Is a Real Global Agreement on Sustainability Possible?

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Abstract

Effective global agreements are stalled. We now settle for papered over agreements that, particularly regarding environmental sustainability, do not reverse trends. The latest formulation for global agreement, variable geometry in which countries set their own strategies, is untested and needs a great deal of work. Suggestions are made to stimulate more honest reporting on sustainability issues and to strengthen the UN to be a model of good environmental behaviors. Population planning, modifying consumer preferences, and governance of the global commons continue as neglected issues. Unchecked growth continues to trump sustainability. We are left with poor Plan B options: geo-engineering and/or massive systems changes. Both unrealistic. Perhaps this will force academies and academia to at long last cooperate to face global existential threats.
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"God forgives always, humans sometimes, and Nature never."

(Pope Francis, quoting a peasant)

Introduction

In the field of nuclear disarmament there are numerous extremely talented people whose commitment, expertise and linkages with like-minded experts and politicians are outstanding. For any given issue in nuclear disarmament (safety, testing, down-sizing, safeguards, boundaries, use protocols) these experts can fashion on a moment’s notice an outstanding draft treaty. There has indeed been excellent progress in some areas, e.g., eliminating nuclear stockpiles in some former Soviet republics. But for many years now we have not had much progress in global agreements. The upcoming NPT review has weak prospects. And even bilateral talks between any two nuclear powers on reducing their stockpiles have almost ceased. Global nuclear disarmament has stalled.

In contrast, a number of environmental agreements have been agreed during the past few decades. In the recent global sustainability conferences, on the surface, the negotiations have yielded positive outcomes. Indeed 2014 saw a number of breakthroughs and 2015 is shaping up to have a great deal of momentum on climate matters. In the September 2014 UN “summit” on forests, a non-binding political declaration was endorsed by 27 countries (including the US but not Brazil), 8 subnational governments (including six in Peru, one in Brazil and one in Spain); 34 companies; 16 organizations representing indigenous peoples; and 45 NGOs or CSOs. By the end of 2014 the new Green Climate Fund had met its $10 billion commitment goal with a rather surprising $3 billion pledge by the US at the Brisbane G-20 meeting. And in December there was some progress at the Lima United Nations Framework Convention on Climate Change 20th Conference of Parties (UNFCCC COP20). All this is encouraging and may indicate a brighter
future for 2015 climate negotiations than we have come to expect, including the all important 2015 UN Summit in September to consider proposed Sustainable Development Goals.

These achievements, while modest compared with needs described herein, run counter to the disappointing story of global climate negotiations over the last several years. A short review of that history is instructive.

It is widely agreed that at the UN 2009 Copenhagen conference a back room deal saved the conference from disaster, but it was only a papering over of disagreements. The UN in inviting heads of state to Copenhagen to “seal the deal” misstated the case as there was no deal to seal. At the Durban UN Conference on Sustainability in 2011, the EU succeeded in forging an agreement only to find that its own climate-change policy was thrown over three months later by a veto from Poland, which is heavily dependent on coal.² And there was the famous back room in 2012 at the Earth Summit at Rio+20 that “saved” that conference. It had two parts. The official agreement was an agreement to agree which comes due this year. But the second agreement at Rio+20 was touted by senior UN officials as its real accomplishment, a deal with private sector leaders to spend $55 billion on sustainability programs. Since this was a UN conference, in political terms the UN Secretary General made an end run around his member states by working directly with the private sector to gain this commitment. This was actually a papering over of the failure to agree at the official level, and the billions committed by the private sector failed the additionality test.

Indeed, there are those who contend that all the past environmental agreements, including the most recent ones, have not reversed global trends, that they have been paper exercises rather than commitments to significant trend-reversals.³ An exception has been the ozone treaty where very special circumstances existed: only a small number of actors needed to change

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course; compliance through peer pressure was in place; and there was rather full cooperation between the private and public sectors.

Have the stalled nuclear disarmament discussions and the ineffectual global sustainability and climate conference outcomes of the past few years been a fluke in international negotiations? Not really. In fact the world has changed in numerous ways that make formal global agreements harder to achieve. These world developments were presciently predicted by former World Academy for Art and Science president Harlan Cleveland in his 2002 book Nobody in Charge in which he argued that the world had grown into such complexity that only the most open and nimble leaders, using the most unusual and creative means could get much accomplished.

