the pike is a net benefit to the human race. As E. J. Mishan put it, "While new technology is unrolling the carpet of increased choice before us by the foot, it is often simultaneously rolling it up behind us by the yard." We need technologies of development, technologies that more efficiently digest a given resource throughput, not the technologies of growth, of larger jaws and a bigger digestive tract. And, once again, instead of vaguely calling for "changed consumption patterns" we need to specify "reduced consumption levels" of resources and environmental services. Once the level of resource throughput is reduced to a sustainable level, the pattern of consumption will automatically adapt, thanks to the market. Controlling the pattern directly would require abrogation of the market and would not limit the level of consumption.

15. Sustainability in the United States is closely tied to global sustainability. Our policies for trade, economic development aid, and environmental protection must be considered in the context of the international implications of these policies.

The connection between sustainability and international trade is important, but rather different I think from what the council has in mind. Nearly all policies for sustainability involve internalizing external environmental and social costs at the national level. This makes prices higher. Therefore free trade with countries that do not internalize these costs, or do it to a much lesser extent, is not feasible. In such cases there is every reason for protective tariffs. Such tariffs would be protecting not an inefficient industry or firm but an efficient national policy of cost internalization. Free trade among differing regimes of cost internalization will result in a standards-lowering competition, leading to a situation in which more and more of total world product is produced in countries that do a less and less complete job of counting costs. Hardly a movement toward global efficiency! The current thrust toward economic globalization by free trade, free capital mobility, and free (or at least uncontrolled) migration is in effect the erasure of national boundaries for economic purposes. This greatly undercuts the ability of nations to put into effect any policies in support of sustainable development, including population control and including domestic enforcement of international treaties that may have been signed in support of efforts to combat irreducibly global environmental problems. The power vacuum created by the weakening of national communities will be filled by the transnational corporations, which, in the absence of a world government, will be unconstrained by any community interests.

United Nations Sustainable Development Goals (SDGs)

- 1) End poverty in all its forms everywhere
- 2) End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

- 3) Ensure healthy lives and promote wellbeing for all at all ages
- 4) Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- 5) Achieve gender equality and empower all women and girls
- 6) Ensure availability and sustainable management of water and sanitation for all
- 7) Ensure access to affordable, reliable, sustainable and modern energy for all
- 8) Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all
- 9) Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
- 10) Reduce inequality within and among countries
- 11) Make cities and human settlements inclusive, safe, resilient and sustainable
- 12) Ensure sustainable consumption and production patterns
- 13) Take urgent action to combat climate change and its impacts (taking note of agreements made by the UNFCCC forum)
- 14) Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- 15) Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss
- 16) Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- 17) Strengthen the means of implementation and revitalise the global partnership for sustainable development

Within the goals are 169 targets, to put a bit of meat on the bones. Targets under goal one, for example, include reducing by at least half the number of people living in poverty by 2030, and eradicating extreme poverty (people living on less than \$1.25 a day). Under goal five, there's a target on eliminating violence against women, while goal 16 has a target to promote the rule of law and equal access to justice.