Moises Naim carries the Nobody in Charge thesis further in his 2013 book, in which he argues that the revolution in rising expectations (another Harlan Cleveland concept) has gone into high gear creating huge consumer demands, a major global middle class, and so many new sources of power and interest that major global agreements are impossible as even small countries now have the ability to throw global agreements off track. Here is what Naim reports about the 2009 Copenhagen conference:

*By digging in their heels, small countries can hold up any number of international initiatives – and they are not hesitating to do so. The failure of the Copenhagen climate summit in December 2009 was blamed on many factors – the reluctance of the United States and China to make a deal, the intransigence of large industrial or developing countries – but in the end, what stopped the adoption of even a weak accord was the objection by a previously unimagined coalition: Venezuela, Bolivia, Sudan, and the tiny Pacific island nation of Tuvalu. The Sudanese representative likened rich-country proposals to the Holocaust, while the Venezuelan representative cut her hand on purpose to ask if it would take blood to be heard.*

Prior to the Copenhagen Conference, I chaired a discussion at the Woodrow Wilson Center in Washington, DC on creative ways to gain international

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4 *Ibid*

agreement on climate. The then president of the Carnegie Endowment for International Peace, Jessica Tuchman Mathews, put forth the idea that maybe log rolling would work, i.e., that if the US and China made a side deal, then maybe the EU would come along and maybe that would be enough for Brazil and then Russia and possibly India to join in the deal. The common understanding was that you had to negotiate outside of the main tent in order to get any deal.

That approach may now be underway with the agreement that the US and China announced on November 11, 2014 of a new target for the US to cut net greenhouse gas emissions 26-28 percent below 2005 levels by 2025 while China stated that its CO2 emissions would peak around 2030, with the intention to try to peak earlier, and to increase the non-fossil fuel share of all its energy to around 20 percent by 2030. The two countries also announced joint research and studies.

**Variable Geometry**

The crux of the US-China announcement sounds like a new practice in international agreements on sustainability and climate which we could term “variable geometry” whereby countries pursue a common overall global goals but country-specific actions will be quite different one from the other. Indeed, variable geometry is at the heart of the current United Nations Framework Convention on Climate Change scheduled to be finalized in Paris in December of this year. By that time each country is expected to “outline” its Intended Nationally Determined Contributions (INDCs) with actions it will take to reduce its emissions.

As is obvious, this is a new theory of governance for sustainability (indeed perhaps a new theory of global international conventions) because past agreements have called for comparable, at times enforceable efforts. The upcoming new agreement is proposed to consist of overtly non-comparable

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6 White House Statement released November 11, 2014.
actions, an approach that may well be politically necessary. Indeed, the US-China agreement was actually two quite separate national commitments, not even set out in a signed agreement, and certainly without any accountability. Accountability may come later.

Variable geometry answers the stance of developing countries that they cannot be punished for the sins of the industrial countries, but that they will do their part. India’s part and Nigeria’s part will be different from each other and from China’s part. So it is certain that we can expect at least 194 different sets of national commitments.

Will this untested approach work? In theory, yes, but there are a number of problems to solve. For example: Can international governance assure comparability between countries at various stages of development? Can all countries pursuing greatly different courses be compared on global measures of impact? Will the sum of the parts lead to the desired global results?

If the current climate change negotiations are to succeed, we can assume that by the end of this year the international negotiators will arrive at the answers to these questions by coming up with some common denominators that will indicate comparability. Some of the spade work on this has been done by Joseph Aldy (Harvard Project on Climate Agreements) and William Pizer (Duke University).7 They recommend four standards for comparable metrics for mitigation efforts: comprehensive (so all the efforts of a country are accounted); measurable; replicability (in that measurement is open, transparent, and able to be used by analysts and the public); and universal. Aldy and Pizer believe no simple measures will suffice and that a suite of measures will have to be developed as benchmarks and to establish progress for all countries. Such work, they recommend, will need to be professionally sound and transparently arrived at. They have explored whether some kinds of relationships could be reliably used (e.g., linking environmental performance to GDP and other economic measures).

To my mind, the challenges in this technical work will be similar to those faced by the UN economists in the late 1940s who devised the system of national economic accounting best known for their recommending the concepts of GDP and GNP. It needs to be recalled that responsibility for developing those economic measuring sticks was given to some of the best economists around, including some existing and future Nobel Prize winners. But can such comparable measures be devised regarding climate change mitigation? Surely, yes, if the quality of the work developing the indicators and systems of measurement is first class. Even then, such measures will face significant technical challenges and will ultimately be subject to unpredictable political determination.

The harder question is whether such measures will work in practice. And in this we are in rather new territory for global governance. Based on similar self-reporting efforts to meet the much simpler Millennium Development Goals (MDGs), we can expect that many countries will need help in reporting; some countries will try to fudge their reports; and official statistics will only go so far in helping us to understand whether real mitigation agreements are being kept.

Even well functioning official national reporting augmented by official international reporting should not be wholly relied upon. Civil society also has potential utility to help hold all governments to high standards of honesty.

In reporting on national efforts to meet the MDGs, it turned out to be highly useful to have parallel reporting by civil society. A particularly innovative example of such monitoring is organized by the Instituto del Tercer Mundo in Montevideo which produces regular “Social Watch” reports on progress to meet the MDGs.

The Institute’s reports are in two sections. The first part presents what countries officially report. For example, in the case of primary education enrollment the Government of India at one time reported that enrollment was 104% of the expected cohort, i.e., there was both 100% coverage of the target

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ages and an extra group of older students who came back to learn reading and math. Then “Social Watch” presents country report chapters compiled by selected local civil society organizations who work together to produce an agreed reading on their country’s performance. In the case of primary school enrollment in India, national civil society organizations in India held that normally about 60% of primary age children attended school. Multilateral officials and international NGOs use “Social Watch” reports to identify problem areas in national performance. If the UN is wise, it will recommend to global civil society that they establish an independent reporting system to monitor the upcoming environmental agreements as well as the proposed successor to the MDGs, the Sustainable Development Goals (SDGs), now in negotiation.

**The best roles for the UN**

The UN family of organizations issued a joint position for Rio+20 that ended by saying: “The UN system stands ready to support the world's nations and peoples to make sustainable development a reality.” As former senior advisor to four parts of the UN system, it would be my observation that the UN could use significant help in making itself ready.

The main UN institutional strengths to help on governance for sustainability are the United Nations Development Program, UNDP, and the United Nations Environment Program, UNEP. Also pertinent is the World Bank, technically a part of the UN, but a step removed from the obligation to follow UN General Assembly agreements.

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9 Common statement by the UN System Chief Executives Board for Coordination on the Outcome of Rio+20 - http://www.unep.org/newscentre/Default.aspx?DocumentID=2656&ArticleID=8920#sthash.9w3AeF0w.dpuf

10 Also to be mentioned is the UN’s International Panel on Climate Change (managed by UNEP and the World Meteorological Organization, WMO (which also houses the IPCC). The IPCC has proven itself reliable and functional, although it errs on the conservative side. It is the most successful collaboration between the UN and the scientific community.
UNDP’s work on governance has mainly been to reinforce standard prescriptions on what good governance is, i.e., enhancing effectiveness, transparency, accountability, meritocracy and the like. Governance for sustainability is another matter altogether which UNDP simply does not recognize. In its March 2014 Discussion Paper entitled “Governance for Sustainable Development: Integrating Governance in the Post-2015 Development Framework,” UNDP does not say a word about the needs for specific capabilities for governing for sustainability. It merely re-titles the standard prescriptions for good governance under the banner of governance for sustainability. As UNDP is led by a former minister of environment, this is particularly surprising.

In the early days of the gender revolution in the 1970s it was standard to say that we needed to see the world through a gender lens. Similarly, we now need to see governance through the lens of sustainability. How can countries best analyze their sustainability challenges? What do they need to re-tool in their societies in order to promote sustainability best practices in urban life, industry, agriculture, consumer behavior, etc? What are best practices in monitoring and evaluation of societal performance to best assure sustainability? What kinds of education, media, and cultural shifts are needed and how can nations and societies best bring these about?

None of these issues are easy. Many are new challenges for humanity. But in the UN no institution has a stronger mandate to work on these matters than UNDP. It should become a major resource to assist countries to manage governance for sustainability, devoting a huge percent of its resources to this task.

While UNDP could be of very substantial help in assisting countries to govern their economies and society for sustainability, it would need to re-tool considerably, if it were looking through a sustainability lens, to: define best practices, establish relevant capacity building programs, hire pertinent staff and market actual expertise in assisting member states to govern for sustainability. Under its current leadership, the prospects for this do not exist.
The World Bank has very close relations with a large number of countries aimed at improving their governance. It also reported (January 2015) that “climate risk is now considered in all country assistance and partnership strategies for the poorest countries.”\(^{11}\) This may well be so, but a review by the World Resources Institute of a sampling of 60 projects and programs approved by the Bank between January 2012 and June 2013 showed that: “Three-quarters of relevant projects fail to even consider, let alone address, risks from climate change impacts.”\(^{12}\) The report found weaknesses in identifying governance issues in general and sustainability governance issues in particular. Only 48% of the projects assessed were aligned with the country’s stated sustainability plans. But the plans themselves needed improvements. So WRI recommended that the Bank “consider the need to develop or strengthen integrated sustainable development plans to support countries’ sustainable development agendas.”\(^{13}\)

In sum, both the UNDP and the Bank require strengthening their performance if they are to appropriately assist countries to have governance for sustainability be far more central and to assure that the underlying programs and projects in their development portfolios are more sustainable.

UNEP was established pursuant to the UN’s 1972 Conference on the Human Environment. Its main task was to coordinate the role of the UN on environmental matters. After a bare knuckles brawl as on where it would be located, UNEP was established in a new campus outside of Nairobi. That it was an outsider to the rest of the UN system has been clear. Only in the past few years has UNEP’s Executive Director been invited to be part of the UN’s Chief Executives Board, the de facto operational board of directors of the UN. While focusing on environmental issues and more recently on climate

\(^{11}\) World Bank website dated January 2015 on the Millennium Development Goals, report on Goal 7 “Ensuring Environmental Sustainability by 2015.”


\(^{13}\) Ibid, p. 44.
change, UNEP has not made notable contributions on the sustainability question.

UNEP has 854 staff and a budget of about $630 million, but most of its budget is for earmarked projects and its Environment Fund. Little is left to allow UNEP to coordinate environmental actions of the UN system, and, in fact, UNEP currently does not even define itself as having this responsibility. Instead it says that it is “the voice for the environment in the United Nations system (as) an advocate, educator, catalyst and facilitator.”¹⁴ UNEP staff struggle merely to attend all the UN meetings that they feel they need to cover. I met with the founding executive director of UNEP, the amazingly dynamic Maurice Strong, when he was setting up UNEP and his vision of the organization was much more central to sustainability and to the work of the UN.

There is recognition that the challenges facing the earth’s environment demand a greatly invigorated UN organizational response. Hence in 2007, 46 countries, led by France, called for the replacement of UNEP by a United Nations Environment Organization (UNEO), on par with the major UN agencies, particularly the World Health Organization. However, missing from among the initiative’s sponsors were the four major greenhouse gas emitters: the US, China, India and Russia. Rio+20 called for a “strengthened and upgraded” UNEP. It would be excellent for the French proposal to be put back on the table as part of the discussions to adopt the Sustainable Development Goals. But first, the advice of the UN’s 2006 High Level Panel on Coherence should be followed that: “An independent assessment of the current United Nations system of international environmental governance is required to support ongoing efforts at reform.”¹⁵ The High Level Panel

¹⁴ UNEP homepage.

also recommended that UNEP “be upgraded and given real authority as the environment policy pillar of the United Nations system.”

While other parts of the High Level Panel’s report were acted upon (e.g., establishing UN Women), their environment recommendations have not yet been carried out, so it is still fair to ask how could an invigorated and upgraded UNEP (or a new UNEO) best help the world understand the requirements of governance for sustainability?

I believe it could best do this by making the UN a model of best sustainability practices. To do this UNEP/UNEO would need considerable staff augmentation, and would need to deploy talented staff where the UN works, i.e., primarily in New York, Geneva and Rome..with roving staff visiting country and regional offices for intensive consultations. Co-located UNEP staff in, say, New York..perhaps 60 staff..would work within the UN Secretariat and UN agencies located in New York to review all their work through the lens of promoting sustainability and good environmental practice. The UNEP staff would be change agent advisors on staffing, programs, office housing, communications..all aspects of work to make the UN family of organizations exemplars of sustainability. It will no longer do for the UN to act as if sustainability is just one amongst its numerous priorities. Sustainability is an existential issue for humanity and must become seen by states and societies as such. The UN must show by example that sustainability is humanity’s and the UN’s top challenge.

Fortunately, the UN system-wide mechanism for coordination, its Chief Executives Board, has become increasingly capable. In its history, the UN has only undertaken two major system-wide substantive initiatives. In both of these the CEB (and its predecessor organization, called the Administrative Committee on Coordination) played crucial roles. I was responsible for the first of these efforts. The Millennium Development Goals is the second such. And the upcoming Sustainable Development Goals will be the third. It should become natural for the CEB to boldly lead the whole UN system to

\[\text{\textsuperscript{16} Ibid.}\]
outstanding sustainability practices and programs as part of its third system-wide initiative.

Retooling national governance and the UN system for sustainability will be significant and costly. Establishing new budgeting systems and priorities, creating review mechanisms, and M&E functions at national and sub-national levels are complex and require long-term governance and capacity building work. Where are the human resources and financial abilities to work on such a scale? My suggestion would be that the World Bank take the lead on this.

To do this, the World Bank itself will have to be revamped. Yes, it has a Global Environment Facility of great worth (technically co-managed by the UNDP), but already with very serious responsibilities on environmental challenges such as water, energy, soil, and air, which have their own governance challenges. It is the regional departments of the Bank that work on general governance issues...and, like the UN...its staff will need to be trained and augmented to become expert on governance for sustainability.

Like the UN, the World Bank truly needs to take sustainability to a pre-eminent level. Some of us\(^\text{17}\) had hoped that when its current president, Jim Kim, reorganized the Bank that he would bundle all its work on sustainability into an organization like the International Finance Corporation, which is headed by an Executive Vice President of the Bank standing high on its organizational chart as a symbol of the World Bank’s priority given to responsible profit. We wanted a counterpart organizational bundle headed by an Executive Vice President for Sustainability showing that sustainability is just as important to the world as growth and profit. Instead the Kim reorganization placed a vice president for climate fairly far down the organizational chart.

The Bank, frankly, has become an organization in search of a mission, particularly now that the BRICS have staked out a claim to become the world’s premier financier of infrastructure. Given its expertise and reach on governance and its better ability to retool than some other organizations, the Bank could well become the ‘Go To’ place for financing governance.

\(^{17}\text{Notably, Nancy Birdsall, President of the Center for Global Development.}\)
improvements to better assure sustainability. This would be an ideal future major role for the Bank. UNDP is under considerably greater member pressure for a diverse program. The World Bank is better positioned to not only focus more sharply, but to put major resources to support its recommended major foci.

Another global financial need is to assure that the work of the International Panel on Climate Change (IPCC) is expanded and assured. The IPCC may well need to augment its work by stimulating research around the world (e.g., earth systems modeling still has many unmet challenges), helping to form research alliances, etc. It would be excellent if IPCC’s work were far better financed so that it could sponsor or at least help expedite major research. Reliable funding of an expanded IPCC might well engage global foundations and national research institutions more prominently.

**Neglected Factors**

On July 31, 2007 the United Nations General Assembly held a unique informal session, a “Thematic debate on Climate Change as a Global Challenge.” Two of us were permitted to speak from the audience..the World Bank representative to the UN and I as senior advisor to the World Federation of United Nations Associations. It was a learning experience. I stressed two underlying factors to climate change that had been neglected in the discussion: population growth and the need to change consumer preferences. When I suggested the world redouble its collective efforts to address population planning I was hissed by one of the delegates..a first for me. It was a sign that such issues are not easy ones on which to mobilize action.

If I were giving that intervention today, I would add an additional item: better assuring governance of the global commons.

Consider each one.
Currently the world’s population stands at about 7.2 billion. Past population planning programs have been highly successful as there is clear demand in all societies for such services. A combination of economic growth and population planning services has dramatically decreased desired family size within the space of a generation, such as has dramatically occurred in Bangladesh where the fertility rate moved from 7 to 2.4 in the space of three decades.\(^{18}\)

The most comprehensive population growth projection at the time of the UNGA informal session was the UN Department of Social and Economic Affairs 2004 projections to the year 2300\(^{19}\) which said that global population would reach 9.2 billion by 2050, fall a bit and level off at almost 9 billion by 2300. More recent projections show a 2050 projection of 9.6 billion.\(^{20}\) But the latest very long term projections by the UN\(^{21}\) show continuous population growth to a year 2100 level of 10.6 billion and continuing to rise thereafter. (The 2100 projection is the median between UN projections of very low growth yielding a 2100 population of 6.8 billion and a high growth scenario yielding a staggering population of 16.6 billion.)

As 2050 is only 35 years away, projections of population then of roughly 9.6 billion are much more certain. That would be a rise of 33% in world population, almost all of it in very poor countries less able to cope with environmental and sustainability challenges. So it is very reasonable for the world to try to foster family planning for all the previous rationales (improved family chances for social and economic gain) plus the rationale that global sustainability becomes impossible with this high rate of population growth. At the same time we have very weak momentum on population planning because the politics of the issue have changed (hence the hissing) as family planning is now held to be a Western-imposed strategy.


\(^{21}\) *World Population Prospects: The 2010 Revision*, op.cit.
This makes it harder to work in some areas of the world. What is almost worst is that UN leaders are passive in coping with this changed political climate and timid about organizing the world community to work on reducing population growth.

There is no goal in the proposed Sustainable Development Goals to reduce population, instead it is one target amongst some 170 targets being proposed, namely: “By 2030 ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.”

Instead of a buried and watered down commitment that the UN does not intend to pursue as a priority, the UN’s leadership should boldly organize the global community to substantially expand its efforts to foster reasonable family size. A major political and program campaign might be financed privately from enlightened philanthropists like Warren Buffet, who had indicated in the years prior to his merging much of his wealth with the Gates Foundation that his money would go to population planning and environmental causes. Past financial leadership on population planning from countries like the US, China and the EU should be rekindled.

A second neglected issue is that of assuring that the global commons become sustainable. One problem of the variable geometry approach to global environment agreement is that no one is responsible for such critical global commons as the oceans beyond lines of national sovereignty. This is a major flaw in the current approach to negotiations that must be quickly and effectively corrected.

A third neglected issue is that of shaping consumer preferences. This is a far more complicated problem, indeed the most challenging question of cultural modification ever faced by humanity. Consideration needs to be given both to modifying consumer demand and the supply of consumer goods, including housing and local environments.

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22 All the goals and targets are incorporated in United Nations, “The Road to Dignity by 2030: ending poverty, transforming all lives and protecting the planet.” Report of the Secretary-General on the post-2015 sustainable development agenda. 4 December 2014, Document A/69/700.
Changing the demand side would entail modifying consumer desires away from throw away, resource heavy consumption and towards a lifestyle that is highly conscious that one has to be responsible for taking actions throughout one’s life that do not degrade but instead enhance the environment. In so doing each of us needs to live a life that builds sustainability. Modifying our consumption preferences cannot be the responsibility of only educators, advertising experts, sociologists and psychologists, cultural icons and political leaders. It needs to be the responsibility of all of them. It would be excellent for major convening authorities to gather leaders of such fields to map out how consumer behavior can best be modified over the long term to create very different demands for consumption than those now found most everywhere. Already for a number of years some portion of consumers have changed their lifestyles towards more sustainable lives and communities. It is imperative to learn why and how they managed these constructive changes.

Modifying the behavior of the supply side is even more difficult. The production and marketing of excess and the unnecessary is a huge part of economies around the world. While there have been marginal changes in the demand side, there has been very little change in the overall supply side. For every Tesla there are thousands of new ways to squander resources.

The life story of “Gus” Speth is instructive. He has been at the heart of working within the system in many leadership roles all aimed at helping to save the environment. As a lawyer he was a co-founder of the Natural Resources Defense Council to sue for improved environmental practice. He then founded the World Resources Institute, a critically important think tank, to produce the research needed to change environmental practice. Then he became chair of the US Council on Environmental Quality to try to lead national action for better environmental practice. Then he became Administrator of UNDP to change the multilateral system and the world for better environmental results, particularly through treaties and agreements. And then he became dean of the Yale School of Forestry and the Environment to produce future leaders of environmental activism.

In the end, Gus has concluded, just as the World Academy of Art and Science has concluded, that the only thing that will change the world’s trajectory to sustainability is systemic change. “In short, most environmental deterioration
is a result of systemic failures of capitalism that we have today, and long-term solutions must seek transformative change in the key features of this contemporary capitalism.”

Speth recommends a whole list of societal actions, but, frankly, few that would seem to lead to transformative change. The closest he gets is to recommend:

“Shift(ing) away from policies that encourage consumerism and toward those that encourage long-term public and private investment in R&D, green technology, the industries of the future, modern infrastructure, environmental restoration, and community development.

“Regulate Wall Street to curb speculative activity, eliminate systemic risks, and protect investors, while building up a system of community-based financial institutions....

“Establish a monetary measure of sustainable economic welfare that is published quarterly along with GDP, and create a new system of indicators to gauge national progress.”

These are interesting jumping off points, particularly the first and third one. But one would have to go much deeper to change systems through very strong incentives and disincentives that have global reach. At present we simply do not have countervailing power anywhere near sufficient to adopt and enforce the kind of incentives and disincentives needed, and we kid ourselves if we think we can do more than foster incremental change on these issues. Just to remind: From 1973 to 1992 the UN had a Commission on Transnational Corporations and a Center for Transnational Corporations. They had no powers except to report, but even that was seen as too much of a threat to business interests so they were closed and their functions transferred to UNCTAD, an organization that has no powers of action and


enforcement. The odds of creating effective countervailing power to control business practices has not grown better.

**What can be done?**

So what can be done? Lots. Here are a number of admittedly incremental steps that the UN, national and local governments can do:

1. Big global changes for sustainability will need to be built on the experience of successful local experience. Indeed, one of the things the UN does best is to highlight in peer settings the best actions of its members. Peer learning on best sustainability practices needs to be instituted on a regular basis at all levels of governance.

2. The UN and national governments should use mass media to publicize successful sustainability regularly so that momentum and confidence builds in countries and governing institutions to take on larger issues.

3. National governments and the UN need to declare sustainability as one of their top governance goals. In the UN this would mean adding a fourth organizational goal equivalent to Peace, Development and Human Rights in their priorities.

4. National governments and the UN should name very high level coordinators whose sole responsibility would be to assure maximum sustainability. In national governments this should be a deputy prime minister or deputy president. In the UN this would be a Senior Advisor to the Secretary General who would become a member of the

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Secretariat’s cabinet, and the Chief Executives Board…preferably a widely respected and dynamic former head of state.

5. National parliaments and the UN General Assembly should hold annual special sessions on the nation’s and global sustainability, respectively. Annual serious attention to environment should also be given in key civil society forums such as Davos, and ecumenical gatherings.

6. Global and national media councils should be established involving leading traditional and social media to publicize sustainability and to translate that into both policy education and lifestyle guidance.

7. Civil Society councils should be encouraged at the local, national and global level to advise on actions needed, just as “Social Watch” provides accountability for the Millennium Development Goals.

8. Leadership counts. Local, national and global environment, climate and sustainability leaders must be recruited who are consistently high level and effective. Their functions must be counted as senior ones in local, national and global cabinets and forums. The next secretary general of the United Nations will be elected in 2016. The next head of the World Bank will be elected in 2017. Will these positions be filled by weak personalities only vaguely committed to sustainable development? Probably, unless there is a strong demand that these positions be filled by true leaders who are deeply committed to fostering sustainability.

9. A world conference to accelerate population planning programs should be held by the UN, or failing such sponsorship, it could be put together by leading civil society organizations. In 1997 civil society held a highly successful “summit” on microfinance when neither the UN or the World Bank took on that topic. It put microfinance on the map for both organizations.
10. The one percent of GDP roughly estimated to effect a more sustainable world must be assured as a start for reorienting societies. In addition, richer countries and the major polluters have a responsibility to mount very consequential programs of international assistance to global institutions and poorer countries to help them do their sustainability actions well.

11. Finally, the prospects for productive negotiations on sustainability and climate change are poor unless very creative ways can be found to unpack the global context of North-South negotiations. As long as the failure of rich countries to meet the .7% GDP for foreign aid is the backdrop for global discussions, there will not be successful environment negotiations. This topic alone would be worth a very high level political advisory group assisting the UN Secretary General to find more promising ways of organizing the negotiations.

**Prospects for Big change?**

What are the prospects that all these shifts in culture, practice and climate results take place in a way that assures a sustainable world fit for humans and as much existing flora and fauna as possible? Alas, the wise bookmakers of the world would bet against these good outcomes happening in a timely way. There is not only crazy political resistance to climate change, but a much more pervasive psychological resistance to the need for sustainable societies.

Market forces encourage lifestyles that collectively are suicidal for humanity given even a one century prospective. In the continuing short run the customers just keep coming and probably will. Note, for example, China, arguably soon to be the largest economy in the world. China’s top economic priority has recently become to boost consumerism and reduce investment so that the country becomes a true middle class consumer society in a few years. The implicit economic priority of the great majority of citizens of the world, particularly the quickly growing emerging middle class of the world, is the same. Do better off societies have a better record on sustainability? There is precious little data that large proportions of the citizens of middle class and
rich countries have substantially cut back on resource heavy consumption despite decades of discussion and education on environmental fundamentals in these countries.

Paradigm shifts are truly rare. The last big ones affecting major economic systems were the Industrial and the Marxist Revolutions. Each took many decades to take hold. On a similar timeline a successful paradigm shift to a sustainable world would only take place after the tipping point to unacceptable global warming passed. The prospects for the kind of paradigm shifts that WAAS and Gus Speth articulate have very long odds against them.

While making best efforts towards sustainability, the world also has to prepare itself for a Plan B in case sustainability is not being achieved and global temperatures are heading to an unsustainable world. The only Plan B on offer is geoengineering the climate, a highly risky and as yet unproven technical fix. Having followed this field of work for some years, it is my impression that it is moving far too slowly and that the need for developing the best geoengineering solutions possible is not appreciated by political leaders and most leaders of science. Under current circumstances, this field is ripe for private philanthropy to give it a major boost so that if needed, geoengineering can be called upon to at least give humanity some additional years to fix climate and sustainability correctly.

In the meantime, geoengineering utilizing the most promising technology now being considered (high altitude continuous infusions of reflective sulfur dioxide) would produce a lowered world temperature with very serious side effects, e.g., some regions would have more severe sustained droughts, and oceans would acidify further. So this Plan B would be very dangerous, even if it would become necessary. People should be educated a lot more about Plan B so that they take Plan A more seriously.

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26 One could argue that the Information Revolution is a third paradigm shift, but it seems more likely it is a major systems change that helps to implement the Industrial Revolution paradigm shift, much as electricity and business education did.
The governance implications of moving to a geoengineering Plan B have hardly been looked at. One scenario is that its cost, a matter of only a few $billions, could be undertaking by many of the world’s billionaires if any of them got fed up with a world of governments moving too slowly towards sustainability. Or it might be that a few governments believe it is so much in their national interest that they will launch geoengineering the climate regardless of the wishes of other nations. (Think Bush in Iraq.) In other words, it is likely that faulty, ad hoc governance will prevail causing who knows what kind of instability to the entire system of global rules and regulations.

Is there a safer Plan B? Unfortunately, there has been very little work developing Plan Bs and so geoengineering is the only Plan B on option. One would think that developing fallback Plan B positions on climate would receive much more serious attention.

The key strategic point about sustainability and Plan B strategies is that the stakes are so important that redundancy and many parallel approaches are required, the rule of thumb being that the more important the problem the more important it is to have many options under development so that real choices are possible.27

The existential threat is so great from climate change and modernization of nuclear weapons that the Bulletin of Atomic Scientists has recently moved its doomsday clock from five minutes to three minutes before oblivion.28


Can Social Science Help?

This paper mentions a number of intellectual challenges that need to be solved, to wit:

- Crafting effective and enforceable sustainability agreements;
- figuring out how variable geometry can work;
- meeting numerous institutional challenges at all levels of governance that can model and encourage better behaviors;
- addressing how to increase major momentum behind population planning;
- finding ways to stimulate better consumer behavior; and
- establishing real Plan B options.

In the physical sciences such a list of climate related challenges led to the creation of the IPCC to bring together numerous great minds to compel acceptance of the key climate chemistries and physics. Could a similar approach be taken to help solve major related social science issues?

Alas, those in the social sciences do not easily agree, but perhaps the existential drama of climate/sustainability could bring together key academies and other centers of social science study to agree on what are the key social science issues, what division of labor can be developed and how can collaboration on such key issues best take place. Perhaps the World Academy and the University of Brasilia could formulate a proposal for this kind of grand collaboration.

Sustainability is not an issue. It is the issue of our era. It will require ambitious, unprecedented governance actions involving all parts of our local, national and global societies. It deserves our best minds in social science: indeed, the engagement of us all.
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